Nurses' Experiences of Guideline Implementation in Primary Health Care Settings

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DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work, and that I have not previously in its entirety or in part submitted it at any university for a degree.

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Signature Date

SUMMARY

This dissertation examines how nurses in primary health care in South Africa make use of guidelines. Primary level health care is reliant primarily on nurses, who are under-resourced and often overwhelmed by the complex needs of their clients in the context of the TB and HIV/AIDS epidemic. Despite various continuing education strategies to promote current and evidence-based practice, there are many barriers to providing optimal care. Clinical practice guidelines using best evidence are an important tool for updating health professionals in current practice, particularly at primary care level, where busy practitioners often do not have time or sufficient access to the best evidence. Despite this, we know little of the practitioners' experiences of guideline use.

This study describes experiences of nurses in implementing clinical practice guidelines in the delivery of health care in selected primary level contexts in the Free State Province. The primary research question for this study was "What are the experiences of nurses in using guidelines in primary health care facilities?"

A qualitative research approach, drawing on a psychoanalytic framework, was adopted. Three linked studies were conducted, utilising secondary data analysis of transcripts collected during the PALSA (Practical approach to Lung Health in South Africa) RCT study (sub-study 1), document description and review of guidelines used in primary care settings (sub-study 2), observation of nurses in practice and during patient consultations, and focus group discussions with nurses in primary health care facilities (sub-study 3).

After the introduction of new format guidelines with onsite training and access to good support and updates, nurses reported feeling more confident, as the guidelines were explicit and gave them clear direction as to when a patient would need referral to the medical practitioner. When the guidelines were followed, and the patient responded positively to an intervention, this gave nurses a sense of credibility and validated their role as primary level health care providers.

Guidelines available in the primary care clinics covered a wide variety of clinical conditions, were inconsistent, often outdated and even contradictory. A detailed comparison of two selected guidelines, the South African TB control guidelines and the PALSA PLUS guidelines, both in everyday use in the Free State province, shows that the preferences expressed by the nurses in sub-study 1 are evident in the layout, colour, and user-friendliness of the PALSA PLUS guideline.

Nurses in the Free State province do use guidelines, but not consistently. Nurses make clinical judgments and decisions based on experience, alternative knowledges and intuitive responses, in consultation with colleagues and through the use of guidelines. Very few guidelines were used regularly, and each nurse had her preferences for a limited number of guidelines which she found useful.

There is a clear need for integrated approaches to the information needs and support of nurses and nurse practitioners at primary care level. Guidelines play a role in promoting learning, changing

professional practice and strengthening health care delivery by nurse practitioners at primary level. They can also be thought of as a strategy the health care system uses to defend against the possibility of its health professionals not meeting its expectations of providing quality care.

Guidelines may *contain* anxiety and improve the quality of care, or *compromise* practice through the imposition of controls. The use of guidelines in primary care settings facilitates decision making, may contain practitioner anxiety and improve the quality of care, yet guidelines pose challenges to creative discernment of the patient's symptoms in relation to his/her personal circumstances and may impact on the personalised holistic care approach which characterises the essence of nursing.

Today's primary care nurse and nurse practitioner needs to be a ***competent clinician***, ***compassionate carer,*** and ***confident co-ordinator*** – the overlapping roles of caring, diagnosing and treating and managing. The challenge for the nurse in primary care is to combine her traditional caring and co-ordination role into a role which encompasses curing, caring and co-ordination, a new, yet critically important identity for the 21st century nurse.

OPSOMMING

Die proefskrif ondersoek hoe verpleegsters in primêre gesondheidsorg in Suid-Afrika van riglyne gebruik maak. Primêre vlak gesondheidsorg steun hoofsaaklik op verpleegsters, alhoewel hulle verswelg word deur die komplekse behoeftes van hul kliënte in die konteks van die TB en HIV/ AIDS epidemie. Ten spyte van verskeie volgehoue onderrigstrategieë om die huidige en bewese basiese te bevorder, is daar verskeie struikelblokke om optimale versorging te voorsien. Kliniese praktyk riglyne voorsien die beste bewyse en is 'n belangrike hulpmiddel om praktiserende professionele gesondheidswerkers, veral op die vlak van primêre gesondheidsorg, op hoogte van sake te hou. Besige programme en onvoldoende toegang tot hierdie riglyne weerhou dikwels die gesondheidswerkers van bestaande inligting. Dit is egter onbekend wat gesondheidswerkers se ondervinding en gebruik van riglyne is.

Die studie beskryf versorgers se ervaring van die implementering van kliniese praktyk riglyne vir gesondheidsorg in primêre vlak kontekste in die Vrystaatprovinsie.

'n Kwalitatiewe navorsingsbenadering wat steun op 'n psigoanalitiese raamwerk, is gebruik. Drie verbandhoudende studies is gedoen wat sekondêre data analise transkripsies gebruik het wat verkry is gedurende die PALSA (*Practical Approach to Lung Health in South Africa*): RCT (Willekeurig Gekontroleerde Toets) studie (sub-studie 1), beskrywing van dokumentasie en oorsig van riglyne wat in primêre vlak ontwikkeling gebruik is (sub-studie 2), en observasie van verpleegsters in die praktyk en gedurende konsultasies met pasiënte, en fokusgroep besprekings met verpleegsters in primêre vlak gesondheidsorg fasiliteite (sub-studie 3).

Na die bekendstelling van 'n nuwe formaat riglyne vir indiensopleiding en toegang tot goeie ondersteuning, het die verpleegsters meer selfversekerd gevoel omdat die riglyne duideliker was en aan hulle 'n beter aanduiding gegee het wanneer 'n pasiënt verwysing na 'n mediese praktisyn benodig het. Wanneer die riglyne gevolg is en die pasiënt positief op behandeling gereageer het, het dit aan hulle 'n gevoel van agting en deug vir hulle rol in primêre vlak gesondheidsorg gegee het.

Beskikbare riglyne in primêre sorg klinieke dek 'n wye verskeidenheid kliniese kondisies, is onsamehangend, dikwels verouderd en selfs soms weersprekend. 'n Gedetailleerde vergelyking is tussen twee geselekteerde riglyne gedoen: die Suid-Afrikaanse TB kontrole riglyne en die PALSA PLUS riglyne. Beide word daagliks in die Vrystaatprovinsie gebruik. Die verpleegsters in sub-studie 1 het a.g.v. die uitleg, kleur en gebruikersvriendelikheid die PALSA PLUS riglyne verkies.

Verpleegsters in die Vrystaat gebruik wel riglyne maar nie op 'n gereelde grondslag nie. Hulle maak eerder kliniese keuses en besluite gebaseer op ondervinding, alternatiewe kennis en intuïtiewe gevoel, in konsultasie met kollegas en na bestudering van die riglyne. Baie min riglyne is gereeld gebruik, en elke verpleegster het haar voorkeure vir 'n beperkte aantal riglyne wat sy bruikbaar vind.

Daar is 'n duidelike behoefte aan 'n geïntegreerde benadering tot die informasiebehoeftes en ondersteuning aan verpleegsters en praktisyns op primêre sorg vlak. Riglyne speel 'n belangrike rol in die bevordering van onderrig, verandering van professionele praktyke en die versterking van gesondheidsorg wat deur verpleegsters in primêre vlak gesondheidsorg gelewer kan word. Dit kan ook gesien word as 'n strategie wat die gesondheidsorgsisteem kan gebruik om te verseker dat gesondheidswerkers kwaliteit diens lewer.

Riglyne kan moontlik angstigheid beperk en verhoogde versorgingskwaliteit *bring*, of dit kan gesondheidsorg *benadeel* deur die afdwing van kontrolemaatreëls. Die gebruik van riglyne in primêre sorg fasiliteer besluitneming, en mag dalk angstigheid by die praktisyn beperk, wat dan die kwaliteit van versorging kan verhoog. Riglyne bied uitdagings aan die kreatiewe oordeelsvermoë om die pasiënt se simptome te sien binne die konteks van sy/haar omstandighede en mag 'n impak hê op persoonlike holistiese versorging wat die aard en kern van verpleging is.

Die huidige primêre sorg verplegingspraktisyn moet 'n ***bekwame klinikus***, ***ontfermende versorger*** en ***betroubare koördineerder*** wees – met oorvleuelende rolle van versorging, diagnosering en behandeling, en bestuur. Die uitdaging vir die verpleegster in primêre sorg is om die tradisionele versorging en koördinering te kombineer tot 'n omvattende rol van genesing, versorging en koördinasie; 'n nuwe, maar krities-belangrike identiteit vir die 21ste-eeuse versorger.

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Clinical Nurse Practitioner

A registered nurse who has completed the Diploma in Clinical Nursing Science, Health Assessment, Treatment and Care (Government Notice No. R. 48 of 22 January 1982, as amended by No. R1432, R. 2563, R. 2189 and R.71). This course is required to be a minimum of one academic year (South African Nursing Council, 1982).

Educational outreach

Educational outreach, also referred to as academic detailing, has been defined as an educational visit by a trained person to a health professional in his/her own setting to influence professional practice (Allen, Ferrier, O'Connor, & Fleming, 2007; Thomson O'Brien, et al., 1997). It comprises "non-commercial, short, face to face, in-service interactive education by a trusted outsider" (Fairall, et al., 2005, p. 751).

Key messages

"Tailored, concise, up-to-date and repetitive messages, which emphasise key management principles with the intention of fostering change in clinical practice" (Bheekie, et al., 2006, p. 264). They can be considered essential 'take home messages' which contain the essence of the topic which was presented to the clinician (Wong & Lee, 2004).

Guidelines

"Clinical practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances" (Field & Lohr, 1990, p. 27). They define the best practices that meet the needs of the majority of patients in most circumstances, reduce variation in practice and promote the efficient use of resources. "Clinical practice guidelines are an increasingly common element of clinical care throughout the world. Such guidelines have the potential to improve the care received by patients by promoting interventions of proven benefit and discouraging ineffective interventions" (Grimshaw, Thomas, et al., 2004, p. ix). Explicit clinical guidelines inform and reinforce good practice (Siddiqi, Newell, & Robinson, 2005).

Integrated Management of Childhood Illness (IMCI)

"IMCI is an integrated approach to child health that focuses on the well-being of the whole child. IMCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities. The strategy includes three main components: improving case management skills of health-care staff;

improving overall health systems; improving family and community health practices" (World Health Organization, n.d.-d). The IMCI guidelines for children under five years of age have been adopted by the SA Department of Health and all primary care nurses are required to undergo training in the use of the guidelines.

Low and Middle Income Countries (LMIC)

The term LMIC is taken from World Bank terminology and is based on the Bank's operational lending categories. "Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. Classification by income does not necessarily reflect development status" (The World Bank, 2009). South Africa is currently classified as a developing upper-middle income country.

Income group: "Economies are divided according to 2008 GNI (gross national income) per capita, calculated using the World Bank Atlas method. The groups are: low income, $975 or less; lower middle income, $976 - $3,855; upper middle income, $3,856 - $11,905; and high income, $11,906 or more"(The World Bank, 2009).

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARVs	Antiretroviral drugs
ART	Antiretroviral Therapy
CD4 cell count	CD4 cells play a crucial role in the body's immune response. The CD4 cell count is the best predictor for the risk of developing opportunistic infections. The normal CD4 cell count in healthy, non-HIV infected person is approximately 600–1500 cells/mm^3 (Evian, 2000)
CNP	Clinical Nurse Practitioner
CPG	Clinical Practice Guideline
CPT	Co-trimoxazole prophylaxis therapy
DALY	Disability-Adjusted Life Year "One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability" (World Health Organization, n.d.-a).
EDL	Standard Treatment Guidelines and Essential Drugs List for South Africa: Primary Health Care
EBM	Evidence-based medicine
EBP	Evidence-based practice
FG	Focus group or group discussion
GP	General Practitioner
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illness
LMIC	Low and Middle Income countries
PHC	Primary Health Care
RCT	Randomised Controlled Trial
SANC	South African Nursing Council
STI	Sexually Transmitted Infections
TB	Tuberculosis
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION AND BACKGROUND

In this chapter, I introduce the study; provide an overview of health care services in South Africa, the burden of disease and the background to the study.

Introduction

This dissertation explores the experiences of nurses in primary health care in South Africa. In particular, it focuses on the use of guidelines in primary care.

Health and health care in South Africa

South Africa, a middle income country with approximately 48 million people, has been described as a country which has made great political strides since 1994, but is struggling to overcome the legacy of apartheid and the challenge of transforming institutions and promoting equity in development (Coovadia, Jewkes, Barron, Sanders, & McIntyre, 2009). This is particularly evident in the health of its people and in the health care system. The health system which was in place in 1994 at the transition to democracy was structurally fragmented, centralised, biased toward curative services and inequitably distributed (McIntyre & Gilson, 2002). Despite significant changes in policy, structure and service provision (National Department of Health, 1997), there remain significant health challenges for the country and its health services. South Africa has four concurrent health/disease epidemics: poverty related diseases; an increasing burden of chronic and non-communicable diseases; an HIV/AIDS epidemic which accounts for 31% of the total disability-adjusted life years of the population, with violence and injuries further contributing to death and disability (Chopra, et al., 2009; Coovadia, et al., 2009).

The burden of disease in primary care

Accurate information on the health status of the population is essential for the adequate planning and provision of health care. In South Africa such information is compromised by inaccurate records, particularly the under-recording of diseases and deaths (Redelinghuys & Van Rensburg, 2004). There are numerous health indicators, the most common of which are morbidity and mortality rates. These however, do not provide a complete picture of the burden of disease.

The WHO Global Burden of Disease (GBD) project provides a "consistent and comparative description of the burden of diseases and injuries and the risk factors that cause them". The first GBD study in 1990 provided a common platform for the understanding of the disease burden and a means of comparing burdens in and between countries. A key metric was developed to estimate the burden of disease and health loss associated with morbidity and mortality, the disability adjusted life-year (DALY), "a time-based measure that combined years of life lost due to premature mortality and years of life lost due to time lived in health states less than ideal health" (World Health Organization, n.d.-a).

Although it is beyond the scope of this dissertation to discuss the health status of the South African population in depth, generally speaking South Africa's health status is poor compared with other countries of similar socio-economic standing (Redelinghuys & Van Rensburg, 2004)., and is characterised by "a quadruple burden of disease, with the impact of HIV/AIDS added to the combination of a high injury burden, conditions related to underdevelopment and chronic diseases". Bradshaw, Norman and Schneider, in the 2000 burden of disease study identified the top twenty leading causes of disease burden ranked in DALYs (2007). These are presented in Table 1.1.

Table 1.1 Top twenty single causes of disease burden in DALYs in South Africa, 2000 (Bradshaw, et al., 2007, p. 440).

Top twenty single causes of disease burden in DALYs in South Africa, 2000			
Rank	**Disease, injury or condition**	**Rank**	**Disease, injury or condition**
1	HIV/AIDS	11	Ischaemic heart disease
2	Interpersonal violence injury	12	Protein-energy malnutrition
3	Tuberculosis	13	Birth asphyxia and birth trauma
4	Road traffic injury	14	Diabetes mellitus
5	Diarrhoeal diseases	15	Alcohol dependence
6	Lower respiratory infections	16	Hearing loss, adult onset
7	Low birth weight	17	Cataracts
8	Asthma	18	Hypertensive heart disease
9	Stroke	19	Fires
10	Unipolar depressive disorders	20	Falls

The ten leading causes of death by broad income group for 2004 (World Health Organization, 2008b) are listed in Table 1.2. South Africa, which straddles the middle/low-income country groupings, has a similar disease profile. Notable in the causes of death are preventable diseases, poverty-related infectious diseases, chronic diseases of lifestyle and the trauma related to violence and road traffic accidents.

Table 1.2 The ten leading causes of death by broad income group compared with South Africa (World Health Organization, 2006a, 2008b)

Low income countries	Middle income countries	South Africa (2002)
Lower respiratory infections	Stroke and other cerebrovascular disease	HIV/AIDS
Coronary heart disease	Coronary heart disease	Cerebrovascular disease
Diarrhoeal diseases	Chronic obstructive pulmonary disease	Ischaemic heart disease
HIV/AIDS	Lower respiratory infection	Lower respiratory infections
Stroke and other cerebrovascular diseases	Trachea, bronchus, lung cancers	Violence
Chronic obstructive pulmonary disease	Road traffic accidents	Tuberculosis
Tuberculosis	Hypertensive heart disease	Diarrhoeal diseases
Neonatal infections	Stomach cancer	Road traffic accidents
Malaria	Tuberculosis	Diabetes mellitus
Prematurity and low birth weight	Diabetes mellitus	Chronic obstructive pulmonary disease

Bradshaw et al. recommended the following interventions in order to reduce premature mortality significantly in South Africa:

- "Reduce HIV transmission and delay mortality from AIDS in adults by improving treatment of sexually transmitted infections, improving voluntary counselling and testing services, providing antiretroviral treatment to pregnant HIV positive women and HIV-positive patients, and promoting safe sex.
- Improve TB control.
- Develop strategies to reduce violence and injuries.
- Promote healthy lifestyles (including a prudent diet, physical activity and reduced smoking, alcohol, and substance abuse)" (Bradshaw, et al., 2003, p. 687).

Many of the current challenges facing the South African Health Care system, and in particular primary care health providers, can be attributed to the fragmented health care structures of the apartheid government policies and in particular institutionalised racial discrimination (Foster, 2005; Lewin, 2004; McIntyre & Gilson, 2002). There was an emphasis on first world tertiary level care, affordable only to those with adequate income and/or private medical insurance, fragmentation of health care provided by up to fourteen departments of health and limited provision for persons without access to private medical insurance. Despite numerous attempts to shift the focus of health care to the primary health care approach in the 80s and early 90s, South Africa in 1994 was a grossly unequal society, in political structures, socio-economic status as well access to affordable, equitable and quality health care (Coovadia, et al., 2009; McIntyre & Gilson, 2002; Van Rensburg, 2004c). With its two-tier health system of public sector health care for the majority of the population and a minority covered by private health insurance, fragmented along socio-economic lines, "the disparities in resources available to each sector, relative to the population that each serves, have widened over the past decade" (McIntyre, et al., 2007, p. v). Michaels-Strasser (2006, p. 1) aptly sums up the challenges facing the South African health services as:

- "The need for high quality primary clinical care services as part of the restructuring of the public health services.
- Significant shortages of nurses with the adequate skills mix to lead the provision of such services".

Health care provision at primary level in South Africa

There has been a significant paradigm shift in the provision of health care in South Africa since 1994. Although the primary health care approach had been policy in the South African national department of health since the early 90s, since 1994 it has been actively implemented and the emphasis of the changed policy has been felt at the interface of PHC practitioner and patient (Walker & Gilson, 2004). The transformation of the health system has led to a number of significant changes in health care delivery, including a significant 'downsizing' of the tertiary health sector and an increase in primary care level services. The health care system in South Africa has forced health workers to live with change (Van der Walt, et al., n.d.).

South Africa is committed to building a primary health care system based on the principles of equity, accessibility, affordability effectiveness and efficiency (Chopra, et al., 2009; Kautzky & Keegan, 2008; Phaswana-Mafuya, et al., 2008). The State primary health care services in South Africa offer essential first contact health care to approximately 80% of the population, i.e. persons without medical/health insurance (Benatar, 2004). Health care at the primary level is provided within the District Health system. Each health district should provide comprehensive health services at primary and secondary level, with referral to a tertiary (specialist) level as necessary. There has also been an increase in the number of patients attending the primary level health services as these became more accessible. A number of reasons may explain this increase, including: free services to pregnant women and children under the age of six years in 1995 (Walker & Gilson, 2004); free primary care services to all citizens in 1996 (Fairall, 2006); increase in the number of sites (clinics) providing primary level services (701 additional primary care clinics country-wide between 1994 and 2004) (South African Government, 2004), and the impact of the HIV/AIDS epidemic (Akinsola, 2001; Petersen & Swartz, 2002a; Van Rensburg, 2004c).

Nurses in the primary health care system

In developing countries, including South Africa, the responsibility for diagnosis, treatment and referral of disease rests mainly upon primary care health practitioners. In South African public sector primary level care, nurses carry almost all the first contact clinical load, and are patients' main, and often the only connection to health care. Nurses are the major health care service providers, finding themselves increasingly responsible for a service that is under-resourced (in terms of human and material resources), and indeed are often referred to as the backbone of the service (Van Rensburg, Steyn, Schneider, & Loffstadt, 2008). Strasser and Gwele (1998) argue that, in many ways, nurses are filling the gap in a system which lacks key personnel who are needed to address the many health and related needs confronted daily by nurses at the front line of primary care.

Today's primary care clinical nurse practitioner (CNP), also referred to as a primary health care nurse, fulfils a multifunctional role. She[1] needs to be multi-skilled, able to promote health, diagnose and treat common ailments, recognise complex health problems and refer appropriately, follow up patients after treatment and referral back to the primary facility, manage chronic health conditions and support those who care for others. Her role extends beyond the boundaries of the community health clinic to involvement in community structures and programmes (Strasser, London, & Kortenbout, 2005).

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[1] For convenience, I refer to nurses throughout the study as female. Currently approximately 85% of all nurses in South Africa are female, although there has been an increase in the number of males entering nursing over the last ten years (South African Nursing Council, 2008).

In order to facilitate the nurse's role and functions at the primary care level, various supportive mechanisms are provided. One of these, clinical practice guidelines (CPGs), aims to provide good evidence for practice and serve as an easily utilised tool for diagnosis, treatment and management. Guidelines, as quickly reproducible, regularly updated tools, provide the busy practitioner with the latest information and enable him/her to provide a comprehensive service. In South Africa, guidelines are issued from the Department of Health and other sources such as academic/specialist working groups. Numerous guidelines, offering information on diverse health/disease conditions, are available in every primary health care clinic. It is difficult to establish just how these are used and whether they meet the purpose for which they were designed.

At primary care level, nurses have increasingly assumed roles and functions previously considered to be the exclusive role of a medical doctor. Most nurses, however, in common with other health workers, have obtained the major component of their training at urban secondary and/or tertiary level health centres. Although since 1985 courses in community health nursing have been incorporated in nurse training programmes, this has not prepared them sufficiently for the task of providing a comprehensive diagnostic, care and treatment service to the majority of South Africa's population, who depend on the public health system for health care (Department of Health, South Africa, 2001b).

Nurses who provide services at primary care level receive further training in diagnostics, pharmacology etc. (South African Nursing Council, 1982), yet this may be insufficient for the complexity of tasks which they are required to perform. Furthermore, the Department of Health policy of a nurse-driven primary health care service, together with the shortage of medical practitioners, especially in the rural areas of South Africa, means that nurses often function without medical support (Dohrn, Nzamz & Murrman, 2009).

Health care knowledge changes rapidly (Abidi, 2008; Downing, 2009; Genuis, 2008), and health practitioners outside of academic settings may have limited access to information, and are at risk of being outdated in their knowledge and practice. This is a significant challenge for departments of health and various strategies have been employed to keep health practitioners, in particular nurses, up to date with changes in policies and practice. One of the mechanisms used to assist PHC practitioners to remain up to date has been the provision of guidelines for diagnosis, treatment and care. Despite the availability of guidelines, however, there remains a significant gap between best evidence and practice in the implementation of guidelines (Carnett, 2002; Davis, et al., 2003). Clinical practice guidelines are developed by guideline groups in an attempt to make health care less variable, more reliable and efficient (Carnett, 2002; Moreira, 2005). Examples of these include: the South African Essential Drug List (EDL) (Department of Health, South Africa, 2003), the Integrated Management of Childhood Illness (IMCI) (World Health Organization, 1997) and WHO Practical Approach to Lung Health (PAL) (Ottmani, et al., 2005). One approach taken is that of using evidence based algorithms that offer standardised diagnostic and therapeutic direction to health workers.

Background to the current study: The PALSA and PALSA PLUS projects

The PALSA (Practical Approach to Lung Health in South Africa) programme, implemented in the Free State province since 2003 (Bheekie, et al., 2006; Fairall, et al., 2005), developed clinical guidelines for the management of acute and chronic priority respiratory diseases by nurse practitioners. The PALSA programme aimed to change and improve the quality of respiratory care at primary care level, through training nurse practitioners to implement standardised algorithm treatment guidelines, based on high quality clinical evidence, and has evaluated the effects of this intervention in a randomised controlled trial (Fairall, et al., 2005) as well as a qualitative evaluation, conducted by the researcher (Mayers, 2004). The PALSA Programme was expanded at the request of the Department of Health in the Free State province when approval was given for the national rollout of antiretroviral therapy. It was an opportune time to include in the PALSA guidelines the management of persons with HIV prior to needing ARVs and in supporting persons who had been prescribed ARVs.

The guideline thus became known as PALSA PLUS ("+" being the addition of the management of HIV and AIDS), and has been used by nurses in primary health care settings in the Free State province and the Western Cape Province, where it was introduced in 2006. PALSA PLUS is a "health systems-based approach to training for primary care providers which attempts to capitalize on the opportunity provided by the ART roll-out to ensure that training for the ART programme is also used to strengthen overall health service delivery" (Stein, et al., 2008). I describe the PALSA/PALSA PLUS programme in detail later in the dissertation.

The emergence of the study

This dissertation emerges from work done in a larger collaborative project, outlined above, which developed, implemented and evaluated the PALSA intervention in the Free State province. This work is ongoing and has expanded into the PALSA PLUS project in the Free State (with the inclusion of HIV and AIDS in the guidelines), in the Western Cape, and is currently being piloted in two further provinces at the request of the national Department of Health. Each phase of the project has been evaluated, using multi-dimensional approaches which have included: a validation study of the initial PALSA guidelines (English, et al., 2006; English, et al., 2008); a pragmatic randomised controlled trial (Fairall, et al., 2005; Zwarenstein, et al., in review); description and evaluation of the PALSA training approach (Bheekie, et al., 2006; Mayers, 2004); quality of life (Booysen, Van Rensburg, Bachmann, Louwagie, & Fairall, 2007) provider experiences (Stein, Lewin, & Fairall, 2007) and cost effectiveness of the interventions (Fairall, 2006; Fairall, et al., 2010).

My own involvement in the PALSA project began in early 2003, just prior to the initial training of nurse trainers in the use of the guidelines and in training nurses in the field (a modified cascade training approach) (Bheekie, et al., 2006). I was requested to conduct a qualitative evaluation of the programme in the Free State province. The evaluation comprised: observation of the training programme (Training the Trainer to Train -TtTtT); follow-up of the nurse trainers for quality of delivery of the intervention in the field, as they in turn trained nurses on site in the implementation clinics; interviews with key stakeholders; focus groups with the nurse trainers; focus groups with nurses who had been trained in the implementation clinics, and those from selected non-implementation clinics.

It was evident that nurses in primary care clinics were provided with a multiplicity of guidelines for variety of conditions. These ranged from treatment of minor infections to fairly complex treatment and management guidelines. Personal observations, done when visiting various clinics in Free State province, were that certain guidelines were well used, easily accessible on the practitioner's desk, while some were stacked on the floor, locked in cupboards or 'filed' under stacks of other papers. It was not clear which were being used and why. The evaluation of the PALSA project indicated that the introduction of the PALSA guidelines, with the associated training and support (described later in the dissertation) appeared not only to be making a difference in the nurses' ability to manage a selected group of patients; the nurses themselves, furthermore, seemed to have been imbued with a new sense of hope and purpose (Mayers, 2004).

From this initial work the research question for this study evolved: "what are the experiences of nurses in using guidelines in primary health care facilities?"

This study represents the first known attempt to describe the experiences of nurses in primary care settings in respect of the use of these guidelines in clinical practice.

Structure of the dissertation

The dissertation comprises nine chapters. The first chapter provides an introduction and brief overview of the background to the study.

Chapter two is a literature review of primary health care and nursing at primary care level, with particular reference to the South African context.

Chapter three is a review of the literature on guidelines, including development, dissemination and implementation.

Chapter four develops the theoretical rationale for this study, which draws on a psychoanalytical framework in order to explore the experiences of nurses in using guidelines.

Chapter five describes the methodological approaches taken in each phase of the research.

Chapters six, seven and eight present the findings of the three phases of the study.

Chapter nine develops the discussion, re-engages with the literature and concludes the dissertation with considerations for further research.

Concluding comments

This dissertation explores the experiences of nurses in the primary care setting in South Africa, in using guidelines during their daily consultations with patients. Using multiple methods, I explore the nature of guidelines available to nurses, their understanding of how these guidelines affect them in their day-to-day practice, the roles they fulfil as carers, diagnosticians and prescribers. In my approach to the study, I have drawn on the body of knowledge emerging from the psychoanalytic paradigm, in particular the work of Hinshelwood and Skogstad (2000b), Obholzer (2005), (Obholzer and Roberts (1994) and Menzies Lyth (1970, 1988).

By describing and illuminating the experiences of nurses in their use of guidelines, the study will provide insights into the world of the nurse practitioner in the primary care setting, her challenges, coping skills and her contribution to the health of her patients.

CHAPTER TWO

REVIEW OF THE LITERATURE – 1: PRIMARY HEALTH CARE AND THE EMERGENCE OF THE ROLE OF THE NURSE

In this chapter I provide context for primary health care (PHC) in South Africa – which will include the issues of the health service – previously and current, the needs of the population, the changing disease profile, training of nurses and an overview of the role of the nurse practitioner.

Introduction and background of the primary health care philosophy and approach

Primary health care (PHC), the model for global health policy (Magnussen, Ehiri, & Jolly, 2004), was introduced by the World Health Organization and the United Nations International Children's Emergency Fund (UNICEF). It reaffirmed the WHO definition of health in 1946 "a state of complete physical, mental and social wellbeing, and not merely an absence of disease or infirmity", and was declared by the conference at Alma Ata in 1978 as the means of achieving Health for All by the year 2000 (WHO and UNICEF, 1978). Primary health care was defined as "essential health care based on practical, scientifically sound methods, made universally acceptable to individuals and families, at a cost that they can afford". It is a key element in the health delivery system (Pullen, Edwards, Lenz, & Alley, 1994).The origins of PHC emanate from the failure of a WHO malaria eradication programme in the mid-1950s (Cueto, 2004b), which was a vertical approach to the management of the disease. Vertical health approaches were targeted at a specific diseases, usually by the developed world into developing countries,[2] and were characterised by the transplantation of the Western hospital based health care system with little place accorded to preventive strategies. By the mid-seventies there had been a number of attempts to implement more comprehensive approaches to health care provision, including the "barefoot doctor" in China (Magnussen, et al., 2004), the Pholela health project in South Africa in the early 1940s (Kark & Cassel, 2002; Yach & Tollman, 1993).

PHC was conceptualised as a significant socio-political shift in health care paradigms. Emphasis was based on more equitable, appropriate and effective responses to the basic health needs of the world's populations. It presupposes an intersectoral, collaborative and people-centred approach to health care delivery, community involvement and empowerment and is closely

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[2] The term *developing countries* is also interchanged with the term *low and middle income countries* (LIMC) which is derived from World Bank classifications. Both terms are used in this chapter, reflecting the use thereof in the cited texts.

linked to community development objectives (Van Rensburg, 2004c). Health was promoted as a fundamental human right and the stated aim of the Alma Ata document was that all peoples of the world should be able to attain a level of health which would enable them to lead socially and economically productive lives (WHO and UNICEF, 1978; World Health Organization, n.d.-b, n.d.-c).

Gilson, Balfour and Goosen (1997, p. 3) refer to the aims of PHC as:

"… to promote health and prevent disease, using education as one of its main tools. It aims to cure sick people and help people with disabilities to improve the quality of their lives. It follows the approach that health is linked to a country's social, economic and political development. Health is dependent on the environment in which people live, services to which they have access and the extent to which they are able take responsibility for their health".

This view was emphasised by Van Balen (2004), who argues that the organisation of health services has to take into account that "their prime objective is not epidemiological, but social: the reduction of health problems impeding human well-being" (p. A23). Principles upon which PHC strategies should be based include equity, accessibility – geographically, financially and functionally (appropriateness), affordability, availability, effectiveness and efficiency (Dennill, King, & Swanepoel, 1995). Further focus on the goal of health for all by the year 2000 was provided at the WHO conference on health promotion held in Ottawa in 1986. This conference aimed to develop the health promotion component of PHC, and the Ottawa Charter emerged (World Health Organization, 1986), which provided strategies for achieving a state of health. Subsequent to 'Health for All by 2000' a follow-up global policy – 'Health for All in the 21st century' was published (World Health Organization, 1998), followed in 2000 with a specific policy for the African continent (World Health Organization, 2000).

The key components of the PHC approach are embodied in Article VII of the Alma Ata declaration (Table 2.1):

Table 2.1: Article VII: Declaration of Alma Ata, 1978

Primary health care:

1. reflects and evolves from the economic conditions and sociocultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;
2. addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;
3. includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs;
4. involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors;
5. requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate;
6. should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;
7. relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

Achieving the shift towards primary health care has not been without significant challenges. A number of reports and evaluations have emphasised that the key to creating effective primary health care services and achieving health for all does not lie in any one strategy – but in a sense of social morality and commitment which will enable obstacles to be overcome and facilitate the achievement of the goal (Bryant, 1988; Bryant, Khan, & Hyder, 1997; Rifkin & Walt, 1986). Sanders (2003), reviewing 25 years of primary health care, notes that from the start, PHC was complicated by confusing terminology and misinterpretation. The Alma Ata document, in defining PHC as both an *approach* and a *level* of care, created the situation in which meanings have been misconstrued, and thus in developed countries PHC has often been interpreted as primary *medical* care, whereas in developing countries PHC is seen as a cheap, low-technology option. The Alma Ata declaration was criticised for being too broad, idealistic and the time frame (which was epitomised by the slogan 'Health for all by 2000') was unrealistic (Cueto, 2004a).

The global agreement on the Millennium Development Goals (MDGs) of 2000 refocused the world's attention on the critical importance of commitment to the primary health care approach, in order to achieve by 2015 targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. Eight goals were adopted by 189 UN member states:

1. Eradicate extreme poverty and hunger;
2. Achieve universal primary education;
3. Promote gender equality and empower women;
4. Reduce child mortality;
5. Improve maternal health;

6. Combat HIV/AIDS, malaria and other disease;
7. Ensure environmental sustainability;
8. Develop a global partnership for development.

Directly and indirectly, these goals are linked to the principles of primary health care, equity and universal access. In 2008, the World Health Organization celebrated sixty years of service to the world's populations, and thirty years since the goal of universal access to health service through the medium of primary health care was enshrined in the Declaration of Alma Ata. In general, Africa is behind in the rate of progress required to achieve the targets of the MDGs (Economic Commission for Africa, 2005; United Nations, 2008a). The MDG report of 2008 (the mid-point report) noted that while there had been significant progress towards achieving the goals, the developing countries, and in particular sub-Saharan Africa, were falling short of the targets (United Nations, 2008b).

Comprehensive versus selective primary health care

Comprehensive versus selective (or targeted) primary health care approaches, linked to the transfer of technologies for improving health, emerged as an issue during the 1980s (Magnussen, et al., 2004; Rifkin & Walt, 1986; Van Rensburg, 2004b). Rifkin and Walt (1986) described the difference between the two approaches as "… primary health care as being concerned with a developmental process by which people improve both their lives and their life-styles", whereas "selective primary health care is concerned with medical interventions aimed at improving the health status of the most individuals at the lowest cost" (p. 560). Walsh and Warren, in Rifkin and Walt (1986) argue that the Alma Ata definition of primary health care was idealistic and not easily achievable and suggested a narrow concept which would allow for planning and implementation of specific, manageable interventions and programmes – i.e. targeted low-cost technical interventions.

The selective PHC approach targets interventions for selected diseases or health problems. This approach has benefits, in that significant energies and resources are used to reduce or even eradicate certain diseases. The tendency is to use focussed biomedical or technological approaches to deal with the disease/problem, but this approach is less likely to deal with the underlying issues which give rise to the disease/problem – in particular the socioeconomic and environmental factors. Four factors were proposed to guide the selection of targeted diseases for prevention and treatment: prevalence, morbidity, mortality and feasibility of control (including efficacy and cost) (Walsh & Warren, 1979). Thus the comprehensive approach based on social equity and health systems development shifted in emphasis toward a verticalised approach in which specific targets for the improvement of health were set and programmes put in place in isolation of the broader health care services. These programmes became known as GOBI (**g**rowth monitoring, **o**ral rehydration, **b**reast feeding and **i**mmunization) to which the FFF – **f**amily planning, **f**emale education and **f**ood supplementation were later added (Magnussen, et al., 2004). With clear targets, these interventions were measurable and appeared to be easy to monitor and evaluate

(Cueto, 2004a). Selective primary health care has not been without its successes, particularly in the field of child immunization (Wibulpolprasert, Tangcharoensathien, & Kanchanachitra, 2008). Yet this approach, by focusing on selected groups (women and children under 5) and diseases, could not fulfil the social justice aims of the Alma Ata declaration and failed to address the socioeconomic root causes of disease in developing countries (Magnussen, et al., 2004). Rifkin and Walt (1986) further note that, although there has been much concern raised about the selectivity of this approach, which negates the object of community participation and control, it has been an approach favoured by major funding agencies as it enables visible results to be recorded, promotes the use of advanced technologies thereby benefiting the multinationals, and maintains the financial and institutional status quo. Schierhout and Fonn (1999) have argued that there is no consensus around "which PHC services can or should be offered together, or what interventions are best run separately as vertical programmes, and how PHC can be linked via referral mechanisms to other levels of care" (p. 1).

In an editorial reflecting on the promise of primary health care, Cueto (2005) argues that the philosophy, despite the problem of implementation, still holds promise. He argues that the different meanings of PHC have had the effects of it being viewed as second-class care, which in turn has impacted on the funding, which has been usually insufficient and inconsistent. Poor intersectoral collaboration and community participation, resistance from health personnel in practice and the reluctance of training programmes to embrace the philosophy and include this in curriculum change have contributed to undermining the implementation of PHC. He further argues that a "combination of the culture of survival among the poor and the privileges of power reinforces inequity, dependency and passivity, all of which are incompatible with PHC" (Cueto, 2005, p. 322).

The strategies of PHC implementation were specified as universal access; equity in service provision; community participation, thus facilitating empowerment, ability to problem solve and engage with health care workers as partners; and intersectoral collaboration with sectors such as housing and education among others (Chatora & Tumusime, 2004). Despite these clear and logical goals, the implementation of the primary health care approach has been hampered by lack of political will, social and health inequities, the specification of donor agencies and structural deficiencies including the pyramidal structure of care (Frenk, 2009).

"Now more than ever" – Primary Health Care revitalisation

With the title "Primary health Care - now more than ever" the World Health Report of 2008 was launched – in the year of WHO's 60th birthday and the 30th anniversary of the Declaration of Alma Ata. The report reflects on the progress made, but concentrates on the failure of health systems to deliver equitable, adequate, acceptable and appropriate health care to the peoples of the world. The report outlines four sets of reforms that "reflect a convergence between the values of primary health care, the expectations of citizens and the common health performance challenges that cut across all contexts" (World Health Organization, 2008c, p. ix). They include:

- *universal coverage reforms* that ensure that health systems contribute to health equity, social justice and the end of exclusion, primarily by moving towards universal access and social health protection;
- *service delivery reforms* that re-organize health services around people's needs and expectations, so as to make them more socially relevant and more responsive to the changing world, while producing better outcomes;
- *public policy reforms* that secure healthier communities, by integrating public health actions with primary care, by pursuing healthy public policies across sectors and by strengthening national and trans-national public health interventions; and
- *leadership reforms* that replace disproportionate reliance on command and control on one hand, and laissez-faire disengagement of the state on the other, by the inclusive, participatory, negotiation-based leadership indicated by the complexity of contemporary health systems.

Notwithstanding enormous worldwide gains in specific areas of health care delivery at primary level (e.g. better vaccination coverage, eradication of smallpox, a significant reduction in the under-five mortality rate, increased contraceptive use, safer childbirth) such gains are not equally distributed (Walley, et al., 2008). Within the African region, the PHC policy formulation has been clearly addressed in the national health policies of most countries. The implementation process however, is inconsistent, due to a number of factors, including weak structures, inadequate attention to PHC principles, inadequate resource allocation and inadequate political will (WHO Regional Office for Africa, 2008). Other factors which challenge and impede the full implementation of PHC are rapid urbanisation, emergence and re-emergence of communicable and non-communicable diseases, especially HIV/AIDS, declining national economic performance, high debt burdens, conflicts, the drain of health workers from developing countries, and increasing disparity among urban and rural populations, particularly with respect to access to basic social and health services (Frenk, 2009; WHO Regional Office for Africa, 2008). Sub-Saharan Africa remains the area in which the least progress has been made.

Primary health care in South Africa

There are a number of different models of health care delivery, and each is adapted to the national health system of health care, which varies from country to country. Political change and reform profoundly influences the nature of the health care service, and this has been particularly evident in South Africa (Department of Health, South Africa, 2001b; Department of Public Service and Administration, 1997). Primary health care is considered to be the acceptable model for delivering basic, essential health care to low income populations in developing countries (Lewis, Eskeland, & Traa-Valerezo, 2004), of which South Africa is one. Trnobranski (1994) emphasises that "the provision of high-quality, cost-effective primary care is undoubtedly crucial to meeting the health needs of the population, and the emphasis on the prevention of avoidable diseases is fundamental to improving the overall health of the nation" (p. 134).

Primary health care, the foundation of the health policies of the South African national government (Republic of South Africa, 2003), offers challenges and opportunities to health care professionals, particularly in the context of HIV/AIDS and the ARV rollout. There has been a significant paradigm shift in the provision of health care in South Africa since the advent of democracy in 1994. Although the primary health care approach had been policy in the South African national department of health since the late eighties (Foster, 2005) it was fragmented with funding for tertiary level care disproportionate to the needs of the citizens for basic effective and effective primary level services. Since 1994 the PHC policy has been actively implemented and the emphasis of the changed policy has been felt at the interface of PHC practitioner and patient (Walker & Gilson, 2004). The PHC approach of the previous regime was a verticalised and selective one; thus the new democracy inherited a national health structure in which different health functions were the responsibility of different tiers of government (e.g. curative care was a provincial function but rehabilitation fell under the local authority) (Van Rensburg, 2004c).

The South African government adopted the primary health care approach as a major strategy towards the goal of achieving equitable, accessible and affordable health care in the country (Chabikuli, Gilson, Blaauw, & Schneider, 2005). In many areas of South Africa, primary health care facilities may be the only available or accessible form of health care for the majority of the population (Ijumba, 2002), and is central to the transformation of the health services in the country (Lehmann, et al., 2004). The transformation of the health system has led to a number of significant changes in health care delivery, including a significant "downsizing" of the tertiary health sector and an increase in primary care level services. Health care at the primary level is offered within the District Health system, in which, in theory, each health district offers comprehensive health services at primary and secondary level, and can refer to a tertiary (specialist) level as necessary.

A number of policies provide the structural framework of primary health care in South Africa, including the ANC National Health Plan (African National Congress, 1994), the White Paper on the Transformation of the Health Systems in South Africa (National Department of Health, 1997), the National Health Care Act (2003), the Primary Health Care Package and Norms and Standards for primary health care and clinics in South Africa (Department of Health, South Africa., 2001b), the National Drug Policy (Department of Health, 1996) and the Nursing Act (2005) and accompanying regulations.

Initially the 'step-child' of a tertiary level weighted health system prior to the democratic change in South Africa in 1994, primary health care is the foundation of all health care (Republic of South Africa, 2003). Health care provision at the community clinic level is a cornerstone of health service transformation in South Africa (Lehmann, et al., 2004). Current challenges in the provision of primary care (i.e. first contact comprehensive health care provided at a community health centre/clinic) in the public sector include long waiting times; excessive workloads for staff; lack of continuity of care; poor attitudes; rudeness and favouritism of nurses, particularly in large urban clinics and lack of confidentiality (Dick, Lewin, Rose, Zwarenstein, & Van der Walt, 2004; Foster, 2005; Janse van Rensburg-Bonthuyzen, 2005; Jewkes, Abrahams, & Mvo, 1998).

Constant restructuring and transformation of services, inequitable distribution of resources, inadequate or irregular supply of basic medicines and inefficient interactions among different hierarchical levels of public health services further compromise the services provided (Benatar, 2004; Janse van Rensburg-Bonthuyzen, 2005; Mills, et al., 2004; Van Rensburg, 2004c). The 2003 Facilities survey reported that,although most PHC facilities provide family planning, STI services and TB services five days a week, almost one quarter of facilities were not yet providing immunisation services five days a week and antenatal care was only provided by half the facilities (Reagon, Irlam, & Levin, 2004).

The 25th anniversary of the Alma Ata declaration however, saw a conference hosted by the Department of Health at which a renewed commitment (the Kopanong Declaration) to strengthening primary health care in South Africa was made (Department of Health, South Africa, 2003). This was followed in 2008 by the Birchwood Declaration on Primary Health Care (National Consultative Health Forum, 2008), which called for a revisioned and revitalised primary health care strategy. Schneider and Barron (2008) make a case for two key dimensions to the implementation of a revitalised approach to PHC in South Africa: firstly, the development of structures and processes of both horizontal and vertical integration of system functioning. All PHC functions in a geographical area should be co-ordinated [horizontal integration] thus minimising fragmentation. PHC vision and goals must inform the actions of all role players and stakeholders in the health system from national to facility level (vertical integration). The authors further argue that the principle of vertical equity, weighting resource allocation by need rather than population size should underpin the resourcing of the health delivery system (Schneider & Barron, 2008, p. 16).

The major health challenges for South Africa were highlighted in the previous chapter. In a recent Lancet series on South Africa, Chopra et al. (2009) have detailed the health/disease trends, their effects on the health system and the social implications in table 2.2.

Table 2.2 The major health challenges in South Africa (Chopra, et al., 2009, p. 1026)

	Trend	Effects on health system	Social Implications
Maternal, newborn, and child health	Rising adult mortality rates causing increased number of orphans and vulnerable children Rising maternal and child mortality and morbidity (75 000 newborn and child deaths per year) and high levels of young child under nutrition 3.4 million orphans (19% of population younger than 18 years) and rising	High numbers of pregnant women needing intervention to prevent mother-to-child transmission of HIV, and to start antiretroviral treatment Increasing number of people needing inpatient care Major long-term morbidity arising especially during the neonatal period because of low-quality care (e.g., cerebral palsy, retinopathy of prematurity), low birth weight, and possible later development of chronic diseases	A lost generation of children and orphans Lost intellectual development and earning potential because of poor environment early in life Increasing care burden on elderly people Increasing incidence of non-communicable diseases and other chronic morbidities
HIV and tuberculosis	Prevalence of HIV increased rapidly since early 1990s; signs of stabilising but no clear sign of slow down; South Africa has the highest number of people infected with HIV worldwide Fuelled by the HIV epidemic, the number of new tuberculosis cases doubled during 2001–06 and rose again to 382 000 (2006–07); South Africa has the fourth highest number of new tuberculosis cases worldwide Increased numbers of drug resistance, including extremely drug-resistant tuberculosis	Target to put 1.5 million people with HIV infection on lifelong treatment by 2011 Increasing requirement for second-line drugs and more complex regimens Side-effects from long-term use of antiretrovirals Crowding out of other diseases especially in acute hospital care High number of health personnel infected with HIV underlines the insufficient number of qualified nurses	Increasing care burden on elderly people and young children Increasing family poverty due to cost of treatment and loss of income Spread of drug-resistant tuberculosis in community Overwhelmed health system resulting in poorer service for all
Chronic disease and mental health	Non-communicable diseases accounted for 35% of disease burden in 2000 Prominent in urban poor population, and also emerging in rural areas Ageing of population and urbanisation will increase burden from non-communicable diseases Rising death rate from diabetes, hypertensive and kidney disease, and cervical and prostate cancer 16.5% of adults have suffered from a mental disorder in preceding year	Increasing demand for care services and a range of services including behaviour modification Persistent poor disease outcomes Psychosomatic conditions will persist if underlying mental health problem is ignored	Loss of income from breadwinners being affected High costs of care can be catastrophic to family Increasing informal care demands often borne by women
Violence and injury	Rates of interpersonal violence and injury have been decreasing, but remain unacceptably high	High demand for emergency services Violence in care settings Further stress and demoralisation of health-care workers	Loss of income, especially for young people Post-traumatic stress and long-term psychosocial consequences that have been largely unmeasured Intergenerational cycle of violence Further loss of social cohesion

The impact of TB, HIV and AIDS on primary health care services

This section provides a brief overview of the TB and HIV epidemics, as the diseases have had a significant impact on the health services at primary care level. TB has been endemic in South Africa for many decades, its management compromised by the socio-economic and socio-cultural environment, widespread poverty and poor, overcrowded living conditions, as well as factors such as access, affordability, equity, efficiency and effectiveness, and has been increased by the advent of HIV (Janse van Rensburg-Bonthuyzen, 2005). "Untreated HIV infection leads to progressive immune deficiency and increased susceptibility to infections such as TB" (Coetzee, Hilderbrand, Goemaere, Matthys, & Boelaert, 2004, p. A11). Co-infection of TB/HIV is over 60% in certain areas of South Africa (Wilson, 2005). Unlike TB in an HIV negative person, for whom there is a reasonable expectation of cure if the person adheres to and completes the TB treatment programme (Naidoo, Dick, & Cooper, 2009), TB is the leading cause of death in HIV-infected persons in southern Africa (Coetzee, et al., 2004). Thus, to an already stretched primary health service has been added the care and treatment of persons with HIV – in particular the management of patients on ARVs. This is due in the main to the backlog of persons requiring treatment, as ARVs were only officially rolled out late in 2003 (National Department of Health South Africa, 2003) and to the need for training of health professionals to manage patients on ARVs at primary level. Benatar reflects "providing antiretroviral treatment to hundreds of thousands of people for many years, in addition to offering adequate integrated care for tuberculosis, malnutrition, and other associated diseases of poverty, presents major challenges in terms of cost, health care delivery, and other factors" (2004, p. 89).

By mid-2008, 568 000 adults and children were receiving ARV treatment in South Africa, with the public sector accounting for 79% of this total (Adam & Johnson, 2009). In September 2009, according to South African Health Minister Aaron Motsoaledi, an estimated 700 000 HIV positive patients in the state health services had been provided with access to ARVs, representing about 50% of the number that has been targeted by the national Department of Health (Govender, 2009). The goal for treatment is to provide ARVs for 80% of people living with HIV/AIDS in need of treatment by 2011. HIV prevention strategies have, however, also failed to achieve the targets, thus the number of persons who will need ARVs in the future will continue to rise, with further strain on the health resources of the country (Tawfik & Kinoti, 2006; Vassall & Compernolle, 2006).

Human resources: health workers and PHC

Health and allied workers are an essential pillar of the PHC approach and policy, and appropriately skilled workers are needed to ensure that this approach is successfully implemented. An appropriate skill mix of health workers working together in a multidisciplinary health care team is essential to develop an integrated approach and an effective health service at the primary care level (Poulton & West, 1993; Shaw, de Lusignan, & Rowlands, 2005; Sherer, et al., 2002; Xyrichis & Lowton, 2008), although there is lack of evidence as to what this mix should be (Kruk, Prescott, de Pinho, & Galea, 2009). In a study to quantify the human resource requirements for PHC, Daviaud and Chopra (2008) adapted a WHO indicator of staff needs tool to estimate the staffing requirements at PHC clinics. They reported that, across all districts, there is wide variation in staffing levels between PHC facilities and inefficient use of professional staff. In particular, only 7% of the required number of doctors was available to the PHC services, 94% of professional nurse posts were filled, with wide variation in distribution, and there were insufficient numbers of other categories of nurses. A more equitable distribution of the health workforce and sufficient numbers of appropriately skilled health care workers who are able to work closely with communities in a decentralised health system are critical to the success of the PHC approach in South Africa (Lehmann, 2008).

Human resources for health care are in short supply worldwide. The global gap in the supply of health workers is estimated to be 4,3 million (World Health Organization, 2006b). For some years there has been a migration of health professionals, in particular doctors and nurses, from the developing to the developed world (Alkire & Chen, 2004). In some of the poorest countries health systems are in danger of collapse due to the human resource crisis (Van Rensburg, et al., 2008). In South Africa, about 60% of nurses work in the public sector, which serves 85% of the population (Breier, Wildschut, & Mgqolozana, 2009), Although the maldistribution of nurses is evident, Breier et al. (2009) report that the clarity about shortages of nurses in the country is difficult to establish.

African countries have been hard hit by the migration of their health professionals. Reasons for this include globalisation of health care, salaries, working conditions, opportunities for training, among others (McCoy, et al., 2008). In South Africa, Breier et al. (2009) report that migration of nurses is linked to a number of factors: lack of incentives in the public service, work pressure, deteriorating working environments, lack of professional development opportunities, escalating crime and the rise of HIV/AIDS. The true extent of health professional migration is difficult to assess due to a lack of systematic data (Alkire & Chen, 2004; Breier, et al., 2009; Clemens & Pettersson, 2008). In sub-Saharan Africa, where nurses form a significant component of the health workforce, the crisis of human resources will be a factor in the non-achievement of the MDGs (Dovlo, 2007). A detailed discussion of the impact of migration and other reasons for health professional shortages in South Africa is, however, beyond the scope of this review.

The nurse practitioner in primary health care

Nurses have always had a broad and dynamic role within the health care system. It is not uncommon for the nurse to be referred to as the backbone of the health service (Mbambo, Uys, & Groenewald, 2003; Petersen, 2000), and as such nurses traditionally fill the gaps when other members of the health team are not available (Bierman & Muller, 1994).

Most health care is provided within a community context, whether this is through a public health service or as a private fee for service. Primary (or first contact) care often acts as the ‘gatekeeper’ for the rest of the health services (Petersen & Swartz, 2002a; Trnobranski, 1994). Primary care has, however, changed over time, impacted by a number of issues. Richards, Carley, Jenkins-

Clarke, and Richards (2000) identify the major changes in primary care in the United Kingdom as follows: medical person power issues – in particular a decrease in the number of doctors working in the primary care settings; an increased workload in this sector, including a significant shift from secondary care to primary level care; boundary definition and enhanced roles of nurse practitioners and a primary care led health service with a more focussed orientation towards health promotion, disease prevention and chronic disease management. Similar changes can be noted in South Africa, with the added challenges of high poverty levels, TB, HIV and a backlog of inequitable resource distribution, among others.

Nurses have expanded their roles over the decades. A formal hospital based system of care in which nurses both managed and provided care and in which other health professionals (physicians and surgeons) had a vital role, but controlled access has evolved into a highly complex, specialised and demanding health care system. There are high expectations of nurses in today's health care settings. Significant technological advances, increasing demands from health care consumers (patients/clients), conflict, both personal and professional between the rights of the health care consumer and that of the provider, a worldwide shortage of skilled health care professionals (for South Africa in particular doctors and nurses) (Aiken, Buchan, Sochalski, Nichols, & Powell, 2004; Daviaud & Chopra, 2008; Ross, Polsky, & Sochalski, 2005), patients with interrelated and complex disease conditions and ever-expanding roles have contributed to the challenges of nursing in the 21st century.

The development of the role of the nurse practitioner has been, in part, in response to the changing trends in health care, increasing demands for effective delivery at the first point of contact, and to deficits in the provision of care to communities (Trnobranski, 1994). The role of nurse practitioners was first identified in the USA in the 1960s, and has continued to evolve and develop. The role was initially conceived as a means of providing health care for the communities traditionally underserved – usually in inner city or rural areas in the United States. This changing role was not without controversy however, as it was viewed by many nurses as a backward step that removed the nurse from the traditional 'caring' role, and by others as a complementary service, providing choice and diversity to patient care (A. Richards, et al., 2000). In the primary health care setting nurses have been assuming an increasingly complex and responsible role. The International Council of Nurses, in a position statement on nurses and primary health care, viewed it "critical that PHC concepts be integrated into all levels of nursing education and that the nurse's role in PHC leadership be strengthened and articulated at all levels nationally and internationally" (International Council of Nurses, 2000).

In settings in which the medical practitioner is not consistently available, nurses have taken on the role of diagnostician, prescriber of treatment and manager of care, within a specified scope of practice – i.e. the registered primary health care nurse. The role of the nurse practitioner has, according to McLaren (2005), adapted in response to a number of drivers, which she lists as: spiralling health care costs which have led to initiatives to limit the costs of labour which led to the replacement of doctors by nurses and the extension of the nurse-role; adaptation and extension of nurses' roles in order to deal with technological advances and the shift from hospital-based care to an integrated community-based primary care approach with an increasing focus on preventive medicine. Nurses have been utilised in order to deal with the inequitable provision of health care, especially in rural settings. Substitution of nurses for doctors is also a means of reducing doctors' working hours and nurses themselves have become more specialised (McLaren, 2005).

In order to provide equitable, affordable access to essential health care in South Africa, a key requirement is the provision and support of appropriately trained primary health care nurses. These nurses, also known as clinical nurse practitioners (CNPs), provide the bulk of primary care services in South Africa (Strasser, et al., 2005) and are increasingly taking on the functions of the community/primary care physician in settings where there are few doctors. Clinical nurse practitioners manage all minor and most of the chronic illnesses and may prescribe medication according to the prescribed schedules and within the Standard Treatment Guidelines and Essential Drugs List (Department of Health, South Africa., 2003). This includes the prescription of broad-spectrum antibiotics. Acting as gatekeepers to the health care system, it is they who are most likely to refer to secondary and tertiary level care. Strasser et al. (2005) argue that primary care services in South Africa are faced with two important challenges: firstly the need for high quality primary clinical care and secondly, the provision of more adequately skilled nurses at primary care level.

Nurse practitioners in primary care – are they effective?

The International Council of Nurses (ICN), in an International Nurses Day publication entitled "Delivering quality, serving communities", focused on the role of nurses, as the largest health care provider group, in applying the core principles of primary health care; "Nursing practice is the very essence of primary health care" (International Council of Nurses, 2008, p. 7).

A number of studies have investigated the role of nurse practitioners in primary care. While the role of the primary care (or primary health care) nurse practitioner differs according to the nature of the health services and the country, these studies have relevance for understanding the complexity of the role and function of the primary health care nurse. They have a level of autonomy which differs from that of the registered professional nurse, and there is significant overlap in the professional boundaries of their medical practitioner colleagues. The primary health care nurse therefore, is more appropriately called the primary care nurse practitioner.

The concept of the nurse practitioner developed out of the need to identify those nurses with particular speciality areas. Barton, Thorne and Hoptroff (1999), citing the Royal College of Nursing, state that the nurse practitioner is a nurse who, after specific study, is responsible for autonomous clinical decisions, uses skills not usually exercised by nurses in differential diagnosis, screens patients for diseases and may refer or discharge patients. Bliss and Cohen, quoted in Richards, Carley, Jenkins-Clarke, and Richards (2000), define the nurse practitioner as a nurse with professional training which has given her/him additional knowledge, skills and attitudes and who can assume responsibility for first level assessment and treatment. In the United Kingdom, nurse practitioners provide frontline care in general practice and in emergency departments (Horrocks, Anderson, & Salisbury, 2002). Primary care nurses in the UK have been found to have longer consultations, arrange more investigations and follow-up, but provide more information and generally give more satisfaction than general practitioners (Iliffe, 2000). A British study found that, although nurse practitioners are not less costly than general practitioners, they are as safe in managing self-limiting illnesses (Venning, Durie, Roland, Roberts, & Leese, 2000). Carnwell and Daly (2003) note that emerging roles for nurses include such titles as Nurse Practitioner (NP), Specialist Nurse Practitioner, Clinical Nurse Specialist (CNS), Advanced Nurse Practitioner (ANP) and higher level practitioner. This points to the differences in training, context and level of care provided and recognition of the specific and specialised role of the nurse practitioner.

A 2005 Cochrane review of 16 studies evaluated the impact of doctor-nurse substitution in primary care on patient outcomes, process of care, and resource utilisation including cost over the period 1966 – 2002. The review found no appreciable differences in quality of care or health outcomes for patients (Laurant, et al., 2005). Despite this finding, the authors caution that doctor–nurse substitution may be more complex that initially assumed – nurses may be meeting previously ‘unmet need’, may generate demand for care, and findings are context dependant. Although cost savings based on the salary differentials of the two professional groups may be achieved, this may be offset by the lower productivity of the nurses compared to doctors. In a systematic review of 11 trials and 23 observational studies, Horrocks et al. (2002) reported that no differences in patients’ health status outcomes were found, and that, although nurse practitioners had longer consultations and made more investigations than doctors, no differences were found in prescriptions, return consultations or referrals. Nurse practitioners in some ways provided better quality care. An RCT in 15 general practices in the Netherlands found no statistically significant differences in health status, medical resource consumption and compliance with practical guidelines between the patients seen by the nurse practitioners and GPs (Dierick-van Daele, Metsemakers, Derckx, Spreeuwenberg, & Vrijhoef, 2009). Long-term follow up studies support the role of nurse practitioners as equivalent health providers (Lenz, Mundinger, Kane, Hopkins, & Lin, 2004).

The literature indicates that nurses can do some of what the doctor does, and usually to the greater satisfaction of the patients (Kinnersley, et al., 2000; Salvage & Smith, 2000). Patient opinions on the role of the nurse practitioner at primary care level vary. Caldow et al. (2006) found that patients will generally accept nurses who take on roles previously considered the exclusive role of doctors. Across a variety of countries and primary care practice settings, patients appear to be as satisfied with the care provided by nurse practitioners as that provided by doctors (Laurant, et al., 2008; Pinkerton & Bush, 2000; Roblin, Becker, Adams, Howard, & Roberts, 2004). There are a number of qualifiers and caveats to this, however. Williams and Jones (2006), in a qualitative study commented that patients need time to discuss their health concerns, and that the time provided by the nurse practitioner may play a significant role in patient satisfaction. Patients do not necessarily understand the skills, knowledge and authority of nurses providing first contact care, their expectations therefore may be lower, and their satisfaction accordingly greater (Redsell, Jackson, Stokes, Hastings, & Baker, 2007). The longer consultations reported by a number of studies, argue Redsell et al., may explain the satisfaction rates reported. Patients do have concerns about the roles of nurse practitioners and are frustrated by the inconsistency of prescribing authority between doctors and nurses (Redsell, Stokes, Jackson, Hastings, & Baker, 2007).

Despite increasing evidence that the quality of primary care delivered by nurse practitioners is equal to that of physicians (Lenz, et al., 2004), criticism of the nurse practitioner includes that of being a 'second class doctor' (Cahill, 1996), 'mini-doctor' or 'maxi nurse'(Castledine, 1995). Leese (2004) found that nurse practitioners did not reduce general practitioners' workload. This study, however, did not take into account different levels of training of the nurse practitioners, ratio of doctors to nurses and degrees of autonomy of the nurse practitioners. Similar findings were reported by Laurant, Hermens, Braspenning, Sibbald and Grol (2004), in a randomised controlled trial in the Netherlands. They state that nurse practitioners do not reduce the GPs' workload, that nurses are not substitutes for doctors but provide a wider service than was previously available, and the addition of nurse practitioners to the general practice team, although welcomed by the doctors, did not influence the subjective workload (job satisfaction and work stress) experienced by the GPs. These findings were in turn challenged by a number of responses to the published study from GPs and NPs in the UK, thus providing further evidence that the debate as to the definition, roles, scope of practice of the nurse practitioner continues. Barton et al. (1999) argue that "nurse practitioning is evolving from a particular blend of both nursing, and medical skills and knowledge, creating a new type of health care professional" (p. 58). The nurse practitioner is both an asset and threat to the traditional nursing and medical boundaries.

The role change and the overlapping of boundaries between health care workers, particularly nurses and doctors, has been reported as a possible source of conflict, blurring of roles and responsibilities, a potential disruption to the primary care team and a challenge to professional identity which has the potential to adversely affect the quality of care given to patients (A. Long, McCann, McKnight, & Bradley, 2004; Williams & Sibbald, 1999). One of the core issues to emerge from studies done in this area seems to be, according to Salvage and Smith, that nursing has changed substantially over the last 20 years, but that the "the core dynamic is the same: nursing, for all its new independence and expertise, is still dancing around the medical maypole" (2000, p. 1019).

Task shifting in human resources for health

Task shifting is "the name now given to a process of delegation whereby tasks are moved, where appropriate, to less specialized health workers" (World Health Organization, 2007, p. 3). The aim of this reorganisation is to ensure that the most efficient use is made of the human resources available. It has been most evident in the shifting of tasks from the professionals to assistive workers, also known as community workers, thus freeing up health professional to carry out tasks for which they are uniquely competent and trained to do. The WHO 2006 estimate of the shortfall of nurses, doctors and midwives in the African region was 817992 (World Health

Organization, 2007). Training of sufficient numbers of health professionals will not meet the needs, as other factors such as attrition during training, migration and the impact of HIV on health professionals have to be considered. The WHO three-prong task shifting project "Treat, Train and Retain" has developed guidelines for the shifting of specific tasks to health workers "with shorter training and fewer qualifications in order to make more efficient use of the available human resources for health" (World Health Organization, Health Systems and Services, 2007, p. 2).

Task shifting, though recently a focus for meeting the challenges of upscaling health care delivery, particularly in the face of the HIV and AIDS epidemic in sub-Saharan Africa, is by no means a new concept. Over many years health care workers, whether formally trained or from a volunteer base, have gradually been taking over tasks from, in the main, health professionals with more in-depth/specialist training, and is acknowledged by WHO as a "pragmatic response to health worker shortages in a number of countries" (World Health Organization, Health Systems and Services, 2007, p. 2). Roles and functions have been delegated/transferred from doctors to registered nurses, from registered nurses to enrolled nurses and ultimately the community based worker has increasingly taken on much that would have been considered an exclusively nursing function in previous decades.

Examples of task shifting to rapidly scale up HIV treatment programmes and delivery have been reported from Zambia (Morris, et al., 2009), South Africa (Van Rensburg, et al., 2008; Zachariah, et al., 2009) Malawi and Lesotho (Zachariah, et al., 2009). Dovlo (2004), in a desk review of substitution of health workers for physicians in Africa, reported four main forms of substitution:

- indirect substitution/task delegation, i.e. substitution using an existing but different profession;
- direct substitution, substituting an existing profession with new and different cadres (e.g. medical professional to midlevel worker/medical assistant);
- intra-cadre skills delegation, in which specific tasks are delegated to a lesser trained cadre from the same profession (e.g. medical specialist to general practitioner);
- task delegation of non-technical tasks (patient records to administration clerks).

Training, scope of practice and functions of substitute health workers varied between countries. Benefits noted by Dovlo included retention of health workers against international migration, retention of specifically trained workers in the rural districts, reduced training periods and lower costs of remuneration and motivation. There was a perception of comparable quality of care, but limited evidence of this (Dovlo, 2004). The author has summarised the advantages and disadvantages of substitute health workers in the following table.

Table 2.3 Advantages and disadvantages of using substitute health workers (SHWs) (Dovlo, 2004) (used with permission)

Possible advantages of SHWs	Possible disadvantages of using SHWs
1. Substitutes are country-specific, not internationally "tradable", and are more easily retained within the country 2. Emoluments and incentives for such cadres are significantly lower than for cadres substituted for 3. Pre-service training costs are also much lower 4. Academic entry requirements into technical training are less problematic and training is accessible to a wider range of entrants from all segments of society 5. All training is local and practical 6. Substitute cadres accept postings into rural/hardship areas and are retained there 7. Substitutes may reduce other service costs by requiring fewer diagnostic tests and less sophisticated equipment and by prescribing generic medications 8. They may relate better with communities by being less elitist and more integrated	1. Quality of care may suffer with poor clinical decision-making or poor supervision of their practice (they still require supervision by a professional) 2. Ethical considerations may be less strong in new cadres who don't have existing traditions and norms. Practice regulation is absent for many such cadres 3. The perceived low costs may be offset by poor treatment results and outcomes to patients and high morbidity 4. Scaling up the numbers of substitutes to achieve higher coverage will mean similar expansion in the numbers of professional cadres required for supportive supervision 5. Eventually cadres carrying out similar tasks want remuneration and incentives similar to those of the original cadres. Interprofessional conflict and demotivation may ensue

The WHO document has formulated twenty-two recommendations (Appendix A) as guidelines for task shifting, with respect to: adopting task shifting as a public health initiative; creating an enabling regulatory environment for implementation; ensuring quality of care; ensuring sustainability and organising of clinical care services (World Health Organization, Health Systems and Services, 2007, pp. 3-5).

In South Africa, nursing roles and functions have been determined by the ‘Scope of Practice’, which is defined, in the Nursing Act 33 of 2005, as “the scope of practice of a practitioner that corresponds to the level contemplated in section 30 (of the Act) in respect of that practitioner” (2005). Section 30(1) of the Act defines a professional nurse as “a person who is qualified and competent to independently practise comprehensive nursing in the manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice”. Details of the training requirements are determined by the South African Nursing Council and may be amended. The Act therefore makes provision for the opportunity for professional nurses to take on greater roles and functions (task shifting) provided that they are qualified and competent and capable of assuming responsibility and accountability for their practice.

Task shifting, although welcomed by some, particularly state health services, as a cost containing means of providing health care, is not without its controversies. In response to the WHO recommendation, the First Global Health Forum on Human Resources for Health, expressed its qualified support for task shifting (First Global Forum on Human Resources for Health, 2008). The forum, comprising the International Council of Nurses, the International Pharmaceutical Federation, the World Dental Federation, the World Medical Association, the International Confederation of Midwives and the World Confederation for Physical Therapy, outlined twelve guiding principles for effective task shifting (Table 2.4).

Table 2.4 Guiding principles for effective task shifting (First Global Forum on Human Resources for Health, 2008)

Guiding principles for effective task shifting

We believe that for task shifting to be effective:

- Skill mix decisions should be country-specific and take account of local service delivery needs, quality and effectiveness factors, efficiency, the current configuration of health services and available resources, as well as production and training capacity, and include the health professions in decision-making.
- Roles and job descriptions should be described on the basis of the competencies required for service delivery and constitute part of a coherent, competency-based career framework that encourages progression through lifelong learning and recognition of existing and changing competence.
- There needs to be sufficient health professionals to provide the required selection, training, direction, supervision, and continuing education of auxiliary workers.
- Regulations for assistive personnel and task-shifting need to be set with the professions involved. It should be clearly stated who is responsible for supportive supervision to assistive personnel. In any case, the curriculum development, the teaching, supervision and assessment should always involve the health professionals from whom the task is being shifted.
- There must be adequate planning and monitoring to avoid the danger of generating a fragmented and disjointed system that fails to meet the total health needs of the patient, offers a series of disconnected and parallel services that are both inefficient and confusing, and may lead to de-motivation and high attrition rates.
- Assistive personnel need compensation and benefits that equal a living wage, a safe workplace and adequate supplies to ensure their own safety and that of patients. At the same time, they should be expected to work within the code of conduct of their employer.
- Deploying assistive personnel will increase demand on health professionals in at least three ways: (1) increased responsibilities as trainers and supervisors, taking scarce time away from other tasks; (2) higher numbers will be needed to take care of the new patients generated by successful task-shifting; and (3) health professionals will be faced with patients who have more complex health needs (the simpler cases will be covered by task-shifting)and thus require more sophisticated analytical, diagnostic, and treatment skills.
- There needs to be credible analysis of the economic benefit of task shifting to ensure equal or better benefit, i.e. health outcomes, cost effectiveness, productivity, etc. Ongoing evaluation, particularly in skill-mix changes and the introduction of new cadres and or new models of care, should systematically consider the impact on patient and health outcomes as well as on efficiency and effectiveness.
- When task shifting occurs in response to specific health issues such as HIV, regular assessment and monitoring should be conducted on the entire health system of the country concerned. In particular, quality assessment linked to overall health outcomes of the population is essential to ensure that programs are improving the health of patients across the health care system.
- Assistive workers should not be employed at the expense of unemployed and underemployed health professionals. Task shifting should be complemented by fair and appropriate remuneration of health professionals and improvement of their working conditions.
- Where task shifting is meant as a long-term strategy it needs to be sustainable. If meant as short term, there needs to be a clear exit strategy.
- Assistive workers need to be integrated into health care delivery systems and treated as part of the team.

Task shifting, while providing much needed relief to the human resource crisis in health care, is not necessarily the solution to the need for health workers of all categories to address the increasing health care needs of populations, particularly at the primary health level of care. Lehmann, van Damme, Barten and Sanders (2009) argued that the long term success of the task shifting approach requires that governments commit to this at the political and financial level. An enabling regulatory framework, implementation of relevant policies, appropriate training and adequate resources are among the essential task shifting strategies identified by Lehmann et al; all of these require committed leadership.

Clinical decision making by nurse practitioners

How do nurse practitioners make decisions regarding diagnosis, treatment and referral in their practice? Primary care nurse practitioners, as with other health care professionals, are expected to incorporate best evidence into their clinical decision making (McCaughan, Thompson, Cullum, Sheldon, & Raynor, 2005). Questions relating to their competency and the adequacy of training of primary care nurse practitioners have been raised. Kassirer (1994) questioned whether nurse practitioners receive adequate preparation for autonomous decision making, as dealing with diagnostic uncertainty and complexity may provoke anxiety. Other factors which may impact on autonomous decision-making may include lack of budgetary control and prescribing powers (McCaughan, et al., 2005). Meyer, Summers and Möller (2001) reported that prescribers (including nurses) in developing countries, particularly in primary care settings, were often not formally trained in rational prescribing (Crigger & Holcomb, 2008).

The distinct nature of primary care diagnosis presents challenges to nurse practitioners. Summerton (2005) stated that patients in primary care present to their doctors with symptoms that are generally less clearly defined than would be seen in a specialist level service. The spectrum of patients, moreover, is different and more wide-ranging than that seen in specialist care. Nurse practitioners, along with other primary health care professionals, need to be ‘expert’ and should be able to practice using the best evidence available. Yet, for busy primary care practitioners, particularly those in rural areas with limited internet access, obtaining the most recent evidence may be difficult, and the skills of translating this evidence into practice are often challenging.

Clinical nurse practitioners in South Africa

In developing countries, including South Africa, the responsibility for diagnosis, treatment and referral of disease rests mainly upon primary care health practitioners. In South African public sector at primary care level, nurses carry almost all the first contact clinical load, and are patients’ main, and often the only connection to health care. Nurse practitioners are not used primarily in South Africa as specialists – they are, in effect, specialised generalists, skilled in assessment and diagnosis, prescription and management of treatment, follow-up and referral. Today’s primary health care clinical nurse practitioner (CNP) fulfils a multifunctional role and is expected to promote health, diagnose and treat common ailments, recognise complex health problems which require referral, follow up patients after treatment and referral back to the primary facility, manage chronic health conditions and support those who care for others.

Nurses, in common with other health workers, have obtained most of their training at urban secondary and/or tertiary level health centres, and although since 1985 courses in community health nursing have been incorporated in nurse training programmes, this has not prepared them sufficiently for the task of providing a comprehensive diagnostic, care and treatment service to the majority of South Africa’s population, who depend on the public health system for health care (Department of Health, South Africa., 2001b). Nurses who provide services at primary care level receive further training in diagnostics, pharmacology etc., yet this may be insufficient for the complexity of tasks which they are required to perform. Furthermore, the Department of Health policy of a nurse-driven primary health care service, together with the shortage of medical practitioners, especially in the rural areas of South Africa, means that nurses often function without medical support.

Despite the contributions that nurse practitioners have made to a number of fields of nursing practice, there remains a lack of clarity about their roles and in South Africa, a lack of recognition of their importance at primary care level. Although the recent occupational specific dispensation policy adopted by the Department of Health has begun to remunerate nurses according to their specific skills mix, there is still much work to be done in order to appropriately recognise the value of the CNP in the PHC services.

Competencies and job descriptions of nurse practitioners at primary care level in South Africa

Strasser et al. (2005) highlight two important challenges faced by the primary care services in South Africa: the need for high-quality primary clinical care and the need for more nurses with adequate skills to provide such services. Competencies which are required, according to the authors are:

- Demonstration of sound judgement, critical thinking and a caring attitude;
- Effective assessment of needs, diagnosis and treatment of common conditions;
- Assistance to clients to attain optimal health and promote self care;
- Ability to work within the scope of practice and practice independently;
- Role of change agent (Strasser, et al., 2005).

The specific roles and responsibilities of the CNP include the delivery of a primary curative service, requiring skills of history taking, diagnosis and assessment, management and prescription of medication, counselling for disease management and behaviour change. Nurses based in clinic/community health centres are expected to integrate preventive and promotive care with curative services, which include the care and management of persons with a wide variety of chronic diseases, such as hypertension, diabetes and chronic respiratory diseases. Management of persons with tuberculosis, sexually transmitted infections (STIs) has been complicated by the HIV/AIDS epidemic and the need for nurse practitioners to monitor and support the patient on anti-retroviral therapy. Furthermore the provision of antenatal, intra-natal and postnatal services form an integral component of the PHC services in most areas of the country, except in areas where a parallel service is provided (e.g. Western Cape Province). Within the PHC context, however, there exists a shortage of other health care providers including pharmacists, managers, and allied health professionals. The nurse is therefore often expected to combine the knowledge and expertise of all these professionals in order to provide a comprehensive PHC service (Strasser & Gwele, 1998).

Training of nurse practitioners

CNPs fulfil a vital role in the provision of primary care services in South Africa. The CNP is a registered nurse who also complies with the provisions of Section 16 of the Nursing Act 1978, as amended (now replaced by the Nursing Act 33 of 2005), and who practises in a primary health care service in South Africa (Bierman & Muller, 1994; Republic of South Africa, 1978). Provision was made under the Act for the Minister of Health to make regulations relating to the scope of practice of the nurse, including the prescribing power of the nurse practitioner. Section 38A of the Nursing Act No. 50, as amended, permitted nurse practitioners to prescribe (up to and including schedule 4) medications. The 1996 National Drug Policy opened up access to health practitioners by formulating a competency based prescribing policy (Gray, 1999).

A complex legal and policy framework governs the role and function of nurse practitioners in South Africa. These include the Medicines and Related Substances Act no. 101 of 1956, as amended, by Act No 90 of 1997, the National Health Act, no. 61 of 2003, the Pharmacy Act no. 53 of 1974 and the National Drug Policy of 1996. The Nursing Act 33 of 2005 provides that the SA Nursing Council determines the scope of practice of all categories of nurses. The Nursing Council may furthermore, under the provisions of Section 56(1) of the Act, register a person who is registered in terms of section 31(1)(a), (b) or (c) to "assess, diagnose, prescribe treatment, keep and supply medication for prescribed illness and heath related conditions, subject to proof of prescribed training and qualification". A nurse who is employed in a state/public health service and who has been authorised by the relevant authority may also examine, diagnose keep and prescribe medication. Currently, nurses who are authorised to prescribe under Section 38A of the Nursing Act of 1978, may continue to do so, while the current Section 56(6) of the Nursing Act of 2005 permits the state to further authorise nurses to assess, diagnose, prescribe treatment, keep and supply medication for prescribed illnesses and health related conditions in the absence of a doctor or pharmacist. It is evident that, although nurses and nurse practitioners provide primary care services throughout the country, they are constrained by a complex set of laws and policies (Stender, 2009).

Provision of primary care services is impacted by the quality of the training of the health practitioners and their ability/preparedness to regularly upskill their competencies (Ijumba, 2002). Competencies needed by primary health care practitioners are clearly articulated in 'The Primary Health Care Package for South Africa – a set of norms and standards' (Department of Health, South Africa., 2001b).

Primary health care training is offered in a variety of formats. Programmes are offered by nursing colleges, university nursing departments, schools of public health and provincial health services (Strasser & Gwele, 1998). The first course in clinical health assessment, treatment and care was offered in 1982 (Geyer, 1999).The nature of the courses, content included and length of training varies considerably and can be broadly grouped: workshops and short orientation programmes, certificate programmes and diploma programmes. Courses of a month or less in duration focus on staff development; orientation to new policies are provided for nurses working in primary health care facilities. Such courses include training in sexually transmitted diseases, integrated management of childhood illnesses (IMCI) (World Health Organization, 1997) and training in the management of tuberculosis.

Courses may be residential, distance education or decentralised, or any combination thereof. Strasser and Gwele (1998), in a review of 16 curriculum documents, concluded that courses of less than six months duration focussed on meeting the programme requirements as specified in the South African Nursing Council regulations, and of equipping the nurse with the required clinical skills to be able to conduct a physical assessment. The diploma programmes which lasted from 12-18 months provided a more comprehensive training programme including skills such as those of interviewing, problem solving as well as physical assessment skills.

Undergraduate training for nurses includes the principles of primary health care, exposure to primary care services and clinical experience in community based facilities. Each nursing school curriculum, while meeting the specified programme requirements as set out in the relevant SA Nursing Council regulations (currently R425), is 'tailored' to meet the school's philosophy and local community requirements. The clinical diagnostic and management skills at undergraduate level are generally inadequate for practice as a primary care practitioner. Nurses would require further training in primary care diagnosis, treatment, and pharmacology.

Concluding comments

This review has highlighted the key developments in primary health care, the role of nurses and nurse practitioners, the debates about task shifting and the challenges of providing a cost effective, efficient and equitable primary care service for the peoples of South Africa. It is evident that while the role of the nurse practitioner in primary care is here to stay, the debates on exactly what this role should be, how the role should be recognised, inter-professional collaboration and referral are far from over.

CHAPTER THREE

REVIEW OF THE LITERATURE – 2: GUIDELINES AND THE CHANGING OF PROFESSIONAL PRACTICE

In this chapter I provide an overview of the emergence of the evidence based practice movement, the development and use of guidelines as a means to change and improve clinical practice, and the use of guidelines by health care professionals in primary care.

Introduction

The process of facilitating the translation of new knowledge based on empirical studies into practice has been recognised as a particular challenge for health and medical researchers. The lack of effective translation of new knowledge into clinical practice and healthcare decision making is a major barrier to the potential human benefit from advances in biomedical sciences. “Making information available does not necessarily result in subsequent transfer and utilisation” (Davy, 2006, p. 17).

Changing professional practice

Changing professional practice is acknowledged as one of the major challenges to the provision of quality health care. There are a number of commonly utilised means of providing health professionals with information which will hopefully be incorporated into practice. These are listed in table 3.1.

Table 3.1 Interventions aimed at changing professional practice in order to improve the quality of patient care (Oxman, Thomson, Davis, & Haynes, 1995, pp. 1424-1425)

Type of intervention	Activity
• Educational materials	Distribution of published or printed recommendations for clinical care, including clinical practice guidelines, audiovisual materials and electronic publications.
• Conferences	Participation of health care providers in conferences, lectures, workshops or traineeships outside their practice settings
• Outreach visits	Use of a trained person who meets with providers in their practice settings to provide information. The information given may include feedback on the provider's performance
• Local opinion leaders	Use of providers explicitly nominated by their colleagues to be "educationally influential”
• Patient-mediated interventions	Any intervention aimed at changing the performance of health care providers for which information was sought from or given directly to patients by others (e.g., direct mailings to patients, patient counselling delivered by others, or clinical information collected directly from patients and given to the provider).
• Audit and feedback	Any summary of clinical performance of health care over a specified period, with or without recommendations for clinical action. The information may have been obtained from medical records, computerized databases or patients or by observation
• Reminders	Any intervention (manual or computerized) that prompts the health care provider to perform a clinical action. Examples include concurrent or inter-visit reminders to professionals about desired actions such as screening or other preventive services, enhanced laboratory reports or administrative support (e.g., follow-up appointment systems or stickers on charts).
• Marketing	Use of personal interviewing, group discussion (focus groups) or a survey of targeted providers to identify barriers to change and the subsequent design of an intervention
• Multifaceted interventions	Any intervention that includes two or more of the last six interventions described here
• Local consensus processes	Inclusion of participating providers in discussion to ensure agreement that the chosen clinical problem is important and the approach to managing it appropriate

Oxman, Thomson, Davis and Haynes (1995, p. 1427) in a systematic review of 102 trials of interventions to improve professional practice, concluded that while there are no “magic bullets” for improving the quality of health care, there are a wide range of interventions, which if used appropriately, could contribute to the changing of professional practice and ultimately improving the quality of health care. There are a number of structural and systemic issues which impede the uptake of interventions to change professional practice, particularly in the South African context. These include: the restructuring of the South African health system, which has provided increased access to primary care but resulted in high patient numbers and uncertainty and insecurity of health professionals (Dick, et al., 2004; Swartz & MacGregor, 2002), inadequate numbers and poor distribution of health personnel (Daviaud & Chopra, 2008), changes in conditions of employment and scope of practice (McIntyre & Klugman, 2003), routinised task-orientated care (Van der Walt & Swartz, 2002), work overload and burnout (Engelbrecht, Bester, van den Berg, & van Rensburg, 2008), making it difficult to prioritise recommended interventions (Hofer, Zemencuk, & Hayward, 2004), and conflicting information or guidelines on the same topics (Hitchen, 2007). The health services infrastructure at primary level is poor (Ijumba, 2002; Sanders & Chopra, 2006). Although there has been some improvement since 1994 there remain huge equity gaps between the provinces and health facilities (Van Rensburg, 2004c).

Continuing education (often referred to as CME – continuing medical education) aims at changing the practice of the individual practitioner. This approach assumes that the locus of control lies with the individual practitioner and draws on and respects adult learning principles

(Davis, 2006). This approach seldom takes into consideration the systemic constraints identified above. In the context of guideline implementation, argues Davis, "the individual practitioner is seen as only one element in a complex array of forces that include policy, other health care practitioners, patients, family members and the health care system itself" (2006, p. 6).

Knowledge translation – a science and method

Bridging the research to practice or the "know-do" gap is the greatest challenge for public health in the 21st century (Pablos-Méndez & Shademani, 2007). Graham et al. (2006, p. 14) refer to this as the "knowledge-to-action (KTA) gap". Knowledge translation science and methods are the means to close this gap, defined by Straus, Graham and Mazmanian as "the scientific study of the methods for closing the knowledge-to-practice gap, and the analysis of barriers and facilitators inherent in this process" (2006, p. 3). Knowledge translation (KT) is defined as "a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve health … provide more effective health services and products and strengthen the health care system" (Canadian Institutes of Health Research, 2009, para. 1). Knowledge translation aims to make users aware of research knowledge, facilitate their use of it, close the gap between what we know and what we do thus moving knowledge into some type of action (Graham, 2007). Davis et al. (2003) argued that knowledge translation is located in the practice of health care, focuses on changing health outcomes using best clinical evidence, and has more potential to close the gap as it is able to draw on a wide range of disciplinary knowledge. Knowledge translation therefore has the potential to unite or bridge the gap between the individual learner-centred approach to changing practice and the macro-systemic approach to quality improvement (Davis, 2006). It requires five key components for success: a focus on systems and organisation of work rather than care of individual patients, engagement of local interdisciplinary teams to assume ownership of the improvement project, creation of centralised support for technical work, supporting local adaptation of the intervention and creating a collaborative culture within the local unit and larger system (Pronovost, Berenholtz, & Needham, 2008, p. 963). The translation of best available evidence into user friendly clinical practice guidelines is one of the strategies that underpin this approach.

Knowledge translation in developing countries lags behind the developed world. Santesso and Tugwell (2006) argue that this is due, not only to the shortages of skilled health workers, but also to insufficient understanding of how to minimize the "know-do gap".

The challenges to knowledge transfer/knowledge translation are summarised in Table 3.2:

Table 3.2 Challenges to the knowledge transfer process (Coalition for Global Health Research, 2003, pp. 9-11; Santesso & Tugwell, 2006, p. 91)

Challenges to the knowledge transfer process
Practice Environment • structural (e.g. health systems and information technology) • interest group pressure or peer pressure on decision makers • competing funding priorities • insufficient economic/budget resources and/or time to include research in decision making • centralisation of power and information, or hierarchy of power • political instability and high turnover • lack of access to research, data and analysis • culture not conducive to evidence-based decision making • censorship and control
Potential Adopters • generation of decision making based on past experiences • local or indigenous knowledge • variation in incentives and motivations to change • lack of communication and personal contact with researchers • limited networking time • negative feelings about research and its use • lack of awareness and/or technical background about relevant research • lack of skills to apply and use research
Perception of Evidence • lack of timely or relevant research • politicisation of research • poor quality of research • insufficient credible evidence • inaccessible or unhelpful format

The use of guidelines (also known as clinical practice guidelines - CPGs) has been integrated into all levels of health care, as a means of effectively translating the research evidence into practice, thus making it possible for the busy health care practitioner to easily access good evidence and implement the best practice/treatment for his/her patients. The literature on clinical practice guidelines in health care is vast, and this chapter does not attempt to cover the wide field. It aims to provide a broad overview of key concepts, and focus on specific aspects of guideline literature which are pertinent to this study.

Evidence-based medicine and clinical practice

Evidenced-based medicine (EBM), a term coined and promoted as a new paradigm for medical practice has become “one of the most important and successful initiatives to recompose biomedical reasoning and practice” (Mykhalovskiy & Weir, 2004, p. 1059). The evidence-based medicine working group provided an early definition: EBM “de-emphasises intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research (Evidence-Based Medicine Working Group, 1992, p. 2420). As “an approach to clinical activity based on careful review and application of the best and most current clinical research literature" (Mykhalovskiy & Weir, 2004, p. 1059), EBM has become the norm for changing professional practice of medical and increasingly nursing and allied health professional practice, and is considered the gold standard for the provision of safe, compassionate health care (C. E. Brown, Wickline, Ecoff, & Glaser, 2009). Although the place of EBM in medical literature is firmly established (see the authoritative journal Clinical Evidence[3] and the Cochrane collaboration[4]) the nursing literature, however, has tended to use the term evidence-based practice (EBP) – as distinct from evidence-based medicine (Driever, 2002). The difference in terminology appears to be rooted in the need to create a distinction between the available research evidence for practice and the implementation thereof, but may also be linked to the need to distinguish between medicine and nursing as separate disciplines.

A further term used in this debate is that of best practice. Banning (2005), in a study on conceptions of EBM and EBP, contended that there remains a paucity of good evidence to inform many aspects of nursing practice, and that nurses, though using these terms routinely in everyday practice, lack confidence in articulating their use. Banning provided a useful table (table 3.3) outlining the difference between evidence-based medicine (EBM) and evidence-based practice (EBP).

Table 3.3 The difference between evidence-based medicine (EBM) and evidence-based practice (EBP) (Banning, 2005, p. 413).

The difference between evidence-based medicine (EBM) and evidence-based practice (EBP)
• Evidence-based research underpins EBP • Research is looking into something practice that actually happens • Evidence-based research is a piece of work that has studied a topic, a paper examining an area of work • EBP is a way of working following evidence-based research • Research is looking to prove the evidence. Practice is carrying out what has been found • Practice may not be based on research as it may be new or still in development • EBM gained from clinical trials. EBP involves implementing what you gain from evidence-based research

Kitson, Harvey and McCormack (1998) proposed three critical components which impact on the implementation of research into practice: evidence, context and facilitation. There needs to be a "clear understanding of the nature of evidence being used, the quality of context in terms of its ability to cope with change and type of facilitation needed to ensure a successful change process" (Kitson, et al., 1998, p. 152). The understanding and exploration of context in itself is variable within reported research, and needs to be clearly defined in terms of organisational culture, leadership and measurement of the complexity of the health care environment (McCormack, et al., 2002).

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[3] Clinical Evidence journal, published by BMJ group, describes the best available evidence from systematic reviews, RCTS and observational studies.

[4] The Cochrane Collaboration is an international not-for-profit organization, providing up-to-date information about the effects of health care.

Clinical practice guidelines constitute one mechanism through which evidence-based practice is promoted and operationalised (Feder, Eccles, Grol, Griffiths, & Grimshaw, 1999) and are one of the main tools used to make health care less variable, more reliable and efficient, to direct specific areas of practice, based on best available evidence (Mead, 2000; Moreira, 2005; Onion & Walley, 1998).

Clinical practice guidelines are defined as: "systematically developed statements designed to assist in decision making about appropriate health care for specific clinical circumstances" (Field & Lohr, 1990, p. 27) and "systematically developed statements to assist practitioner and patient decisions prospectively for specific clinical circumstances: in essence the right thing to do" (Campbell, Braspenning, Hutchinson, & Marshall, 2002, p. 359). Guidelines are "essentially algorithmic formulations that guide their user to a course of (diagnostic or therapeutic) action, dependent on stated prior conditions" (Harrison, Dowswell, & Wright, 2002, p. 300). Mead (2000) describes guidelines as "tools which operationalize the implementation of evidence-based practice" (p. 110).

Key concepts relating to guidelines, according to Keeley (2003), are those of *systematic*, *practitioner*, *patient* and *particular/specific*. Guidelines should be developed out of a systematic review of the best available evidence, are aimed at the practitioner and the patient and are specific to a particular condition, disease and context.

Guidelines which inform clinical practice in health care are now a common feature at all levels of health care and a fact of life for most clinicians (Keeley, 2003), but particularly at primary and secondary level (i.e. the non-specialist level). Systematic development of guidelines began in the late 1970s, when consensus statements for good medical care began to be produced by the US National Institutes of Health (Burgers & van Everdingen, 2004). There has subsequently been a proliferation of guidelines internationally (Genuis, 2005; Grimshaw, Watson, & Eccles, 1998; Mead, 2000; The AGREE Collaboration, 2003) and Berg (1997) notes that the development of clinical guidelines has become 'big business'.

The evidence-based medicine (EBM) – guideline debate

There has been considerable debate regarding the use of clinical guidelines. Proponents of the use of guidelines argue that guidelines which are evidence-based provide an excellent means of ensuring that patients are offered treatment and care based on the best available evidence. Guidelines have been shown to improve practice, especially in settings where there has been rigorous evaluation. Sackett, Rosenberg, Muir Gray, Hayns, and Richardson (1996) argued that user friendly guidelines support the decision making process of the clinician; rather than *telling* the clinician what should be done, evidence is provided which informs clinical judgement.

Increasingly, patients are being offered information in the form of literature in which treatment and management are explained, based on the clinical guidelines. Guidelines may therefore assist patients in evaluating the quality and appropriateness of the care they are offered (Mead, 2000) and they in turn may “act as effective levers in changing the behaviour of health professionals” (Cheater & Closs, 1997, p. 12).

There is a case to be made for the usefulness of guidelines in multi-professional practice. Guidelines can assist with the transfer of knowledge, “enhance the understanding of logics, problems and assumptions between professions” (Berg, 1997, p. 1086), and thereby influence the management of a patient by a team of health professionals. By providing health care practitioners with a guideline or protocol, the possibility of the acquisition of new competencies, responsibilities or skills is created, as the ‘safety of the protocol’ allows a practitioner to act/prescribe beyond what may have previously been possible, knowing that there is good evidence to support the clinical decision making (Berg, 1997). Cheater and Closs (1997), in a review of the effectiveness of dissemination and implementation strategies for nursing practice, noted that improved interdisciplinary communication and improved collaboration were reported as indirect benefits from the implementation of clinical guidelines.

Hewitt-Taylor (2004) argued that, in the case of critical care nursing, although there are undoubtedly benefits of clinical guidelines and care protocols, there is also potential that these could lead to inappropriate levels of standardisation in which individual client contexts and professional autonomy and judgement are impeded. Genuis (2005) was more critical of guideline usage – stating that the proliferation of guidelines without sufficient interrogation of these for their clinical integrity and applicability may lead to a “follow the recipe” approach or “medicine–by-numbers” (2005, p. 419). This concern was previously raised by Berg, who raised the issue of cook book medicine or treatment according to a recipe and subsequent ‘de-skilling’ of health care practitioners as there was no longer any need for the health practitioner to think about what he/she is doing (Berg, 1997). Christensen and Hewitt-Taylor (2006) raised concerns about the demise of the expert nurse, who runs the risk of being replaced by comprehensive but prescriptive guidelines or care protocols, designed to be followed by technically proficient staff who are unable to provide expert individualised holistic care. Care may be reduced to a series of tasks, and the intuitive *knowing* of the expert practitioner disregarded. This premise is in turn critiqued by Paley who argues that ‘patterns of knowing’ fail to meet even the minimum criterion for what can be considered good clinical decision making or evidence (Paley, 2006).

Critics of the guideline movement further argue that there is a real danger that protocols have the effect of devaluing the individual practitioner’s autonomy and that professional judgement is less valued (Berg, 1997). This argument is countered by advocates who are of the opinion that a guideline is just that – a *guide* – and should not be over-prescriptive but allow for deviations from the standard when appropriate, thus strengthening professional autonomy. Guidelines contribute to the illusion of a single answer – and an optimal solution to every health care problem (Berg, 1997), yet Appleton and Cowley (1997), however, citing Hutchinson et al. (1995), noted that many clinical guidelines do not show an explicit link between the evidence on which they are based and the recommendations contained in the guidelines. Genuis (2005) raised particular concerns about issues of impartiality and commercial influence on the development of guidelines and practice directives.

Do practitioners use evidence-based practices?

Evidence-based practices are sometimes reluctantly embraced, as clinicians continue to prescribe treatment which is requested by their patients without necessarily expecting this to be effective (Sekimoto, Imanaka, Kitano, Ishizaki, & Takahashi, 2006). In the broader debate on evidence-based medicine, questions have been raised about the politics and ethics of power in the health sciences, the dismissal of a theoretical basis to practice, as evidence is equated with truth (Murray, Holmes, Perron, & Rail, 2007). They argued that evidence is not value-neutral, and the integrity of the practitioner requires that this 'truth' must be questioned.

Malterud argued that "the tacit knowing held and applied by proficient practitioners represent a valuable form of clinical knowledge, which has been acquired through experience" (2001, p. 397). A further challenge to the EBM movement is that of providing sufficient information to enable the clinician to know how to manage the patient who does not respond adequately to available standard treatments as recommended in guidelines. This is a clinical dilemma and there is limited evidence to enable the clinician to make decision on how to treat. Clinicians may rely on their clinical judgment and experience; try different medication combinations, high dosage medications and off-label medications, for which good evidence is not available (Howland, 2007). The value of alternate forms of medical knowledge is problematic for the EBM movement (Tonelli, 2006). Malterud, in a commentary on Tonnelli's paper, described diagnostic activity in medicine as "gendered, power-infused social interaction where the gold standard of medical knowledge is very narrowly set" (Malterud, 2006, p. 292). This opinion is echoed by Holmes, Murray, Perron and Rail, (2006) who argued that EBM has become accepted as the 'truth', and that when only one method of knowledge production is promoted and validated, health practitioners should be questioning its legitimacy, and indeed have an ethical obligation to deconstruct the 'regime of truth'(2006, p. 185).

In nursing, the debate is also evident. Milton stated that "to say nursing is evidence-based misrepresents the nature of the discipline, which is a complex, intimate, and multidimensional process of interhuman relating" (2007, p. 125). She challenged the political structures implicit in the EBM movement and raises ethical issues that nurses should consider.

Why are guidelines developed?

There are numerous reasons for the development of guidelines for clinical practice. In an era of ever-increasing information and availability of evidence for good practice (Bonetti, et al., 2005), a clinical practice guideline can serve as a filter and as a tool for the clinician faced with an overwhelming amount of information which he/she has to translate into appropriate action (Bro & Waldorff, 2004; Brozek, et al., 2009). Transfer of research findings into practice is unpredictable, and the process is often slow, with uneven and haphazard uptake (Bonetti, et al., 2005; Dykes, 2003).

Clinical practice guidelines are a tool to manage knowledge and facilitate the translation of biomedical and clinical research into accessible and useable information for the practitioner, thus promoting evidenced based clinical practice (Feifer, et al., 2006). Guidelines are an “attempt to distil a large body of medical expertise into a convenient, readily usable format” (Cook, Greengold, Ellrodt, & Weingarten, 1997, p. 210).

Written guidelines can serve to organise and standardise practice/reduce practice variation within a specific clinical setting, and attempt to ensure consistency of quality of care within an organisation/clinical setting (Bro & Waldorff, 2004; Graham, Beardall, Carter, Tetroe, & Davies, 2003; M. J. Long, 2001), and are increasingly used to form standards of care (Keeley, 2003). A guideline “provides a framework for treatment while allowing for necessary, patient-driven, variations” (Carnett, 2002, p. 62). Guidelines are also viewed as a tool for promoting more efficient use of resources (Graham, et al., 2003). In the age of managed care, large health care organisations and services and the need to reduce ever increasing health care costs, clinical guidelines are seen as a major tool to increase clinical efficiency. Guidelines are used to evaluate quality of care, and have increasingly been utilised by medical administration and legal experts in medico-legal and disciplinary settings (Genuis, 2005). Hayes and Gregg (2001) referred to the industrialization of health care delivery which has created a situation in which behavioural science is being looked to as a “guide to effective and efficient treatment, and to clinical practice guidelines as a primary means of creating this linkage” (p. 215).

Good clinical guidelines should be *valid* (leading to the results expected of them), *reproducible*, *cost-effective*, *representative/multidisciplinary* [by involving key groups and their interests], *clinically applicable*, *flexible*, *clear*, *reviewable* and *amenable to clinical audit* (Broughton & Rathbone, 2003). The potential benefits of clinical guidelines have been categorised by Woolf, Grol, Hutchinson, Eccles and Grimshaw (1999) into benefits for patients, health professionals and health systems. Brozek encapsulates the nub of the many challenges and debates around guidelines in his statement: “for clinicians and patients to be confident that following these recommendations will do more good than harm, guidelines need to be evidence-based, transparent and explicit about whose values and preferences were taken into account and how they influenced the final recommendations” (2009, p. 670). For patients, guidelines that promote interventions of proven benefit have the potential to reduce morbidity and mortality and improve quality of life; guidelines also improve decision making of health professionals, provide explicit recommendations which can reduce uncertainty and improve consistency of care. Health care systems can benefit from the use of guidelines as there should be improved efficiency and cost effectiveness.

Despite the usefulness of guidelines, a number of concerns have been raised by various authors in relation to the use of guidelines by health practitioners; guidelines may not have been adequately researched for a specific age group, many are based on clinical trials which may not be applicable to the settings in which the guidelines are expected to be used; rigid adherence to guidelines may preclude the practitioner from ‘thinking out of the box’ when a patient presents with a clinical problem which cannot be managed through the use of a guideline (Genuis, 2005). The prescriptive use of guidelines may undervalue the importance of tacit clinical knowledge in practice, much of which is not easily quantifiable (Gabbay & le May, 2004). Guidelines cannot prescribe for the multifactorial contexts which impact on patients' lives and health and health practitioners have to take these into consideration as they make use of the recommended guideline. This requires individual judgement and the practitioner's decision may deviate from the guidelines (Mead, 2000).

How are guidelines developed?

There is extensive information on the development of clinical guidelines in the literature. The guideline development process is summarised by three groups in Table 3.4.

Table 3.4 Summary of guideline development processes

The guideline development process		
(Shekelle, Woolf, Eccles, & Grimshaw, 1999, p. 593)	NICE group (National Institute for Health and Clinical Excellence, 2007)	(Bailey & Gabbay, 1999, p. 42)
• Identifying and refining the subject area is the first step in developing a guideline • Convening and running guideline development groups is the next step • On the basis of systematic reviews, the group assesses the evidence about the clinical question or condition • This evidence is then translated into a recommendation within a clinical practice guideline • The last step in guideline development is external review of the guideline.	• Guideline topic is referred to NICE • Establishing the parameters of the guideline • Stakeholders register interest (national organisations representing patients and carers, and also health professionals) • Identifying a multidisciplinary development group including representatives of patient and carer groups, to manage the work • Searching for appraising and synthesising research evidence • Incorporating expert opinion and consulting on provisional guidelines • Finalising, publishing and disseminating guidelines.	• Establish a guidelines development group • Review and synthesis of evidence • Construction of guideline • External review and appraisal of guideline • Scheduled review of guideline • Dissemination and implementation of guideline.

Guidelines may be produced at international, national, regional or local level. Ideally, nationally developed guidelines should be adapted for local conditions, provided that they remain in line with the national guideline. They are often then called protocols. According to Duff, Kitson, Seers, and Humbris (1996, p. 889) the distinction between protocols and clinical guidelines is related to "the amount of operational information contained within each". In order to be acceptable and useful, guidelines should be rigorously developed, valid and supported by sound research evidence (Grimshaw & Russell, 1993). The validity and acceptability of clinical guidelines depends on the development group's composition. Groups can comprise the actual patients/clients and health care professionals who are going to use them, representatives of those clients/patients and health care professionals, or a group excluding them (National Institute for Health and Clinical Excellence, 2007). Despite availability of CPG development handbooks and strong concordance between such handbooks on the key elements of an evidence-based guideline development process, Turner, Misso, Harris and Green (2008) argued that few CPGs meet the quality criteria as stipulated by the AGREE collaboration.

Dissemination and implementation of guidelines

Dissemination and implementation of guidelines is closely linked (Eccles & Grimshaw, 2004), as dissemination is a critical component of successful implementation. Dissemination refers to the methods by which guidelines are distributed and communicated to practitioners to increase their knowledge and skills (Eccles & Grimshaw, 2004; Thomas, McColl, Cullum, Rousseau, & Soutter, 1999). Dissemination of a guideline aims at increasing awareness, understanding and acceptance of the guideline (Field & Lohr, 1990). Guidelines are disseminated via a number of routes. The passive form of dissemination takes place through publication of a guideline in a recognised journal (Grimshaw & Eccles, 2004), postal delivery and delivery to health centres for dissemination to staff. Computerisation is becoming increasingly used in settings in which health professionals have good access, and range from electronic filing cabinets to computerised reminder systems to sophisticated decision support systems (Eccles & Grimshaw, 2004).

Educational outreach, described as a short, interactive focused education by a trusted outsider, is a method that has potential to change professional behaviour. Also referred to as academic detailing (Fender, et al., 1999) it has been widely used in the pharmaceutical industry. A trained person meets with health care providers in their practice settings to provide information with the intention of changing the provider's practice, and is often accompanied by relevant literature (Grimshaw, Thomas, et al., 2004). The methods of educational outreach as described by Fender et al. (1999, p. 1247) are outlined in Table 3.5.

Table 3.5 Principles of educational outreach / academic detailing (Fender, et al., 1999, p. 1247)

Principles of educational outreach / academic detailing
• Conducting interviews to investigate baseline knowledge and motivations for current prescribing patterns • Focusing programmes on specific categories of physicians as well as on their opinion leaders • Defining clear educational and behavioural objectives • Establishing credibility through a respected organisational identity, referencing authoritative and unbiased sources of information, and presenting both sides of controversial issues • Stimulating active participation in educational interactions • Using concise graphic educational materials • Highlighting and repeating the essential messages • Providing positive reinforcement of improved practices in follow up visits

Grimshaw et al. (2004) reported that the combination of educational outreach with educational materials and educational meetings was the most effective means of changing professional behaviour. Tailoring the outreach intervention to the unique attributes of the primary health facility is likely to improve the success outcome of the intervention. In particular the facilitator needs to be flexible, providing assistance and visits as needed by the practice health professionals (Hulscher, et al., 1998). Fairall (2006) reviewed studies reporting the use of educational outreach interventions, most of which were in primary care settings, in North America and Europe. Approximately 75% of the 40 studies reviewed reported positive effects on process outcomes;

however she notes that there is a dearth of studies of guideline dissemination and implementation strategies in the developing world settings (Fairall, 2006).

Other forms of dissemination of guidelines include: educational meetings, local opinion leaders – nominated by colleagues as influential in persuading other to use guidelines; reminders – either paper based or electronic; marketing – e.g. personal interviewing and discussion groups; mass media techniques; audit and feedback of clinical performance (Grimshaw, Thomas, et al., 2004). Modest improvements were noted in most strategies reported across the studies; however Grimshaw et al. (2004) noted that their review had highlighted the lack of economic evaluation of guideline dissemination, most reporting only on the cost of treatment. Wiysonge (2008) in a SUPPORT[5] collaboration summary of the Grimshaw et al. review, noted that resources available for maintaining and improving quality of care need to be considered when assessing whether intervention effects found in high income countries are likely to be transferable to other high and middle income countries and that it was critical to conduct rigorous studies in low income countries to determine effect.

Implementation of guidelines in practice has been studied from a number of perspectives. Implementation involves the "introduction of an innovation into daily routines" (Eccles & Grimshaw, 2004, p. S53). Effective guidelines implementation, according to Grol and Wensing (2005), requires a systematic approach and good planning. They offer a series of systematic steps to implementation: formulation of concrete, well developed proposals for practice change [what do we want to achieve]; clear targets; thorough analysis of the target group; identifying the problems in care provision, and the factors which may stimulate or inhibit change. There needs to be development of a series of strategies for change – for dissemination, implementation and sustainability; an implementation plan comprising timetable, activities and tasks and finally a plan of evaluation and ongoing monitoring.

The success or failure of guidelines is multifactorial and maybe related to development and implementation characteristics, therapeutic settings and context of implementation, provider/practitioners' beliefs and attitudes, and patient beliefs and attitudes (Brand, et al., 2005). Ploeg, Davies, Edwards, Gifford, and Miller (2007) identified factors at individual, organisational and environmental levels which influenced guideline implementation. Facilitators of successful implementation included group learning about the guidelines, positive attitudes and belief from staff, champions, leadership support, teamwork, collaboration, inter-organisational collaboration and networking (Ploeg et al., 2007). Implementation strategies which are individualised, interactive and responsive to local problems, are provided regularly and occur close to the time of clinical decision making are those which are likely to be most successful (Cheater & Closs, 1997).

Perhaps the most extensive and methodologically rigorous review of guideline dissemination and implementation strategies was undertaken by Grimshaw et al. (2004), who reviewed 235 studies reporting 309 comparisons. This review reported that the overall quality of the studies was poor;

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[5] The SUPPORT Collaboration provides concise summaries of the best available evidence of the effects of health systems interventions and maternal and child health interventions for low and middle-income countries (http://www.support-collaboration.org/index.htm)

although there were overall observed improvements in care, there was considerable variation in the observed effects between and across interventions. A range of factors can promote or inhibit the use of a guideline – such as complexity, compatibility and skills required (Grol, et al., 1998). Factors associated with the greatest likelihood of uptake and subsequent practice change include: educational interventions with active participation, restructuring of medical records, management support, learning through social influence, reminder systems and multifaceted interventions (Ploeg, et al., 2007). Bazian Ltd (2005) argued that successfully implemented guidelines have some common features: they cover an area of clinical practice which varies greatly and clinicians are aware of this; their evidence base is fairly secure; their indication for use is common in the practice of targeted clinicians; clinicians are aware of their own knowledge gaps in the conditions for which the guideline is developed.

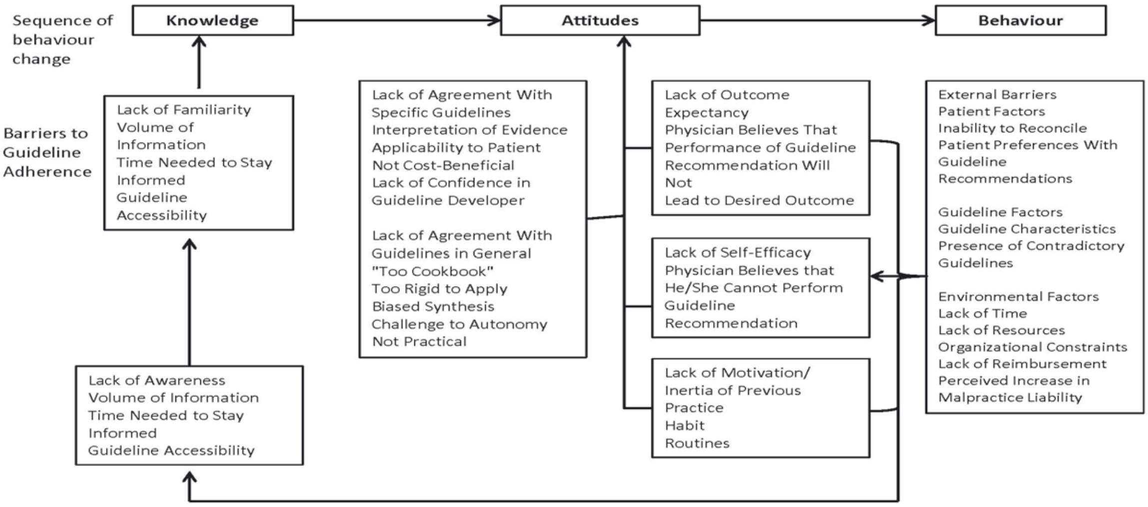
Barriers to using guidelines

Although the literature on guidelines indicates that guidelines may be an effective way to promote evidence-based practice (Grimshaw & Russell, 1993), the clinical importance of the effects of guidelines on both processes and outcomes of care has been called into question (Eve, Golton, Hodgkin, Munro, & Musson, 1996). Guidelines, to be effective, have to be of direct relevance to the clinical situation (Benech, Wilson, & Dowell, 1996). Despite a variety of strategies used to promote acceptance and uptake of the use of clinical guidelines, concern has been expressed over the apparent inconsistency in uptake and therefore inconsistent change in clinical practice has been reported by a number of studies (Cranney, Warren, Barton, Gardner, & Walley, 2001; Grimshaw, Eccles, & Tetroe, 2004; Langley, Faulkner, Watkins, Gray, & Harvey, 1998; Lesho, 2005; Rycroft-Malone, et al., 2002). Putnam, Twohig, Burge, Jackson, and Cox (2002), report that decision making with respect to the use of evidence in primary care settings is highly complex, and is influenced by patient factors, physicians' understanding and use of evidence, and the changing nature of evidence itself. In a literature review on barriers to evidence based practice at primary care level, McKenna, Ashton and Keeney (2004) reported that the research literature was poorly organised, reported often conflicting results, was of mainly poor quality and perceived to be irrelevant to primary care practice.

A number of barriers to the use of guidelines with respect to medical practitioners have been identified. These may operate at a system or individual level (Grimshaw & Eccles, 2001). Bailey and Gabbay (1999) grouped the barriers to the use of guidelines in primary care under three areas: "service related", "what others think" and "what I think". Service related issues include financial costs, organisational costs [time, equipment, administration and information], fear of complaint or litigation. Clinicians may be resistant to guideline use as other influences may to carry more weight – e.g. those of pharmaceutical companies, local practices and opinion leaders, as well as patient preferences. Barriers emanating from a resistance to change, new evidence which is perceived to conflict with previous knowledge, uncertainty of a new approach or protocol and the difficulty of knowing that the 'new' guideline is really better than the current practice all fall under Bailey and Gabby's "what I think" category (1999, p. 41). Arguing that clinicians "in practice make complex decisions that are based on experience and involve judgment" Mahli and Adams (2009, p. 9) have opted for the term clinical practice recommendations (CPR) to capture the advisory aspect of guidelines and enable clinicians to individualise treatment.

In a review of 76 published studies describing at least one barrier to adherence to practice guidelines, policies or national consensus statements, Cabana et al. (1999) extracted 293 potential barriers which were organised into a framework according to their effect on physician knowledge, attitudes or behaviour, reproduced in figure 3.1.

Figure 3.1 **Barriers to physician adherence to practice guidelines in relation to behaviour change (Cabana, et al., 1999, p.1459)**



Grol and Wensing (2004) proposed a multi-level approach to examining the barriers and incentives for changing professional practice: the innovation itself, the individual professional, the patient, the social context, the organisational context and the economic and political context. At each level they identified barriers and incentives for change:

Table 3.6 **Barriers and incentives for change (Grol & Wensing, 2004, p. S59)**

Level	Barriers/incentives
Innovation:	Advantages in practice, feasibility, credibility, accessibility, attractiveness
Individual professional	Awareness, knowledge, attitude, motivation to change, behavioural routines
Patient:	Knowledge, skills, attitude, compliance
Social context:	Opinion of colleagues, culture of the network, collaboration, leadership
Organisational context:	Organisation of care processes, staff, capacities, resources, structures
Economic and political context:	Financial arrangements, regulations, policies

The production and dissemination of a clinical practice guideline according to Grimshaw and Eccles (2001), is itself insufficient to ensure effective implementation of the recommendations.

Effective early implementation is not necessarily associated with sustainability (Brand, et al., 2005; Ploeg, et al., 2005; Titler, 2004).

In order for guidelines to be effectively implemented, effective educational strategies are required (Cranney, et al., 2001). Grol and Wensing (2004, p. S57) stated that "individual professionals need to be informed, motivated and perhaps trained to incorporate the latest evidence into their daily work". Educational outreach is one such strategy. Successful implementation is also more likely if the entire health care team is committed to the changed practice guideline.

Problems and pitfalls – can guidelines do more harm than good?

Clinical guidelines are only one option for improving the quality of health care, and should not be implemented without consideration of their quality, applicability, cost effectiveness and user friendliness among other factors. Guidelines should be logical, unambiguous, clear and terms precisely defined (Lohr, 1994). Woolf, Grol, Hutchinson, Eccles, and Grimshaw (1999) have outlined a number of limitations and potential harms of guidelines. Guidelines may be wrong or may not be based on the best evidence available, as guideline development groups often lack the time and expertise to examine every piece of available evidence or to be able to assess contradictory information. A guidelines development group usually comprises people with varying opinions, beliefs, clinical experience and levels of specialist expertise, all of which influence the decision making processes of the group (Woolf, et al., 1999, p. 529). Guidelines presuppose an 'average patient' (Hurwitz, 1999) one for whom the standard treatment is likely to be the most effective, and this may cloud the judgement of the clinician who is expected to apply such a guideline. Guidelines which are too prescriptive and legalistic may impede the clinician's professional judgement, and the medical decision may be made in accordance with the guidelines for fear of litigation, rather than for reasons of sound clinical judgement and professional experience based on scientific evidence. Inappropriately implemented guidelines may even be harmful (Bazian Ltd, 2005). Genuis (2005) raised a concern about the undue influence of commercial interests, which are a source of significant funding, on "medical institutions, clinical research, scientists who do the research, publications that report research, and physicians who teach and report research to the medical community" (p. 422).

Evaluation of clinical guidelines

It is critical to successful change in professional practice that guideline developers and promoters understand the factors and experiences that influence guideline implementation (Ploeg, et al., 2007). Despite significant efforts and good intervention plans in promoting the use of clinical guidelines, many guidelines fail to change clinical practice and there is much variation in the quality of care (Rashidian, Eccles, & Russell, 2008). Wallace and Shorten (2005) suggested that it was naïve to evaluate the effects of clinical guidelines on patient care without "understanding the contextual, human and logistic factors on which successful change is predicated" (p. 277).

Guideline assessment tools are important to ensure that guidelines are of sufficient quality (Lohr, 1994). A well validated instrument which is widely used in the appraisal of guideline quality is the "Appraisal of Guidelines Research and Evaluation (AGREE)" instrument (The AGREE Collaboration, 2001, 2003). The AGREE instrument considers six different domains of guideline development: the scope and purpose; stakeholder involvement; rigour of development; clarity and presentation; applicability and editorial independence, and are described in table 3.7. Guidelines are evaluated according to these criteria.

Table 3.7 Criteria for high quality clinical practice guidelines (The AGREE Collaboration, 2003, p. 22)

	Criteria for high quality clinical practice guidelines
1	*Scope and purpose* Contain a specific statement about the overall objective(s), clinical questions, and describes the target population.
2	*Stakeholder involvement* Provide information about the composition, discipline, and relevant expertise of the guideline development group and involve patients in their development. They also clearly define the target users and have been piloted prior to publication.
3	*Rigour of development* Provide detailed information on the search strategy, the inclusion and exclusion criteria for selecting the evidence, and the methods used to formulate the recommendations. The recommendations are explicitly linked to the supporting evidence and there is a discussion of the health benefits, side effects, and risks. They have been externally reviewed before publication and provide detailed information about the procedure for updating the guideline.
4	*Clarity and presentation* Contain specific recommendations on appropriate patient care and consider different possible options. The key recommendations are easily found. A summary document and patients' leaflets are provided.
5	*Applicability* Discuss the organisational changes and cost implications of applying the recommendations and present review criteria for monitoring the use of the guidelines.
6	*Editorial independence* Include an explicit statement that the views or interests of the funding body have not influenced the final recommendations. Members of the guideline group have declared possible conflicts of interest.

Guidelines and nurses in a primary health care context

Are guidelines used by primary care practitioners? High quality primary care is a demand from governments and consumers (patients/clients) alike. In South Africa particularly, the devolution of the bulk of health care provision to primary level is an integral component of the national health plan and the National Health Act, and resource distribution has occurred over the last ten years according to this model (Republic of South Africa, 2003).

Lohr, in 1994, argued for the benefits of the use of guidelines in primary care, while cautioning against guidelines being viewed as "the solution to any country's problems of health care delivery and organisation" (Lohr, 1994, p. 23). She outlined the following possible benefits of the use of guidelines in primary care:

- "better clinical decision-making by patients and practitioners;
- improved ways to measure and improve quality of care;
- educating individual patients and the broader population about health matters and quality of care; and
- guiding the allocation of resources for health care and helping reduce the financial costs of inappropriate, unnecessary or dangerous care" (1994, p. 23).

The judicious use of guidelines by medical professionals who have the clinical freedom to adapt them to individual patient needs may not be possible for nurses who do not have the same degree of autonomy, particularly when prescribing practices and boundaries are taken into account. Guidelines can make more complex activities and management possible (Berg, 1997). The guideline which is a *guide* and *flexible tool* for the doctor may be prescriptive and mandatory for the nurse, thus entrenching her/his subordinate position (Berg, 1997; Mead, 2000). There is a paradox in that protocol-based care has empowered and restricted nursing practice, particularly in the area of individualised nursing care (Ilott, Rick, Patterson, Turgoose, & Lacey, 2006, p. 551). Boonstra, Lindbaek, Khulumani, Ngome and Fugelli conducted a study on adherence to national treatment and prescription guidelines in Botswana, where most of the curative and primary care services are provided by nurses (2002). This study reported full or acceptable adherence in 64% of the 2994 respondents, acceptable adherence with one or more non-effective [for a specified condition] drugs in 33% of cases, and in 3% of cases, nurses prescribed insufficient or dangerous treatment. Nurses with 4-11 years of practice were most likely to adhere to treatment guidelines. It was postulated that nurses with less practice or experience had insufficient experience in using guidelines, whereas those with more than twelve years of practice lacked opportunity for regular updating. In a study investigating extent doctors and nurses adherence to guidelines, Goossens, Bossuyt and de Haan (2008) reported that nurses and doctors differed with respect to the six characteristics listed in table 3.8.

Table 3.8 Guideline characteristics which affect willingness to adopt a guideline (Goossens, et al., 2008, p. 139)

Guideline characteristics which affect willingness to adopt a guideline
1. Personal value for the professional (you will/will not benefit from it)
2. Source (coming/not coming from your own discipline)
3. Management (finds/does not find compliance to the guideline important)
4. Scientific basis (strong evidence, weak evidence, consensus)
5. Costs (will go down/up)
6. Subject (has/does not have your interest).

The characteristics of guidelines and the contextual and managerial factors (particularly management support) within the organisation are the major influences in persuading health professionals to adopt guidelines. The most influential individual factor for doctors was the guideline's scientific basis while for nurses a guideline was considered worth adopting if the subject was interesting. The importance of management buy-in and leading by example in the adoption of and adherence to clinical practice guidelines has been reported in other studies (Bennett, 2003).

In South Africa a wide range of guidelines exist at the primary care level for all health practitioners. These range from the well known and utilised National Tuberculosis control guidelines (Department of Health, South Africa., 2004, 2008) to those which address less familiar conditions. Nurses are not exempt from the expectation that they should utilise best available evidence in their practice. Yet nurse practitioners, in keeping with other health care providers at primary care level, may not access the most recent research findings and be able to translate these into practice.

Concluding comments

Guidelines have an important place in health care and will remain an integral component of clinical practice. They have the potential to change professional practice, but in order to do this, have to be appropriate, applicable to context, acceptable to health practitioners and be practical in implementation (Goossens, et al., 2008). Support of practitioners through a variety of strategies further contributes to the successful implementation and sustainable use of guidelines. There remains debate however, on the inherent prescriptive nature of guidelines, and how best evidence can be translated into practice without excessive prescription, yet providing quality care to clients and patients. Clinical guidelines can be part of the solution to the dilemma of providing efficient, cost effective high quality care.

CHAPTER FOUR

CONSIDERING A PSYCHOANALYTIC FRAMEWORK FOR UNDERSTANDING THE USE OF GUIDELINES IN PRIMARY CARE CLINICAL PRACTICE

In this chapter I outline the theoretical framework which underpins the exploration of the research question, and provides the basis for the analysis of the data.

Introduction

Research is underpinned by theoretical and methodological assumptions, and these need to be made explicit in order for the researcher to demonstrate his/her understanding of the field of research. This is particularly relevant in qualitative studies, in which the use of language is foundational to the investigation, description, analysis and discussion of the field of study. Theoretical and methodological assumptions are built into the wording of research questions as well as in the choice of the subjects/participants (Silverman, 2005).

Qualitative research has no theory or paradigm that is distinctly its own, as is evidenced by the multiple theoretical paradigms in which qualitative research methods are used (Denzin & Lincoln, 2005). In this study, I have chosen to use a theoretical stance taken from the psychoanalytic paradigm, assuming that anxiety is inherent in the human condition, the central concept of which is described by Hollway and Jefferson as “the idea of a dynamic unconscious which defends against anxiety and significantly influences people’s actions, lives and relations” (2000, p. 19).

This dissertation makes no claim to explore in depth the nature of psychoanalytic theory and the work of the early psychoanalysts. I draw on the work of later theorists, in particular Menzies Lyth, Obholzer and Roberts, Hinshelwood and Skogstad to provide the theoretical underpinning of my study.

The nature of anxiety

Psychoanalysis, particularly the work of Melanie Klein, has contributed significantly to our understanding of the nature of anxiety and the primitive defence mechanisms which enable us as individuals to defend against the anxiety, which otherwise might overwhelm and destroy. If anxiety is the basis of the way in which the individual operates, then the protective defence of anxiety is essential for the stability of the individual and the ability to engage with a threatening world.

Anxiety in nursing

Anxiety is inherent in the role of the nurse at an *individual* and *organisational/institutional* level. The individual nurse is faced with pain and suffering at different levels, which contribute to the nurse's experience of stress and anxiety. In the latter half of the twentieth century, the psychoanalytic approach of anxiety was superseded by the concept of stress, and the behavioural approach to its management. Evans, Pereira and Parker (2008b), in a literature review on occupational stress in nursing, found that the terms anxiety and stress in the nursing literature are used interchangeably.

A study which has stood the test of time (Lawlor, 2009) is that of Isabel Menzies Lyth, a psychoanalyst who used this psychoanalytic approach to understand the anxiety in nursing and how nurses defended themselves against these anxieties. Menzies Lyth, a qualified psychoanalyst and child psychoanalyst, in her work in organisational consultancy made key contributions to the analytic interpretation of institutional dynamics (Pecotic, 2002). Menzies Lyth (1988), in her study of nurses in a general hospital in London, found high levels of tension, stress and anxiety which were difficult to tolerate. Her study found that at least one-third of student nurses did not complete their training, there was an appreciable level of absenteeism due to illness and senior staff changed jobs more frequently that workers at similar level in other professions. She noted that there was an increased desire to further training at postgraduate level, and postulated that this was also due to the high levels of anxiety (Menzies Lyth, 1988). Menzies Lyth drew on the work of Klein who developed the concept of positions by which the individual deals with anxiety. Klein, in her work with children, focused on the phantasy content of anxiety (Hinshelwood, 1991). In particular Klein described the paranoid-schizoid position and the depressive position as different ways of dealing with anxiety (Segal, 1992). Halton (1994, p. 14) described schizoid splitting as "normally associated with the splitting off and projecting outwards of parts of the self perceived as bad, thereby creating external figures who are both hated and feared. In the helping professions, there is a tendency to deny feelings of hatred or rejection towards clients. These feelings may be more easily dealt with by projecting them onto other groups or outside agencies, who can then be criticized". Splitting occurs between groups within the institution, as the structures such as departments, wards, professionals are divided for effective management, but these in turn may create the basis for splitting and projection of negative images of the other (Halton, 1994, p. 15). This is evident in the relationships between nurses and doctors (Mayers, Mash, Conradie, Kuiper, & Marais, 2009; Sirota; Willis, Condon, & Litt, 2000).

Menzies Lyth (1988) identified socially structured defence mechanisms which "operate simultaneously and interact with and support each other" (p. 51). The defence mechanisms are summarised in Table 4.1.

Table 4.1 Socially structured mechanisms of defence (developed from Menzies Lyth, 1988, p. 51-63; Lawlor, 2009, p. 525-526)

Socially structured mechanisms of defence
• ***Splitting up the nurse-patient relationship***. The core anxiety lies in the nurse's relation with the patients. The more intense the relationship, the more likely she is to experience the impact of anxiety. Splitting up her contact into small tasks protects her against the anxiety.
• ***Depersonalisation, categorisation and denial of the significance of the individual***. Little personal connection between nurse and patient. The patient is referred to by bed number or by diagnostic category, thus minimising the individual humanity.
• ***Detachment and denial of feelings***. Cultivation of professional detachment strategies to avoid becoming emotionally attached to patients.
• ***The attempt to eliminate decisions by ritual task-performance***. Tasks are focused on and discretion and initiative taking by nurses is discouraged
• ***Reducing the weight of responsibility by checks and counterchecks***. The nurse protects herself from anxiety by checking and rechecking with colleagues or immediate seniors.
• ***Collusive social redistribution of responsibility and irresponsibility***. Through the projection of irresponsibility onto different layers of the nursing hierarchy, the nurse protects herself against anxiety; the collusion occurs as each nurse plays out her own projections.
• ***Purposeful obscurity in the formal distribution of responsibility***. Authority and responsibility is so generalised among the nurses that no one individual has to shoulder the pain of full responsibility
• ***The reduction of responsibility by delegation to superiors.*** The upward delegation of responsibility moves this away from the individual nurse.
• ***Idealisation and underestimation of personal development possibilities***. The role of the nurse is idealised, thus reducing anxiety about the tasks which are performed, and minimising the need for individual or group support
• ***Avoidance of change.*** Change is avoided to minimise anxiety, and initiated only at the point of crisis.

A further factor which has gained attention in the literature from Menzies Lyth's work on is the question of unconscious motivations in the decision to enter a helping profession like nursing in the first place (Obholzer & Roberts, 1994). It may be the case that some people enter nursing in order to have a way of dealing with past anxieties and life challenges – what Roberts (1994) refers to as 'reparation'. This is not necessarily an unhealthy way of dealing with anxiety, but it may mean that current interactions between nurse and patient are coloured by the difficulties the nurse has had in the past. If for example a nurse has a need to see her patients get better partly because she lost a parent to illness when she was a child, she may find contact with patients who do not get better or who are dying unbearable. This may reinforce the defences of depersonalisation and routinisation and contribute to the nurse not allowing herself emotional contact with the patient as a whole person.

Nursing within the organisation

Nurses have traditionally operated within highly structured hierarchical environments/ organisations with specific responsibilities, which vary from the relatively menial, though essential components of caring (e.g. bed making, basic patient hygiene etc.) to the highly skilled and technological tasks, requiring the ability to assess, diagnose and manage complex health situations. The 21st century hospital is a complex institution with organisational and personnel challenges that equal those of any large multinational company. This has required increasing specialisation of the nursing tasks and roles, though the fundamental need of the patient for a caring, compassionate and concerned nurse has not changed. The 21st century primary care clinic is similarly challenged, if not more so.

The organisation within which the nurse functions creates its own stresses. Hinshelwood and Skogstad (2000, p. 12) refer to the culture of an organisation being shaped by anxieties and defences in three different ways:

- specific kinds of anxiety are associated with particular forms of work
- people are drawn to particular professions and fields of work. This may link the particular anxieties and defences of the individuals themselves. This influences the culture of the organisation.
- the different ways in which these anxieties (both general and personal) impact on the culture of the organisation.

Menzies Lyth argued that a social organisation is influenced by a number of interacting factors, crucial among which are "its primary task, including such environmental relationships and pressures as that involves; the technologies available for performing the task; and the needs of the members of the organisation for social and psychological satisfaction and… for support in the task of dealing with anxiety" (Menzies Lyth, 1970, p. 11). She specifically applied this to her work on hospital organisations, the anxiety experienced by nurses and their socially structured defence mechanisms (1970, pp. 10-23). Young (2003), reflecting on the challenges of social change in organisations, argues that all organisations have, within their structures and dynamics, elements of those described by Menzies Lyth, which mitigates against change and adaptation. The anxiety experienced at a conscious or unconscious level by the individual within that group or organisation manifests itself in a variety of ways, and the socially structured defence mechanisms enable the organisation to function, yet do not deal with the underlying issues and may over time contribute to the destabilisation of the organisation.

Individual anxiety, and the response to this, is embedded within a context of often unacknowledged organisational stress and anxiety. Institutions develop defences against anxiety and complex emotions, which are difficult to acknowledge and resolve. While certain defences are healthy, creating the sense of structure, safety and predictability, organisational defences against anxiety may also obstruct the ability to adapt to changing socio-political and economic circumstances, thus preventing the organisation from meeting its societal obligations (Halton, 1994). Chernomas states that the "psychological health and efficiency of workers are profoundly affected by the way in which the institution is organised" (2007, p. 370).

Within the South African context, institutional/organisational anxiety in health care at primary level is compounded by the broader challenges of shortages of health personnel and specifically nurses, increasing numbers of patients demanding adequate health care and timeous services, management of scarce resources, rigid responses by the national health system, non-availability of essential medications and a culture of incapacity and overload (Daviaud & Chopra, 2008; Petersen

& Swartz, 2002; Sanders & Chopra, 2006; Sanders, Todd, & Chopra, 2005). Institutional cultures of authority and hierarchy permeate the health services in South Africa, continuing the legacy of authoritarian practices of both the colonial and apartheid eras (Ehlers, 2000; Gibson & Swartz, 2000; Pillay, 2001; Van Rensburg, 2004). Despite numerous reforms in the health care system since 1994, there remains in nursing a tension between the old and the new.

Nurses operate within boundaries of place (the hierarchical setting of the health care institution), practice (codes of conducts, scopes of practice) and protocol (standard operating procedures, clinical guidelines algorithms and care routines). They work individually and in groups; the nature of the work - continuous (24 hour care in hospital) or sequential shifts, requires that there is a structured and detailed 'handover' between nurses on different shifts. This places each nurse in the position of having her work and responsibilities (the care of the patient) reviewed, evaluated and criticised by the next shift. This contributes to the anxiety of the individual nurse and may affect her decision making and performance. Being an individual within such a structured group setting requires that the nurse is confident and feels competent to make individual decisions which may not be sanctioned by the group (ward team). Thus it is difficult, if not impossible, for the nurse to challenge the way of working within a ward of nursing unit. Stokes (1994, pp. 20-22) refers to the unconscious at work in groups and teams, as he engages with Bion's analysis of two main tendencies in the life of the group – work-group mentality (the tendency to work on a primary task) and the often unconscious tendency to avoid work on the primary task (basic assumption mentality). According to Stokes, in "workgroup mentality, members are intent on carrying out a specifiable tasks and want to assess their effectiveness in doing it", while in "basic assumption mentality, the group's behaviour is directed at attempting to meet the unconscious needs of its members by reducing anxiety and internal conflicts" (1994, p. 20). If this explanation is applied to the work of the nurse in the institutional setting, it can be argued that the nurse is intent on carrying out the tasks, which although individually performed, are group based and assigned by the group or group leader (unit manager/ward sister). The nurse may, however, try to avoid the censure of the group by only doing what is required – and not working independently – and thus avoiding conflict and reducing anxiety.

Much of the nurse's work is routine and structured (van der Merwe, 1999). The establishment of routine creates a structure which promotes a feeling of safety, familiarity and enables the individual to do the job efficiently; knowing what is expected of her. The nurse, her anxiety under control, is better able to provide the emotional care needed by the patient without herself being over-emotionally engaged. Routine therefore cannot be considered an entirely negative concept. Routine becomes a defensive ritual when the nurse's anxiety becomes overwhelming; thus Menzies Lyth argues that the nurse copes using the ritual of instrumental nursing activities and retreats from the interpersonal and expressive components of her duties (Menzies Lyth, 1970). Ritual is observable in the inability of the nurse to be creative, respond to her patients with empathy, make decisions for which she is accountable, and engage with the organisational complexities of health care. Although organisational routines are necessary and effective in managing our working lives, they have the potential to rigidly entrench organisational culture and reinforce the prevailing paradigm and practices (Brooks, 1996).

Rituals and nursing

The term ritual in nursing has been used for the most part in a negative context, linked to unthinking routinised action by nurses (Philpin, 2002) and associated with belief and emotion, rather than knowledge and thought (Strange, 2001). It is described in a number of studies of nursing and nursing care: the handover ritual (Evans, Pereira, & Parker, 2008a; Holland, 1993; Philpin, 2006; Strange, 1996; Yonge, 2008); the morning tea break ritual (Lee, 2001); time-wasting nursing procedures as rituals (Huttman, 1985); ritual in primary care settings (Lewin & Green, 2009; Van der Walt & Swartz, 2002); rituals and evidence-based practice (O'Callaghan, 2001); rituals which prevent the achievement of person-centred care (Tonuma & Winbolt, 2000); the effect of ritual action on nurses as patient advocates (Martin, 1998) and reflective practice and clinical supervision as ritual (Gilbert, 2001). Not everything about rituals is necessarily negative, however, and Biley and Wright (1997) make a case for the healing power of rituals in the nursing routine, an example being the beginning of shift nursing rounds as a mechanism for containing patient anxiety. Philpin (2002) argues that rituals are relevant in spiritual care; provide structure in settings such as operating theatres where technical competence and rational action is critical. Rituals not only transmit knowledge and history and can assist in the discovery of new knowledge. Catanzaro (2002), referring to the work of Driver (1998) argues that rituals have transformative power, and for this power to be effected, the ritual has to change "in order to address the situation that needs to be transformed" (p. 26).

Crossing the boundaries

Within the health care setting worldwide, nurses are changing their modes of practice, leaving the profession and/or taking on new forms of caring roles. This is particularly evident in the primary care setting, where the occupational and professional boundaries between the nurse and the doctor are poorly defined and often overlap (Barton, Thome, & Hoptroff, 1999; Masterson, 2002). Nursing professional knowledge and positioning within the health care organisation is underpinned by deeply embedded social structure based on gender (May & Fleming, 1997). This fluidity and unstructured identity has the potential for existential conflict between *who* they are and *what* they do. This has an anxiety provoking effect, which Obholzer argues is entirely normal, as "it is absolutely standard normal behaviour for individuals and for groups of individuals with specific joint task, called institutions, to defend themselves against the emotional pain from the work that they do" (2005, p. 297).

In line with the primary health care approach and national health plan (Republic of South Africa, 2003), the majority of health care has shifted to settings outside of traditional hospital settings. In the health care environment of the primary care clinic, nurses have taken on what was traditionally considered the role of the doctor – the diagnosis, management and treatment of patients, within clearly defined (boundaried) parameters. Nurses and clinical nurse practitioners[6] (CNPs) in primary care have taken on the major responsibility for day-to-day patient care. Referrals are made to the doctor for diagnosis and management which is outside the nurse's scope of practice. This role has become a critical one for the sustainability of the health service, particularly in developing countries, but not exclusively. Although there are significant expectations of the CNP, there are also barriers which prevent her from fulfilling the role. These include organisational factors, training and prescribing issues, cultural and professional issues, tensions, boundaries of practice and responsibilities, discourses of changing interprofessional communication and relationships (Jones, 2007; Leonard, 2003; Main, Dunn, & Kendall, 2007; Masterson, 2002).

Nurses are becoming increasingly responsible and accountable for their own practice (Masterson, 2002). When nurses move out of their structured environment into a setting (such as the primary care setting) in which the standardised structures are altered, distorted or even transformed by the nature of patients, the setting and the diversity of the health care team, it can be assumed that anxiety will increase. In order to manage the anxiety associated with the fluidity of the health care environment, it has become necessary to provide different structural supports. In the primary care clinic one of these is the clinical guideline (discussed in more detail elsewhere).

Patients who present to the primary care setting within the public health service may often present with symptoms indicative of more than one disease condition, thus requiring the expertise of a health care professional with adequate knowledge and skills to correctly diagnose, treat and refer. Co-existing conditions are common, in particular the coexistence of HIV and TB (World Health Organization, 2004). Nurses, who have been trained to not only assess the patient's condition and treat accordingly, but also to care for the patients, will therefore consider more than just the patient's immediate presenting symptoms and diagnosis. The patient's family and social circumstances also impact on the nurse's decisions to manage the patient, and the anxiety felt by the nurse may be in response to a number of complex issues with which she is presented.

Nurses are not trained initially to become primary care CNPs – all nurses go through a basic training programme which equips them to become clinical nurse within a broad range of specialties – but the nurse fulfils multiple roles – co-ordinator, clinical manager, counsellor etc. to name but a few. The role of diagnostician at initial consultation is not a fundamental role, except in the case of the midwife. Although many nurses, having completed their initial pre-registration training go on to become specialists in different fields in which they will be taking on the diagnostician role, this is not the role for which nurses are primarily trained at pre-registration level. Thus anxiety is not only inherent but also *imposed* as the nurse (CNP) takes on more responsibilities as a primary care practitioner. One can postulate that a certain level of

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[6] *Nurse*
Holds a four year diploma /degree qualification and is registered as a professional nurse with the SANC.

Clinical Nurse Practitioner (CNP)
Professional nurse who holds a post registration qualification in clinical diagnosis and treatment at primary care level. Permitted to diagnose, prescribe and treat according to the scope of practice as determined by the current Nursing Act and relevant regulations.

anxiety may increase performance, yet overwhelming anxiety may prove to be inhibiting and counterproductive, causing the nurse to create what Menzies Lyth refers to as socially constructed defences. “An important aspect of such socially constructed defence mechanisms is an attempt by individuals to externalise and give substance to their characteristic psychic defence mechanisms” (Menzies Lyth, 1970, p. 10-11).The potential empowerment of the nurse practitioner (taking on the roles which would have been considered the realm of the medical practitioner) may also be the underlying cause of anxiety.

The link between individual staff members’ anxieties and the institutional dynamics can be made using the psychoanalytic concept of projective identification, which is described by Halton as an unconscious inter-personal interaction in which the recipients of a projection react to it in such a way that their own feelings are affected: they unconsciously identify with the projected feelings (Halton, 1994).

Anxiety and the nurse practitioner

In her study of nursing in a hospital system, Menzies Lyth (1970) found that nurses created socially structured defence mechanisms in order to contain their anxiety. Although Menzies Lyth’s work focused on traditional institutional settings, e.g. the hospitals, I have chosen to consider the broader definition of an institution – that of a body of people, each with specific roles, who operate as individuals within a ‘large group’, the processes of which Kernberg (2002, p. 72) argues threaten individual identity.

Socially structured defences in a primary care setting

I have chosen to reflect on Menzies Lyth’s work in relation to primary care clinical nurse practitioners.

Menzies Lyth described the unconscious mechanism in operation that the nurse, in order to defend against the anxiety of working closely with her patients, split the nurse-patient relationship. Contact with patients is split up (1970, p. 11), achieved through ***task allocation*** to different nurses, thereby minimising prolonged engagement between nurse and patient.

Although the task system is different in the primary care setting, patients however are still labelled and ‘split up’ into different groupings, such as family planning, child care, chronic disease management e.g. hypertension. In the primary care setting, nurses may see patients more regularly; however, there is no guarantee that a patient will consult the same nurse on each visit. Unlike the private general practice model in South Africa, which emphasises the family physician – patient relationship (de Villiers, 2000) as being a cornerstone of good primary medical care, nurses in State health facilities have no guarantee of this nurse-patient relationship being able to develop. In addition to the separation of patients and/or tasks, nurses choose to rotate or are rotated by management through the different departments (e.g. antenatal care, children etc.). There are a number of acceptable reasons for this practice (e.g. leave rotations, the need to ‘cover’ the facility due to absence of staff for training or illness) yet the effect of this is to minimise opportunities for the health practitioner relationship to develop.

Van der Walt and Swartz (1999, 2002) describe the work pattern in a typical community health centre offering primary level care. A patient attending the clinic for TB diagnosis and treatment may be seen by several health professionals during the course of the visit. Task allocation enables the nurse to minimise the anxiety producing effects of the enormity of the task which confronts her in primary care – overloaded waiting rooms, patients with complex and multiple symptoms/ disease processes.

A second defence highlighted by Menzies Lyth is that of ***depersonalisation***, ***categorisation and denial of the significance of the individual*** (Menzies Lyth, 1970, p. 12). The categorisation of patients by bed numbers and/or disease acts as a barrier to intimacy, which reduces anxiety. Routines, uniforms and standard operating protocols all minimise the significance of the individual patient. There is a parallel process in primary care facilities. Patients may be categorised, after initial diagnosis and treatment, into chronic conditions such as hypertension and may then be re-directed to the relevant substructure in a clinic e.g. the diabetic club, or to a particular nurse e.g. the TB co-ordinator. This does not necessarily mean that the patient will see the same nurse on each visit, but it does make it difficult for the patient to lose his/her label. Labelling reduces the patient's dignity and humanity and prevents the nurse and patient from developing a "full person-to-person relationship" (Menzies Lyth, 1970, p. 12).

The use of standard operating protocols – or guidelines – in primary care settings has the potential to entrench the depersonalisation of the relationship between health professional and patient. While there are many sound reasons for the use of clinical treatment guidelines, which are discussed elsewhere, the risk in this practice is that of simply managing a disease condition without consideration of the patient's individual and personal context. A paradox is evident between the need for good guidelines which improve patient care, but which can stifle creative discernment of the patient's symptoms in relation to his/her personal circumstances (Manias & Street, 2000). If nurses slavishly follow guidelines, there is a danger of losing their clinical reasoning and judgement (Flynn, 2005).

Sufficient detachment is considered by some to be a characteristic of the professional. ***Detachment and denial of feelings*** is useful in that it allows nurses to be moved to different settings with minimal disruption. Menzies Lyth saw this as another defence used by nurses to minimise the anxiety of separation from the familiar (1970, p. 13). This too, is evident in primary care settings, as nurses are often not allowed the opportunity to develop relationships with the community in which they work, but are moved according to the needs of the larger organisations, sometimes with little or no warning or preparation for this. Detachment therefore protects the nurse against loss.

Menzies Lyth (1970, p. 16) argues that anxiety of decision making by the individual is reduced by reducing the weight of responsibility in decision-making through the practice of ***checking*** and counter-checking. Primary care places a heavy burden on the nurse – she has to make a diagnosis and treat the patient but the checks are not as obvious or available. Nurses are responsible and accountable for their own practice and their decision making is their own. So they consult – first with their colleagues – just to check and make certain but also with the doctors when they are available (Mash, et al., 2007; Mayers, et al.). Guidelines also act as checks by setting out the limitations of the nurses' practice and indicating levels of diagnosis and management which must be referred to the next level – usually a doctor.

One of the potentially damaging defences described by Menzies Lyth is that of ***collusive social redistribution of responsibility and irresponsibility***. Nurses relieve conflict and anxiety by complaining, blaming and generalising in respect of other nurses, who are seen as irresponsible, careless, requiring supervision and strict control. This too is a feature of primary care. Increasingly there is role blurring and nurses, particularly nurses categorised as enrolled with two years training and enrolled nurse auxiliaries (with one year of training) who work outside of their scope of practice (Republic of South Africa**,** 2005), are permitted and even tacitly encouraged (or studiously ignored) due to staff shortages but are immediately 'blamed' if something goes wrong.

There is standardisation of the clinic settings despite significant differences in the community settings and needs (e.g. a level 1 clinic has specific codes of prescription, which may be unrelated to the community need for services) (Department of Health, 2000).

Menzies Lyth describes the lack of clear lines of responsibility which exist in the nursing care setting, which she sees as ***purposeful obscurity in the formal distribution of responsibility***. Responsibilities at primary care level are numerous and onerous, as this is the first point of contact for the patient, and his/her recovery and survival will depend on the competence of the nurse practitioner whom he/she consults. The nurse carries the burden of diagnosis, treatment and management in many settings with limited support from the doctor and therefore CNPs have to rely on themselves and the support of colleagues. Discussions between staff members in relation to a diagnosis assist in containing the anxiety felt by the nurse when faced with a difficult diagnostic problem. Together – all the nurses in the clinic carry the responsibility for ensuring that the services to the patients are provided.

Further avoidance of anxiety and of responsibility occurs by ***delegation to superiors***. This enables the nurse to disclaim responsibility for decision making. Thus in the primary care setting there may be unnecessary delegation upwards to a more senior person, usually the doctor (when available) or specialist nurse, for management of a patient who should be competently managed at first point of contact. This was seen particularly in the early days of HIV care – and anecdotal narratives abound of nurses who referred patients to the 'HIV doctor' for every complaint – whether or not related to the person's HIV status.

Nurses in primary care, as in other health care settings, want reassurance that the "nursing service is staffed with responsible, competent people" (Menzies Lyth, 1970, p. 21). Despite the focus on primary care competencies, undergraduate nurses often do not have enough practical experience in the clinical settings and may be ill-equipped to work in the primary care setting which requires significant independent practice. Thus, there is a lack of confidence in the abilities of the new graduate, and a dependence on those who have been in the setting for longer periods of time, and in particular on what Menzies Lyth refers to as 'semi-skilled' staff. In the South African context these categories of nurse (enrolled nurse and nursing auxiliary) carry a large burden of care as they often are the stable component of the nursing workforce.

Avoidance of change is associated with anxiety and in a context of an everchanging health service, it is recognised that the health care worker, and in particular the nurse will experience significant anxiety. Change, according to Menzies Lyth, would only occur only if the organisation was at the point of crisis. Barriers and resistance to the implementation of evidence-based practice in nursing may be understood partially in the potential for increased anxiety as a result of the change process (Hannes, et al., 2007).

Containment of anxiety may be facilitated by the social defence structures described by Menzies Lyth. It may also be contained through other mechanisms. What creates the structure when rigid systems, such hospital organisational boundaries, are no longer useful in more fluid settings? Guidelines (also known as protocols) are used by nurses within a complex network of power relations in the clinical setting, particularly between doctors and nurses. In a hospital ward-based study, Manias and Street (2000) found that guidelines may provide legitimacy of the nurse's knowledge in the clinical arena; this acts as a mechanism for documenting safe practice and a means of asserting power in decision making. Manias and Street contend that "the necessity for clinical nurses to follow policy directives and the legitimation accorded to the scientific knowledge underpinning such guidelines actively encourage nurses to seek routinization" (2000, p. 1474).

Guidelines provide another form of structure – which serves more than one purpose:

- they provide readily available, concise information which helps with diagnosis management and prescription (Carnett, 2002);
- they are issued with directives that do not allow deviation (rigidity) (Mead, 2000);
- they are rigid in themselves which minimises the need for the NP (and other health professionals), own initiative and clinical judgement) (Mead, 2000);
- are symptomatic of a rule based system which limits capacity for individual discretion and hence fallibility (McDonald, Waring, Harrison, Walshe, & Boaden, 2005);
- limit risk (McDonald et al., 2005).

Concluding comments

"A change in culture and new ways of working within organisations will be needed if we are to improve the quality of the patient's experience of outcomes and improve health" (McDonald, 2004, p. 926). The challenges for the nurse in the primary care setting are how to manage the care of her patients as well as her own anxieties. Patients have become more complicated (presentation of multiple conditions complicated by socio-economic realities). HIV/TB overrides everything else at the PHC level. As nurses cross the traditional boundary between doctor and nurse, more diagnostic/clinical management of patients is required of them. Do their personal anxieties increase? Do defences increase? What are the defences which nurse use to cope with the crossing and blurring of boundaries? Nurses' experiences of guidelines can be understood within the framework of a broader organisational/institutional culture of 'getting the job done effectively and efficiently'.

CHAPTER FIVE

METHODS, METHODOLOGY AND APPROACH

> “Qualitative inquiry cultivates the most useful of all human capacities: the capacity to learn”
> (From Halcolm’s Laws of Inquiry, cited by Patton, 2002, p.3)

In this chapter the research methods utilised in this study are described, the context and settings of each of the sub-studies are explained, and I deal with the ethical considerations of the research.

Introduction

As this research study comprises three linked sub-studies, each with a different approach, I provide a brief outline of the research from which the present study emerged, the aims and objectives of the study as a whole, the research approach, and describe the design and method for each sub-study separately.

Background and rationale for the study and methodology

This study emerged from the evaluation of clinical nurse practitioners’ responses to the PALSA (Practical Approach to Lung Health in South Africa) study, a larger research project comprising a pragmatic cluster randomised controlled trial, health systems and economic evaluation implemented in the Free State province from 2003 (Fairall, 2006; Fairall, et al., 2005) which is described in the introductory chapter. The PALSA research team developed and implemented integrated clinical guidelines for the management by nurse practitioners of acute and chronic priority respiratory diseases in primary care. An educational outreach strategy was utilised to ensure that the information and adapted protocols were effectively disseminated to the nurse practitioners in the field. Fairall et al. (2005), citing Grimshaw et al. (2004), state that educational outreach (non-commercial, short, face to face, in-service interactive education by a trusted outsider) is generally an effective strategy for changing professional practice towards evidence-based choices among physicians.

Selected senior nurse practitioners/managers and trainers attended a five-day training workshop presented by the PALSA team, comprising a primary care medical doctor (known as the *content* facilitator) and a facilitator skilled in interaction experiential training approach (known as the *process* facilitator). The participants were trained to be able to offer, using an interactive educational outreach approach, the clinical content of the guidelines, and especially the key messages to the nurse practitioners (Fairall, et al., 2005). The aim of the train the trainer programme was to enable the nurse trainers to facilitate learning, rather than offer a didactic input in the content of the new guidelines (Bheekie, et al., 2006). Support of the nurse trainers was provided through the availability of the research team to deal with questions and offer support visits.

Qualitative studies alongside RCTs are relatively uncommon, and underreported in the literature (Lewin, Glenton, & Oxman, 2009). This study, however, had a qualitative component as an integral process, and comprised initial pre-trial work and a process evaluation and follow-up. From June 2003 to June 2004 a qualitative process evaluation was done by the researcher of the nurse practitioners' response to the introduction of PALSA guidelines. This was done over a period of twelve months, during which time I conducted focus groups with nurses in each of the randomised intervention clinics, and selected non-intervention (control) clinics.

The aims of this evaluation were:

- to identify the training experiences of the nurse trainers with the nurses in the community health centres
- to conduct interviews and focus groups with key informants regarding their experiences of the implementation of the new guidelines, and
- to conduct focus groups with the nurse practitioners who had received the on-site training (Bheekie, et al., 2006; Mayers, 2004).
- To inform the trial with respect to the processes involved in implementing the intervention. In a complex health intervention, information provided by process evaluation can assist with the interpretation of the outcome results (Oakley, et al., 2006).

Although the evaluation of the nurses' experience of implementing and using the new guidelines found that they were well accepted and perceived to be user-friendly and useful, the focus groups in themselves provided a much-needed space for discussion and verbalising of feelings about working as nurse practitioners in the primary care services. The overall impression gained from the nurses is that, while they are committed to the care of the persons in their communities, they are frustrated by poor staff patient ratios, and often feel unsupported in their role as primary care providers.

Research question

The primary research question for this study was "What are the experiences of nurses in using guidelines in primary health care facilities?"

Aim of the study

The aim of this study was to describe the experiences of nurses in implementing clinical practice guidelines in the delivery of health care in selected primary level contexts in the Free State

Province and to develop an understanding of the use of these guidelines from a psychoanalytic perspective.

Objectives of the study

Within the context of adult care at primary level in the Free State Province:

- To collect and analyse information on the types, structure, perceived usefulness and practicality of guidelines used by nurses at primary care level
- To describe the experiences of nurse practitioners in implementing guidelines
- To develop an understanding of the use of these guidelines from a psychoanalytic perspective.

The research approach

I have used a qualitative research design in this study, as I aimed to gain an understanding, through a psychoanalytic theoretical lens, of nurses' experiences of using guidelines at primary level. This study conducted in the Free State province, comprises linked studies utilising multiple methods:

- secondary analysis of data which I collected during the evaluation of the implementation of the PALSA trial
- document description and review of guidelines used in primary care settings
- observation of nurses in practice and during patient consultations
- focus group discussions with nurses in three primary health care facilities

The methodology for each study is described separately.

Qualitative research is a method of inquiry that attempts to understand or make sense of phenomena as they appear in their natural settings, and produces descriptive and theoretical knowledge (Buskens, 2002; Willig, 2008). Denzin and Lincoln (2005) provide a generic definition for qualitative research as follows: "a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world … qualitative research involves an interpretive, naturalistic approach to the world" (p. 3). Creswell (1998) expands on this definition as follows: "qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting" (p. 15). Flick (2009) cites Blumer's 1969 (p. 33) statement on the need for this type of research in our postmodern society: "the initial position of the social scientist and the psychologist is practically always one of lack of familiarity with what is taking place in the sphere of life chosen for study" (p. 12). The qualitative researcher, through the process of engaging with participants in the study, creates a perspective upon which he/she critically reflects and provides a description and interpretative understanding of the phenomenon under study. The essential features of a qualitative study are the appropriateness of method and theories; perspective of the participants and their diversity; reflexivity of the researcher and the research and a variety of approaches and methods utilised (Flick, 2009; Smith, 2008; Willig, 2008).

Qualitative researchers generally aim to answer research questions which are more concerned with meanings attributed to events and experiences as described by the participants (Barbour, 2000; Willig, 2008). The methods utilised in qualitative research are flexible, and indeed, Belgrave, Zablotsky and Guadagno (2002) argue that flexibility is one of the major strengths in inductive approaches to research. As a qualitative study progresses, it may be necessary for the researcher to change approaches, or add a research setting or strategy. This flexibility, while an inherent strength, can also be viewed as negative, thus it requires that qualitative researchers clearly document their reasons for decision making at each stage of the study, thus providing the reader with a clear understanding of the purpose, plan and process of the study. This often referred to as the decision or audit trail (Koch, 1994; 2004). Although the usefulness of the audit trail has been challenged by Cutcliffe and McKenna (2004), who argue for the recognition of researcher expertise in examining credibility of findings, it is in the researcher's interest to make explicit the attempts made to establish credibility of findings (Cutcliffe & McKenna, 1999). This I have done in a later section in this chapter.

Wolcott (1994) proposes that the qualitative inquiry follows a process of *description*, asking the question 'what is going on here?' Data comprises observations made by the researcher and descriptions reported to the researcher by others [participants] of what is seen and heard [collecting the data]. This is followed by *analysis*, in which the researcher attempts to understand the essential features of the data and the interrelationships among them, followed by *interpretation*, which addresses the processual question of meanings and contexts.

The findings of a qualitative inquiry typically emerge from three types of data collection: in-depth, open-ended or semi-structured interviews; direct observation in the field, setting or context of the study and written documents, which include transcripts, program records, correspondence and official publications, among others (Labuschagne, 2003; Patton, 2002). More recently the field of qualitative inquiry has expanded to include visual materials and the performing arts (Flick, 2009). The challenge for the qualitative researcher is to demonstrate in depth analysis of the data and "redefine our data within a well articulated analytic scheme" (Silverman, 2005, p. 236).

The findings of a qualitative study are typically written up in a descriptive format with appropriate interpretation and discussion. Without graphs and statistical analyses to support the findings, it is critical that the qualitative researcher report the findings in a rich descriptive manner (often referred to as thick description) (Ponterotto, 2006; Ponterotto & Grieger, 2007), providing an accurate representation of the phenomena (Goodall, 2008) and the interpretation thereof. Thick description implies more than a one-dimensional description, rather an interpretation of what is being heard and observed, presented to the reader, which in turn allows the reader to understand the social action that is being reported on (Denzin & Lincoln, 2005; Ponterotto, 2006).

Study designs and methods

Sub-study 1:
Secondary analysis of the qualitative data collected by the researcher during the process evaluation of the PALSA study (Bheekie, et al., 2006; Fairall, et al., 2005).

Aims of the sub-study

- To identify issues considered by clinical nurse practitioners to impact on their practice at the primary care level.
- To describe their usage of guidelines in the diagnosis treatment and follow-up of patients seen at primary care clinics.
- To re-analyse the data using an interpretive stance from a psychoanalytic perspective to develop an understanding of the issues generating anxiety for primary health care nurses

Data Collection

I decided to revisit the findings of the qualitative evaluation of the PALSA intervention research project during 2003 - 2004, with the aim of developing a theorised understanding of the issues that face nurse practitioners at primary care level, particularly with respect to their use of guidelines and their responses to these. Data comprised transcriptions of focus groups with nurse managers, nurse trainers and nurses.

Sampling

The sample for the original evaluation comprised: all 20 intervention clinics; two control clinics; key informants from the Free State Department of Health management, nurse trainers, nurses and the PALSA guideline developers. I observed the training of the nurse trainers, and attended selected meetings of the local and Free State PALSA teams, and those of the team with stakeholders, including the Free State Department of Health.

For the secondary analysis the focus groups were included and interviews selected for the information which could meet the aim of this sub study i.e. the informants specifically commented on the factors influencing nursing practice in the primary care settings and the use of guidelines.

Data management and analysis

The transcripts of the focus groups conducted with the nurse practitioners as described above were subjected to a secondary analysis. Data from the interviews and focus groups in the PALSA study were analysed using *ATLAS-ti* for data management.

Tesch, Dey and Silverman, have described the basic tenets of qualitative data analysis as follows:

"Qualitative analysis takes place throughout the data collection process. As such, the researcher will reflect continuously on impressions, relationships and connections while collecting the data. The search for similarities, differences, categories, themes, concepts and ideas forms part of the continuous process. An analysis commences with reading all the data and then dividing the data into smaller more meaningful units. Data segments or units are organised into a system that is predominantly derived from the data, which implies that the analysis is inductive. The researcher uses comparisons to build and refine categories, to define conceptual similarities, and to discover patterns. Categories are flexible and may be modified during the analysis. Importantly, the analysis should truly reflect the respondents' perceptions. The result of an analysis is a kind of higher-order synthesis in the form of a descriptive picture, patterns or themes, or emerging or substantive theory" (2002, p. 66).

Secondary analysis is a research strategy which makes use of pre-existing quantitative or qualitative research data for the purpose of investigating new questions or verifying previous studies (Heaton, 2004, p. 110). Secondary analysis data in qualitative research includes field notes, observational records and audio recordings and transcripts of interviews and focus groups (Heaton, 2004). Secondary analysis of qualitative data is not done as commonly as that of quantitative research, but is a legitimate use of data provided that the ethical and methodological issues are considered and addressed (Heaton, 1998). The ethical issues associated with returning to transcripts are discussed in detail later in this chapter. There are different approaches to conducting a secondary analysis of qualitative data. These include using a unit of analysis that was not used in the original research, using a subset of the original study to do a more focused analysis of a specific characteristic or to ask additional questions of the data (Coyer & Gallo, 2005; Heaton, 1998; Hinds, Vogel, & Clarke-Steffen, 1997; Thorne, 1994, 1998). Heaton (2004, p. 38) outlines five types of secondary analysis of qualitative data in the following table:

Table 5.1 Types of secondary analysis of qualitative data (Heaton, 2004, p. 38)

Types of secondary analysis of qualitative data	
Supra analysis	Transcends the focus of the primary study from which the data were derived, examining new empirical, theoretical or methodological questions
Supplementary analysis	A more in-depth investigation of an emergent issue or aspect of the data which was not considered or fully addressed in the primary study
Re-analysis	Data are re-analysed to verify and corroborate primary analyses of qualitative data sets
Amplified analysis	Combines data from two or more primary studies for purpose of comparison or in order to enlarge a sample
Assorted analysis	Combines secondary analysis of research data with primary research and/or analysis of naturalistic qualitative data

The analysis undertaken in this study may be classified under Heaton's "supra analysis" category, as the terms of the primary study from which the data were derived were transcended (Heaton, 2004, p. 39). In using a psychoanalytical theoretical framework to interpret the data, I have moved beyond the original analysis, the aim of which was to evaluate the nurses' experience of the PALSA intervention.

Data were analysed using computer-aided qualitative data analysis software: *Atlas.ti* version 5. *Atlas.ti* is a powerful tool for qualitative data analysis, particularly for large sections of text, visual and audio data. It provides a comprehensive overview of a research project, and facilitates immediate search and retrieval functions (Smit, 2002).

The transcripts of the focus groups were checked to ensure that all data had been correctly captured. Secondary analysis was done at two levels. Content analysis was done of the transcripts based on the approach outlined by Hsieh and Shannon (2005). An interpretive approach from a psychoanalytic perspective was then taken to explore the nurses' experiences of using guidelines. The challenge for the qualitative researcher in data analysis is to maintain the sense of the whole while analysing its parts. The researcher must create a structure for analysis that is coherent, logical and does justice to the words of the participant, while reflecting on the data using an interpretive stance which aims to engage with the unconscious processes that are evident in the participant's narrative (Hollway & Jefferson, 2000).

Sub-study 2:

Document review of guidelines available to nurse practitioners at primary care facilities and approaches to training

Aims of the sub study

- To describe the nature of the guidelines available to nurses to assist them with management of patients at primary care level.
- To conduct a document analysis of two specific guidelines used by nurses at primary care level: the National TB control programme guidelines and the PALSA (now PALSA PLUS) guidelines.
- To describe the training approaches for the TB and PALSA PLUS guidelines

Method and data collection

To provide an indication of the plethora of guidelines available to nurses at the primary care level, guidelines available for use at primary care level were sourced from clinics, distribution centres or on line. These guidelines were then categorised using a framework which I developed, not as an evaluation, but rather to provide background and context. Literature relating to the assessment of guidelines was used in developing the framework. This included the Appraisal of Guidelines for Research and Evaluation (AGREE) collaboration instrument, developed by the AGREE collaboration (The AGREE Collaboration, 2001, 2003). The AGREE instrument was originally developed to provide a format for the assessment of the quality of guidelines (new, existing or updates). The instrument evaluates the following domains: scope and purpose; stakeholder involvement; rigour of development; clarity and presentation; applicability; editorial independence, but does not evaluate the impact of the use of guidelines on patient care.

Two guidelines in everyday use in the clinics and community health centres in the Free State were selected: The South African TB control guideline (Department of Health, South Africa., 2004) and the PALSA PLUS guidelines (UCT Lung Institute Knowledge Translation Unit and Free State Department of Health, 2008). My rationale for this choice is that the original PALSA RCT was designed to improve adult respiratory care at primary level; therefore the guideline with which most nurses would be very familiar is the South African TB control guideline. The PALSA PLUS integrated guideline includes the management of TB. Document analysis was done of these guidelines using the AGREE framework as a basis. The training programmes which support nurses in the use of the guidelines are also described and compared.

Data analysis

Each guideline was reviewed with respect to content, approach (e.g. algorithmic or text), user-friendliness and other criteria, based on the Appraisal of Guidelines for Research and Evaluation (AGREE) collaboration instrument, as described above. The training, follow-up and support approaches for each were reviewed and compared.

Sub-study 3:

Description of the current experiences of guideline usage of clinical nurse practitioners, nurses and facility managers in primary care level facilities in the Free State Province

Aims of sub-study

- To observe nurses in consultation with patients in the primary care clinics and community health centre; specifically to observe their use of guidelines.
- To describe the experiences of nurses in the Free State clinics using guidelines in the treatment and care of adult patients.

Methodological approach

I used an ethnomethodological approach to identify and describe the everyday work of the nurses in the primary care clinic. Ethnomethodological ethnography “analyses the everyday methods that people use to construct and sustain the typical activities in their cultural world” (Harper, Ersser, & Gobbi, 2008, p. 311). The methodology focuses on the empirical study of everyday or mundane practices (Flick, 2009), and is utilised to describe how members of a social group perceive, define and classify how they perform their daily activities and what meanings are ascribed to these activities (Harper, et al., 2008).

Ethnomethodology, as an interpretive practice, "combines a phenomenological sensibility with a paramount concern for everyday social practice" (Holstein & Gubrium, 2005, p. 486). Researchers who have found this approach appropriate to the nursing context as nurse researchers, and in studying the practice of nurses, include Silverman (2005) and Harper, Ersser and Gobbi (2008).

The methods of data collection include focus groups, participant observation, recording of interaction and document collection, all of which I have utilised in the linked sub-studies. Ethnomethodological methods allow for and indeed facilitate an interpretive stance, and allow for the psychoanalytical approach.

Data collection

This phase of the study was conducted in the Free State Province over a period of ten days during July 2009. Data were collected through participant observation and focus groups with nurses in three primary care clinics: a small rural clinic, a small town clinic and a large busy central clinic which serves as a referral centre, as well as managing its own caseload.

Participant observation

In this study, I used participant observation to describe the activities of nurses as they conducted patient consultations in the clinic setting. My aim was to observe their decision making processes in respect of patient diagnosis and treatment, and to observe which guidelines, if any, were consulted during patient consultations, and how these were used.

Participant observation can be active, passive or marginal with minimal participation. Ely et al. (1991), citing Wolcott (1988) describe three participant-observer styles: the *active participant* – the person who has a job to do as well as being a researcher; the *privileged observer*, who is known and trusted by the people in the setting and given easy access to information; and *the limited observer*, who as a researcher with no other function, listens, asks questions and develops a relationship of trust. This option is also referred to as non-participant observation (Gabbay & le May, 2004), however, there is fine distinction between these descriptions, and I have opted to use the term participant observation, as I became, within a short period, accepted as a nurse and researcher. The observer needs to understand the possible impact of her presence on those observed, and in particular on their actions, communications and general activities. Despite this, there are a number of advantages to observation in the field. Patton (2002, p. 262) notes that through direct observation the researcher is "better able to understand and capture the context within which people interact".

In the process of participant observation, I wrote detailed descriptions of the daily pattern of work, interactions between nurse and patients, their use of guidelines or other decision making aids, their consultation with peers and in some cases with me as a *nurse*, and informal conversations held with nurses between patient consultations.

Focus groups

I conducted focus groups with nurses in each clinic to explore their perspectives on the guidelines they are currently using in the primary care settings. “Focus groups are a valuable and effective qualitative technique in primary care research” (J. B. Brown, 1999, p. 124) and have been used in a variety of primary care settings across the world.

Focus groups differ from interviews in that the purpose of a focus group is to explore, through dynamic and engaged discussion and interaction among the participants, multiple stories, diverse experiences and opinions. The research participants provide an audience for each other and the interaction generates a variety of communications that form the data for the researcher (Kitzinger, 1994; McLafferty, 2004).

Focus groups have been widely used in health services research, particularly in exploring the experiences of people with chronic conditions. They are useful in informing the effect of interventions, development of health education programmes and provide social science insights, which are able to explain findings from the traditionally more ‘hard science’ studies (Flick, 2007). They are especially appropriate for accessing perspectives on topics to which participants have not given much thought. This pertains to the present study, as nurses are used to having guidelines available, and seldom have the opportunity to discuss the use of these.

Focus groups are particularly useful for “providing insights into process rather than outcome” (Barbour, 2007, p. 30). The discourse and quality of the data will depend on the skill of the conductor or moderator, the participants’ characteristics and their interest and emotional stake in the topic (Côté-Arsenault & Morrison-Beedy, 2005; Kidd & Parshall, 2000). The setting for a focus group is important, as participants must feel comfortable, motivated and guided, not coerced to express their thoughts and opinions about a topic or experience without fear of reprisal. Côté-Arsenault and Morrison-Beedy (2005) recommend three key components for the running of successful focus groups: keeping to the purpose of the study, creating an environment conducive to interaction and ensuring that the conductor/moderator is sufficiently skilled. The role of the moderator is critical, as s/he creates the environment for the discussion, manages the agenda or process, and facilitates the engagement of the participants with each other. Flick (2009, p. 199) distinguishes three forms of moderation: *formal direction*, limited to the control of the agenda and the time period of discussion; *topical steering* allows for the introduction of new questions and steers the discussion towards deeper levels on particular points; and *steering the dynamics of the interaction* as a more purposive involvement by the moderator in the interaction, such as drawing in those who may be more reticent to speak. My own approach to the moderation of the focus groups can be classified as the topical approach, as I maintained control of the agenda, and introduced questions aimed at gaining a deeper understanding of the issue being discussed.

The challenge for the researcher of conducting a focus group in the workplace, in this case the primary care clinic, is that it is difficult to ensure that there are no interruptions, as patient care must not be compromised. I had to contend with urgent phone calls needing to be answered and emergency patients requiring attention. The researcher has to maintain the focus of the group despite interruptions and be flexible enough to pick up a 'dropped conversation' if a participant has left the room and returns. As the moderator, I had to manage this carefully.

Sampling

Sampling in qualitative inquiry may follow a number of strategies. The choice of sampling strategy is a critical decision. The researcher has to make a decision as to *what* to sample and *how* to sample (Kuzel, 1999). Qualitative researchers are "interested in people who are *really* concerned and experienced with the issue under study", and look for core cases who will have "the experience, knowledge and practice" of the issue to be studied (Flick, 2007, p. 29).

Sampling in qualitative inquiry will typically rely on small numbers, the aim of the sampling being to identify participants and/or settings that can be studied in depth and detail (Patton, 2002; Silverman, 2005; Tuckett, 2004). Thus, sampling is purposefully [or purposively] done. Purposive sampling enables the researcher to select a case, participant or setting because it illustrates the phenomenon of interest (Silverman, 2005), and requires that the researcher critically consider how to study "the phenomenon of interest in the most instructive way" (Flick, 2007, p. 27). Issues of diversity, heterogeneity or maximal variation, intensity and the degree of flexibility which is envisaged must be considered. The relevance, rather than representivity of the sample is a basic tenet of qualitative sampling.

For this phase of the study, purposive sampling was done at the clinic level. My aim was to observe the nurses in an urban, peri-urban and rural setting, in large and smaller clinics, in order to observe the typical clinic setting as well as a range of variation. Three clinics were selected in consultation with the nurse managers and PALSA PLUS primary care doctor responsible for the support of nurses in the Free State programme. Experts in the field are a useful source of information when doing purposive sampling (Flick, 2007).

Gaining access to participants

The success of a project is in part dependent on the researcher's understanding of the community in which data will be gathered. The terms gaining access and building rapport with the participants refer to the complex and dynamic process of engaging and negotiating with potential participants to become involved in the study, as well as obtaining approval from the institutions and other gatekeepers (Shenton & Hayter, 2004; Suzuki, Ahluwalia, Arora, & Mattis, 2007). Access to the clinics and nurse participants was arranged through key persons (the provincial manager and the primary care doctor within the PALSA Plus project team) working in the Free State province. Clinic managers agreed to my presence during pre-arranged periods. Contact was made with potential participants who had indicated that they would be prepared to participate in an individual interview and/or focus group.

I negotiated the days for visits to each clinic and permission was granted for this. On arrival at each clinic I briefly explained my role to the clinic manager who in turn introduced me to the rest of the staff. Focus groups were held on the final day of my visit at a time convenient to the clinic staff. Each focus group lasted approximately 45-75 minutes. The duration of the sessions was directly related to the number of persons in each group (clinic 1: two nurses – full complement; clinic 2: three nurses – full complement and clinic 3: 14 nurses).

Data management and analysis

Qualitative transcripts and field notes produce voluminous data, and the challenging task of the researcher is to organise these, distil the essences of the data without losing the context and meaning, using a framework that is true to the question asked of the data. Field notes are a vital aspect of ethnomethodological research (Wolfinger, 2002). Notes from my participant observation were written up in rich descriptions to provide a word picture of the work of the nurse in the primary care clinic and the use of guidelines in her consultations. Clear and unambiguous field notes are essential for the researcher to be able to illuminate the interconnected processes of observation, data collection, theorising and analysis (O'Reilly, 2009).

Focus groups were transcribed by a transcriber, and checked for errors in transcription. Non-verbal cues were added for context. I listened to the transcribed audio-files several times, while taking notes on the issues raised, the interaction dynamics and the possible interpretations of these.

The transcripts were analysed using ATLAS-ti as the organiser for the text. Each transcript was analysed using an inductive approach, asking the question of the data: what does this tell me about the experiences of nurses using guidelines in their work in primary care? Coding was done and then codes were scrutinised for accuracy. Once each focus group had been analysed, I again searched for patterns and meaning in the codes and text. The emerging categories and themes were then checked against the data as a whole. Finally, using a psychoanalytic framework as the basis for my interpretation of the data, I explain and attach significance the findings.

Ethical considerations

The ethical considerations for all three studies are dealt with in this section. The well-known moral principles of non-maleficence, beneficence, autonomy and justice constitute the ethical basis for all research involving human subjects. While the general principles for qualitative research are no different from that of quantitative studies, the nature of qualitative research requires that the researcher be aware of the specific ethical issues that may be encountered during the research process (Flick, 2009). These include potential risks which have been identified by Richards and Schwartz as "anxiety and distress; exploitation; misrepresentation; and identification of the participant in published papers, either by themselves or others" (2002, p. 136-137). The authors recommend that in order to minimise these risks, informed consent is treated as a process, that researchers maintain their reflexive stance in their work and are adequately trained and supervised.

The original PALSA study was approved by the Research Ethics Committee of the Faculty of Health Sciences, University of the Free State. The Free State Province Department of Health gave permission for the trial (Fairall, et al., 2005) and follow-up phases. Data collection for the qualitative evaluation was included in this approval. Approval for the present study was granted in 2005 by the Faculty of Humanities Research Ethics Committee of the University of Stellenbosch. The Free State Department of Health was informed of the further work being done in relation to the original study and permission sought for further fieldwork. Access to the primary care clinics was granted for the third phase of the study.

Acting ethically in a qualitative study requires that the researcher demonstrate that she has adhered to the following principles:

Informed consent

Essential information for informed consent in qualitative research must include: introduction of research activities; statement of research purpose; explanation of procedures; description of benefits, risks and discomforts; assurance of anonymity or confidentiality; offer to answer questions; voluntary participation and option to withdraw; time or other commitments required from the participant; data access and ownership; and boundaries of data collection (Byrne, 2001; Patton, 2002).

An information sheet indicating the purpose of the research was provided to all participants, and further verbal explanations were provided to participants during the data collection. All participants in the focus groups and personal interviews conducted in the evaluation and in phase 3 study of this thesis gave verbal and/or written permission (Appendix C). Participation was voluntary. Participants were informed that the interviews and focus groups would be audio recorded, and that they were free to request that the device be turned off at any point during the sessions. Prior to each interview/focus group session, an opportunity was provided for any questions, which were answered to the participants' satisfaction before proceeding.

Avoidance of harm during data collection

In this study the protection of not only the participants but the patients for whom care is provided is important. As I conducted interviews and focus groups during on duty time, it was important that at no time were services and patient care compromised.

Arrangements were made to conduct the interviews and focus groups during lunch breaks or late afternoons when the patient load was minimal. Emergency cases were attended to immediately, and this disruption was allowed for throughout the studies.

Management of sensitive information and need for support is an important ethical consideration in qualitative research (Dickson-Swift, James, Kippen, & Liamputtong, 2007; Oskowitz & Meulenberg-Buskens, 1997). Sensitive topics are not only those which are deeply personal, but include issues which may be threatening or have potential consequences for participants or the group represented by the participants (R. M. Lee & Renzetti, 1993). Although the nature of the study was such that I did not anticipate any disclosure of personal and sensitive or emotionally painful information, I was aware that during the PALSA qualitative evaluation focus groups and interviews I had been given sensitive information. My personal experience as a nurse is that the hierarchy of nursing structures is such that there is sometimes reluctance to be open about feelings and opinions, and in a safe space created by a skilled facilitator, such expression may emerge. I therefore was prepared for this to occur. My background in mental health nursing, experience as a group facilitator and counsellor enabled me to deal with sensitive topics and provide the necessary support without compromising the data collection process.

Audio files were stored on a personal computer to which only the researcher has access. Identifying information was deleted from the audio file prior to being transcribed by the transcriber.

Confidentiality

Confidentiality was assured in that no names and other identifying details of the participants have or will be disclosed in the reporting and dissemination of the findings. Focus group and interview audio recordings have been coded so as not to list any information which could identify participants or locations. The context of the study is often described in detail in qualitative studies (Flick, 2009), however the participants must always be protected, and I made every effort to minimise the risk of identification whether through context or use of quotations.

There is a further challenge in qualitative studies of the protection of the confidentiality of third parties mentioned in the transcribed narrative (Hadjistavropoulos & Smythe, 2001). An example of this is a nurse who describes an encounter with a patient, who could be identified if the transcript was read by another person familiar with the clinic and setting. This was potential risk in my study, thus I have attempted to ensure that the clinic settings and nurse and patient are not identifiable by context or by description.

Risks and benefits

As focus groups were held during working hours, I provided light refreshments for the participants. No other incentives were offered. No participant will derive direct benefit from the study. It is my experience, however, that the mere act of listening and facilitating the expression of opinions and feelings has a therapeutic effect for busy nurse practitioners. It is therefore important that I respect this and hold their communication as privileged. Researcher-participant relationships in qualitative studies need to be carefully managed. Kvale, citing Mauthner, Birch, Jessop and Miller (2002), refers to the “instrumentalism of human relationships” as an ethical issue (Kvale, 2006, p. 482). This can occur when the researcher creates a sense of warmth and caring in order to obtain the best possible information but fails to honour the participant's right to dignity and respect.

Doing justice to participants in the analysis of the data

It is incumbent on the researcher to analyse the data with due regard to the respect for the participants, avoiding judgment on a personal level and staying true to the data. This is particularly relevant when using an interpretive stance for analysis (Hollway & Jefferson, 2000). Contextual data are often integral to the analysis thereof (H. M. Richards & Schwartz, 2002). I attempted to ensure that the participants' voices are heard and that my interpretation of their voices is clearly explained and justified.

Ethical issues pertaining to secondary analysis of previously collected data

There are a number of questions surrounding the use of secondary use of research data. Sharing of data and the implications thereof for confidentiality, ownership of data and the risks versus the benefits of using the data have been debated (Law, 2005; Parry & Mauthner, 2004; J. C. Richardson & Godfrey, 2003; Thorne, 1998). In particular, the debate centres around the issues of informed consent and became particularly relevant with respect to "transcripted archived interviews" in the field of oral history and other life-narrative research (J. C. Richardson & Godfrey, 2003, p. 347). Consent, when given for a research study, is given not only for a particular purpose, but also for the individual researcher or research group (Law, 2005). Heaton (2004) argues however, that in cases where the supplementary analysis is carried out by the same researcher who collected the original data, that re-contacting participants, where possible, is an unnecessary expense, burden on participants and may be a limitation on the scope of the analysis that the primary researcher is allowed to undertake. In the present study I collected all the original data, thus I did not attempt to contact the original participants. This would have been extremely difficult due to the mobility of the participants and the time period since data collection.

The fidelity of the secondary findings may be considered an ethical issue. There is a distance between the original data and the analyst (Thorne, 1998), and if the secondary analysts do not have the grounding in the approach and method of data collection of the primary study, they "run a serious risk of finding what they seek rather than learning what is there" (Thorne, 1998, p. 550). Again, this is mitigated if the data being analysed were collected by the original researcher/s.

Reflexivity of the researcher

In qualitative research, the meanings that the researcher attaches to the world are the product of her own experiences, the social fabric of her world, language and culture (Denscombe, 2007). In observing, participating in interviews, the nature of the observations and interactions is influenced by the pre-existing ideas and ideological assumptions and beliefs that he/she holds. Within the psychoanalytic paradigm, the notion of reflexivity is not only about the research process, but the internal awareness of one's own position in the research process, the impact of the researcher on ‘the other’ in the process, and the dynamics of the interaction. Mantzoukas (2005) suggests that since no research is value-free, the recognition and inclusion of the researcher’s bias is a necessary prerequisite for securing validity. The reflexive researcher acknowledges that he/she is intimately involved in both the process and product of the research endeavour, that data analysis is part of the ongoing reflection and evaluation of the research, and that the findings invite critical reflection and engagement (Dowling, 2006; Freshwater & Rolfe, 2001; Patton, 2002).

The researcher, as instrument in the qualitative research study, must critically reflect on the self, as stated by Patton, undertaking “an ongoing examination of what I know and how I know it” (2002, p. 64).

As the researcher, my own reflections have been in the form of field notes, audio recordings of my reflections while conducting field work, and in discussions with my supervisor and a trusted fellow student.

Trustworthiness and credibility, validity and reliability

“The validity of research corresponds to the degree to which it is accepted as sound, legitimate and authoritative by people with an interest in the research findings” (Yardley, 2008, p. 235). The principles for evaluating the credibility and validity of qualitative studies are summarised in the table below:

Table 5.2 Core principles for evaluating the credibility and validity of qualitative inquiry (Adapted from Cutcliffe & McKenna, 2004; Flick, 2009; Mays & Pope, 2000; Patton, 1999, 2002; Yardley, 2008)

Core principles for evaluating the credibility and validity of qualitative inquiry
Sensitivity to context • Relevant theoretical and empirical literature • Accurate presentation of participants’ perspectives • Adequate descriptions of context and setting • Ethical issues
Commitment and rigour • Appropriate sampling and thorough data collection • Use of disconfirming cases • Depth/breadth of analysis • Methodological competence/skills • In-depth engagement with the topic
Coherence and transparency • Clarity and power of argument • Fit between theory and method • Transparent method and data representation • Reflexivity of the account
Impact and importance • Applicability to social entities/contexts • Understanding of limitations • Theoretical
Credibility of the researcher • Training and experience • Expertise and track record • Status • Presentation of self

For many years qualitative researchers have had to justify their methodology and findings against the standards set by and for researchers of the positivist quantitative paradigm (Carr, 1994; Guba & Lincoln, 2005; Silverman, 2005). The perception of the quality and trustworthiness of the results of a research study impacts on the reader's decision to utilise these in practice or subsequent research. Buskens (2002, pp. 2-3) refers to four areas of quality concerns - *technical quality*, *usefulness quality* (the relevance and usefulness of research results), *social responsibility quality* (appropriateness of the project's stance in the wider social context of power and power-relations) and methodological *recognisability quality*.

The validity or trustworthiness of qualitative findings has been traditionally judged by the methodological rigor of the study. Guba and Lincoln, in their book 'Fourth Generation Evaluation' (1989) identify a number of parallel criteria by which the adequacy of qualitative research may be judged, and suggest techniques for increasing the trustworthiness of a study. The criteria of credibility (internal validity), transferability (external validity or generalizability), dependability (reliability) and confirmability (objectivity) have been the standards by which qualitative research has been judged, particularly in the field of nursing and health care. They further devised authenticity criteria, particularly with respect to evaluation processes, of fairness, ontological authenticity, educative authenticity, catalytic authenticity and tactical authenticity (p. 245-251). Findings should be "sufficiently authentic" (Guba & Lincoln, 2005, p. 205) to enable confident action to be taken based on the findings. Rigor, argue Guba and Lincoln, is not only methodological, but also interpretive (1989, p. 205). Interpretive rigor is critical to the trustworthiness of the research.

Validity reflects the moral and ethical relationship of the researcher and the participants. Guba and Lincoln state "the *way* in which we know is … tied up with both *what* we know and *our relationships with our research participants*" (Guba & Lincoln, 2005, p. 209).

Patton (2002) states that the credibility of qualitative inquiry depends on the three distinct yet related elements:

- rigorous methods for doing fieldwork that yield high quality data that are systematically analysed with attention to issue of credibility;
- philosophical belief in the value of qualitative inquiry and its approach and methods;
- credibility of the researcher with respect to training, experience, ability to present the data and self in the inquiry (p. 552-553).

I have attempted to ensure trustworthiness and credibility in this study through both methodological and interpretive adequacy by means of the following:

- Rich descriptions of the context and settings of the sub-studies have been provided;
- Participant descriptions have been provided with due care to protect confidentiality and anonymity;
- The theoretical framework for the study has been described;

- The analytic structure for each sub-study is described and every attempt has been made to preserve the integrity of the analysis and not to shape the findings with my own biases;
- Data have been triangulated through the collection of data using different methods, and creating the links to each sub-study findings in the discussion;
- Ethical considerations have been adhered to.

Triangulation

Qualitative research is inherently multi-method in focus (Flick, 2002). Triangulation through collecting data in different ways strengthens a study as multiple techniques for gathering or handing data are used; different sets of data or different methods may be used (Patton, 2002) and it is also is used for completeness purposes (Adami & Kiger, 2005). Although it was initially considered to be a mechanism for establishing the credibility of qualitative research, Richardson and St. Pierre (2005) state that this approach carries an assumption that there is a fixed convergence point, and argue that there are more than three sides by which to approach the world, and have offered the concept of crystallization rather than triangulation (p. 963).

Denzin (1978) identified four types of triangulation techniques: methodological triangulation (collection of data on the same phenomenon at different points in time or in multiple sites); theoretical (use of alternative disciplinary or substantive theoretical lenses) and investigator (collection of data from different levels of persons).

In the present study, in using a psychoanalytic lens to describe the experiences of nurses in using guidelines, I have applied methodological triangulation. Indeed, the notion of crystallisation as described by Richardson and St. Pierre may be more appropriate as they state:

"Crystallization provides us with a deepened, complex, and thoroughly partial understanding of the topic. Paradoxically, we know more and doubt what we know. Ingeniously, we know there is always more to know" (2005, p. 963).

Preparation of the researcher

As with all fields of inquiry, the competence of the researcher will influence the design of the protocol, the collection of data, quality of data and the analysis thereof, and the interpretation of the findings and subsequent discussion. My own experience and preparation for this study has included the following:

- Completion of a master's thesis utilising phenomenology as the foundation for the inquiry.
- Completion of two qualitative methodology (including interviewing and data analysis) courses and a module in programme evaluation.
- Attendance of a module in computerised data analysis using Atlas-Ti.
- Teaching and supervision of postgraduate diploma and masters students who use qualitative methodologies in their studies.
- Extensive reading in the field of qualitative inquiry
- Discussion with colleagues, experts in the field and my supervisor.

The voice of the researcher

“A credible, authoritative, authentic and trustworthy voice engages the reader through rich description, thoughtful sequencing, appropriate use of quotes, and contextual clarity so that the reader joins the inquirer in the search for meaning” (Patton, 2002, p. 65). I have used the first person voice in this thesis, as the voice of the researcher in a qualitative inquiry is critical to the presentation thereof, and the findings will be judged by the reader, taking into account the researcher’s position in the inquiry and the writing up thereof (Webb, 1992). Using for the most part the active voice, I have attempted to present the voices of the participants through contextual description, and use of rich description and quotes.

Strengths and limitations of the research approaches

Although the strength and limitations of qualitative versus quantitative research paradigms continue to be debated, qualitative inquiry over the last decade has demonstrated its relevance and complementarity to quantitative studies in providing the “depth and detail through direct quotation and careful description of situations, events, interactions and observed behaviours” (Labuschagne, 2003, p. 100). The usefulness of qualitative research methods is demonstrated in the increasing acceptance of such into the traditionally quantitative fields of medicine and psychology, as can be seen in the changing pattern of publications in these disciplines (Britten, 2005). The critical point of reference remains the appropriateness of the method to the issue under study (Flick, 2009).

Each of the approaches used in this study has strengths and limitations. At this point I merely reflect on some of the issues that are well recognised in qualitative inquiry which are relevant to this study, and in a later chapter I reflect on the limitations of this study.

Concluding Comments

This chapter has provided an overview of the rationale for the methodologies utilised in each of the sub-studies, ethical considerations and issues of trustworthiness. The methodologies used are complementary and allow for the interpretive stance I have taken in the data analysis and presentation of findings.

CHAPTER SIX

SECONDARY ANALYSIS OF DATA COLLECTED DURING THE PALSA QUALITATIVE EVALUATION 2003 -2004

In this chapter I present the findings from the secondary analysis of the data collected during the qualitative evaluation of the PALSA intervention, using an interpretive theoretical stance.

Introduction

The setting and context of the PALSA intervention

The land-locked Free State province is one of nine provinces in South Africa. At the time of the study, the province was home to 2.78 million people in five districts. The province is the third largest province with a surface area of 129480km (10,6% of the country), with 6.2% of the country's population and a population density of 23 people per square kilometre.

The age distribution is characteristic of a developing country, namely a large young, medium-size adult and relatively small older population. The population is relatively poor with poverty found mainly amongst the rural African population. Eighty five percent of the population has no health insurance (medical aid) and is therefore mainly dependent on the public health services for all health care. General practitioners (who dispense medicines) and traditional healers[7] (Meissner, 2004; Pretorius, 1999; Republic of South Africa, 2008) also provide health care to persons with or without health insurance, on a fee for service basis. Although nearly 96% of the population has access to relatively safe drinking water, still approximately 35% of the population have no basic sanitation. There are 352 clinics and community health centres in the province (including non-fixed clinics) which is divided into five health districts. The range for visits to public primary care facilities is between 7 and 9 per 1000 population per day across the province. On a typical day around 200 people attend a clinic, of whom about one third are children. A clinic is staffed by a median of nine nurses, some of whom see only children or pregnant women. Problem cases are referred to doctors who visit weekly, except in the larger clinics, where doctors visit more regularly (Fairall, et al., 2005; Free State Department of Health, 2006a).

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[7] Traditional healer practice resorts under the legal framework of the Traditional Health Practitioners Act No. 22 of 2007, but this remains largely unregulated.

The province has to provide comprehensive health care with severe personnel shortages. In the primary health facilities, over the five health districts, the vacancy rates in August 2005 were: professional nurses 39.3% (range 26% - 58%), pharmacists 88.4% (range 65% – 97%) and medical officers 68.8% (range 40% - 85%) (Free State Department of Health, 2006b). In 2007/2008, on average, R233 per capita was spent on primary health care services in the province. This is the lowest of all the provinces and significantly below the national average (Monticelli, 2009). The introduction of the antiretroviral treatment programme in the Free State has further strained the human and other resources in the province. The onus has increasingly shifted onto professional nurses to fill the service gaps caused by the insufficient numbers of other health personnel (Van Rensburg, Steyn, Schneider, & Loffstadt, 2008). "The clinical workload of nurses however has increased over the past 4 years to the current number of 36.9 patients per nurse, per day, and is the highest in the country" (Monticelli, 2009, p. 142).

Health profile of the population

More than 400 000 of the population are HIV-infected, with high rates of tuberculosis. Around 14% of the population and about 1 in every 5 adults were estimated to be HIV positive in 2008 (Nicolay, 2008), with an estimated 73,000 people requiring ARVs in 2008, 44% of whom had accessed treatment. The TB case load (new smear positive cases) in 2007/08 was 9327, with cure rate reported as 69.1% in 2006. There is a high prevalence of chronic diseases of lifestyle and disease conditions relating to poverty, malnutrition and trauma (Bradshaw, et al., 2004). Table 6.1 indicates the top ten causes of death in the Free State province as reported in the latest available mortality statistics.

Table 6.1 Top 10 causes of death in the Free State (Apr 2003 – Mar 2004: reported deaths - midyear estimates)(Free State Department of Health, 2006a).

Top 10 causes of death in the Free State			
Diseases and conditions	**Cases**	**% of total cases (total = 30 818)**	**Per 100 000 population**
* Infectious and parasitic diseases (including HIV and AIDS and TB)	8338	27.1	304.5
* Respiratory system	7187	23.3	262.5
Circulatory system	4640	15.1	169.5
Symptoms, signs and ill-defined causes	3919	12.7	143.1
Endocrine, nutritional and metabolic disorders	1087	3.5	39.7
Neoplasms	1076	3.5	39.3
Nervous system	1055	3.4	38.5
Pregnancy, childbirth and puerperium	1014	3.3	37.0
External causes	914	3.0	33.4
Digestive system	497	1.6	18.2

* The two main causes of death are related to pneumonia, tuberculosis and HIV and AIDS

Aim of the sub-study

> To revisit the transcribed interviews and focus groups with the aim of developing a theorised understanding of the issues which face nurse practitioners at primary care level and their responses to these.

Secondary analysis was done of the qualitative data which I had collected during the process evaluation of the PALSA intervention. These comprised focus group transcriptions from the PALSA project, in order to identify issues considered by clinical nurse practitioners to impact on their practice at the primary care level and their experience of using guidelines in their practice. The process of the secondary data analysis is described in chapter five.

Sources of data utilised for secondary analysis

- *Transcripts from focus groups conducted with the nurses in the primary care intervention clinics*. These nurses had been exposed to the on-site training sessions in the use of the new guidelines. The clinics which had been exposed to the intervention had been randomly assigned, based on a cluster randomisation protocol and thus included clinics across the Free State province. The metropolitan area of Bloemfontein was omitted from this RCT, due the possibility of 'contamination' as clinics are located in relatively close proximity and there is a flow of information amongst staff in the urban clinics.
- *Transcripts of focus groups held with the nurse trainers*. The trainers, who themselves are nurse managers or clinical nurse practitioners, are therefore familiar with guidelines used in primary care settings.

Themes emerging from secondary data analysis[8]

This study, in which I, as the evaluator, personally observed and evaluated the training programme, observed the initial practice training sessions in the clinics and conducted focus groups with nurses in all twenty intervention clinics, as well as interviews with selected individuals and focus groups in non-intervention clinics, was unusual, in that I got to know the Free State province, the health care system and personnel well over the two-year period. Revisiting the data was challenging, as it was essential for me to set aside the evaluation lens and engage with the data using an interpretive, psychoanalytic perspective. As the researcher who had become familiar with the context, the people and the health care challenges of the Free State province, it was important for me to explore how my own assumptions and experiences might influence the construction of knowledge (Rolls & Relf, 2006). Putting aside pre-existing ideas and assumptions is a form of bracketing, which has its origin in the phenomenological tradition. The importance of this reflexive process is to minimise the bias – or reading into the data, based on previous understanding of the data. Using my theoretical framework enabled me to re-engage

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[8] Note: in the original focus groups, all participants were nurses or CNPs. They are therefore all referred as participants in the findings. Only male participants are identified as such, as the majority of participants are female.

with the data. There are a number of types and methods of bracketing (Gearing, 2004; Patton, 2002), however within the broader ethnomethodological approach, Gearing (2004) describes the process: "the researcher acquires a clearer picture of the phenomenon by repeatedly stepping in and out of the bracketing process while comparing the developing data to the larger institutional and cultural context" (p. 1442).

Primary health care - people, places and protocols

The CNP in the PHC setting deals with *people* - her patients, colleagues and the governmental and community structures which interact with the health centre. Her role is vital to the health and welfare of the local community. She is the first point of contact for almost all persons attending the public health service, as health service policy requires that all persons must be seen at the primary level except in cases of emergency. Thus her screening, communication, diagnostic, treatment and management skills are vital to the success of the primary health care services in South Africa. The *people* need her services. Patients depend on the services offered by the clinic and by the primary health care professional – the nurse. The burden of responsibility is great.

The setting is often less than ideal. Clinic services are constrained by the lack of infrastructure. Examples of this include the size of the clinics - often inadequate for the large numbers of patients who wait to see a health professional; lack of basic services in certain areas – which may include piped water and electricity; equipment which is inadequate or faulty; storage space for files and equipment and an unreliable system for transporting of patients to referral centres, as the exchange below illustrates:

> Researcher: How do you cope with all the work that has to get done here?
>
> Participant: *With difficulty. Difficult, really. I don't know whether it's because of our clinic is too small, so we've got only two consulting rooms. So there are other sisters, if they hire the other staff, there is no room again for that sister.*

Despite the building programme that has been instituted by the public health service, there remains a backlog in respect of infrastructural needs. Nurses also have to contend with lack of basic equipment and interruptions in supplies of essential medications. One participant explained: *We have shortage of equipment. Equipment is a big challenge. And if we can have enough medications. As it is we don't even have a simple Panado at the clinic.*

Guidelines – guiding or governing practice?

Nurse practitioners in primary health care centres are faced with a multiplicity of guidelines.[9] The guidelines most often in evidence and routinely used are the following:

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[9] As part of the PALSA training protocol, verbal and/or written permission was obtained for photographs to be used.

- Integrated Management of Childhood Illnesses - IMCI
- Primary Health Care Standard Treatment Guidelines and Essential Drug List, commonly referred to as the EDL
- TB guidelines
- Guidelines for the treatment of sexually transmitted infections
- The big blue book - a large file of policies and guidelines
- Antenatal, maternal and child care guidelines
- Guidelines for the management of persons with HIV

While the guidelines listed above appear to be the major ones, there are many others, which offer information regarding diagnosis, treatment and care of specific conditions such as hypertension: *maternity and antenatal … and then hypertension and then asthma ja …*

Guidelines are not consistent, either in the assumptions of the CNP's clinical expertise, or in the approach that should be taken by the practitioner. They are often difficult to follow and may even be contradictory. As expressed by one nurse practitioner: *that I've noticed … different guidelines, well I can't remember which one but I know IMCI will say one, PALSA will say that. And then like the very same Standard Treatment Guidelines they will go other way round and the other one would go that other way round.*

For some nurses, using a guideline is time-consuming but useful, for others following the algorithm while the patient is in the consulting room proves uncomfortable. Despite their uncertainty about a diagnosis or treatment, using a guideline in front of a patient was difficult for some nurses. There is a sense that the patients will think that the nurse doesn't know what to do. This undermines their sometimes fragile sense of competence, as described by this participant: *First of all they are not comfortable, they think - ah, she doesn't know. But you just explain to her or him that you are just looking for something for your condition. Because sometimes they have a case, yo, with this page they are not going to be cured.*

For this nurse however, the guideline gave her confidence: *the material that we are using is very good. You can see and check whether you had done the proper thing, especially whether it's a serious case. And you exactly know and show your client in front of you what you know, everything, how you treat everything. Because sometimes people don't like seeing. It's just a common cold, it's that and that and that, but in this process we educate our patients.*

Deciding on *which* guideline to use is a further challenge. The CNP usually takes a history of the presenting symptoms, then may or may not do a physical examination, and will then decide on the correct guideline to use. Certain guidelines require that the CNP has a high level of knowledge and skills. These guidelines are for use once the CNP has made a diagnosis, and will provide information regarding treatment and other management or referral. Other guidelines take the nurse step by step through the taking of history, and responding to the answers provided by the patient, the CNP will follow the algorithm which will lead him/her to the diagnosis and treatment. For this nurse, the PALSA guidelines have made a difference.

> Researcher: What else have you found that's been useful for the use of these guidelines?
>
> Participant: *Because we are using so many, many antibiotics and are seeing so many signs and symptoms, you know. Some of them maybe we had to refer to the primary health care book, EDL, you know. But according to this one (the PALSA guideline), this gives everything. Everything.*
>
> Researcher: Everything that you need. Would there be anything else that you would like to add to this, in terms of respiratory care? Anything that you commonly see, that you still have to go back to the EDLs for?
>
> Participant: *No, because I've been checking the EDL. Some of the treatment doesn't appear in the EDL, you know. But this one says we have to go this way.*

Guidelines which are logical and comprehensive help the nurse to make decisions about patient care, as explained by this participant: *We just know that for whatever patient comes in here, everything is in here. I don't have to page this one, go to that one, go outside, then I page that one and I page that one.*

The PALSA guidelines were easy to follow. This may have been due to the clear, logical structure of the presentation of these guidelines. Algorithms were useful and in particular the colour coding made recognition easier.

> Participant: *When you go to the book* (guideline) *and it's only in black and white, it's not that much. So the colours makes easier. You know where to go to …*

The nurses in another clinic concurred:

> Participant 1: *The EDL doesn't have pictures.*
>
> Participant 5: *You don't know where to look in the EDL because you don't know whether you must look at the medicine or the condition or both!*
>
> Researcher: … I've always wondered how people used that EDL, because it's quite complex. I mean you have to use it because that's what it is, but it seems a complex document.
>
> Participant 5: *And you read and read before you get to the …*
>
> Participant 3: *And sometimes you are not really confident whether you've done the right thing, so you go to the other sister - see this book, let's check the two of us.*

The PALSA guideline package includes a desk blotter on which key messages (see example in chapter seven), a two-year calendar and other useful information is easily accessible.

> Researcher: Tell me about how you use the desk blotter
>
> Participant: *If maybe the patient is complaining of coughing or difficulties in eating or maybe pain when breathing or coughing we refer, we, we check the breathing pertaining her respiratory*

> *rate. And then we, we work to the chart and then we go through the guideline and then there is a PALSA antibiotic guide then we check if the patient is having respiratory symptoms … whether a mild, lower respiratory or severe. If it's a mild and then we just turn the wheel and then we find the treatment that the patient suppose to get a Amoxicillin* **…** *500 tds for seven days*.

In another clinic, participants say that the desk blotter saves time.

> Researcher: Why does it save so much time for you?
>
> Participant (Male): *Because, as I am saying, the patient who is coming here, complaining, we just look. We don't go to that big book and check. You see, the time, still, when I am going there to check … When I said the patient is complaining about this, then I'm going to the book, I am going to check and … even check again, you see … But this one, you see …* (demonstrating how he uses the desk blotter)
>
> Researcher: Ja, it's very clear.
>
> Participant: *Even if we, as the sisters, if the patient see that you want to send their sputum for TB, so I just refer that patient* (to the pictures on the desk blotter) … *to show him or her how to spit there, spit there …*

For the nurse in this clinic, anything that saved her time was useful. She talks about the desk blotter: *For me, maybe because I am always in a hurry, I don't have time to look in the book*.

For some the guideline is just that – a guide – and they feel confident enough to manage their patient load using the guidelines as they need it: *it's just a guide, you don't need a book to sort of go through. This was simple and straightforward. Give us time to attend to other patients as well.*

Guidelines are useful *if you don't know what to do.* This participant explains what it feels like when she is uncertain about patient management: *if you work everyday with that problems. Then you are used to it and if there's a problem, it is easy, because we have got it in the drawers - the guidelines, each consulting room. so it's very good to have the guidelines, otherwise we'll be stuck, because you can't remember everything, because with me who's not working really in front with the minor ailments, there are some of the things that I can't remember. And TB is a thing that you really have to get the training everyday, because it's such a difficult ... for me, for me it is, because and the register, all that type of things. So, it's very good to have guidelines, I'm sure.*

Fear of the unusual and unfamiliar?

Nurses are sometimes anxious about using medications with which they are not familiar, or dosages which seem unusually high. An example of this is the use of Prednisone for the emergency treatment of asthma. Special provision was made for extended prescribing powers of this drug in the initial PALSA study, and CNPs were therefore within their scope of practice in prescribing this. Fears were expressed by the CNPs that it was dangerous (it has risks for prolonged use): *We were worried because we didn't we understand it … only used by the doctors … it was also … this steroid thing*. Only when they had seen the beneficial effects of appropriate use, were they able to accept the use of this medication: *and the patient really … there was a patient, it works wonders this Prednisone after, after that treatment it really worked.*

> Researcher: So how did that make you feel?

> Participant*: I felt good (both laughing) because that patient wanted to be on that treatment (laughing). To be put on that treatment not other treatment because it works wonders.*

When they saw that their treatment worked, they felt good about themselves. Not only the nurses themselves, but other health professionals were sceptical of the CNP's ability to prescribe this drug appropriately. Nurses reported that their medical colleagues and the clinic pharmacists had expressed reservations about their prescribing of the drug.

Anxiety created by patient demands

CNPs appear to lack confidence in their knowledge and ability to cope with patient demands. Patients want to be treated with medication, and are often dissatisfied with the CNP who has made the decision that no prescribed medication is required for a health problem. Patient demands for specific treatment, especially medication, may conflict with the guideline for the management of a particular condition. This participant describes her experience:

> Participant*: Because most of our patients they like to … they like medication … if you are not going to give him or her medication they usually become cross with you.*

> Researcher: … and when you said the patient wants medication what kind of medication do they want?

> Participant*: Anything as long as he can come up with something … with something [agreement from others.]*

A guideline such as the PALSA guideline with diagram and picture is used to reinforce a health message

> Participant*: He would say I'm asking for Panado (Paracetamol) at least because … even during the night I'm sweating.*

Patients are also knowledgeable and will specify to the CNP what medications they require. Patients who are knowledgeable and who know what they want are perceived as "clever". Patient demands may be for antibiotics, specific pain medications and cough mixture.

> Participant*: Oh and cough mixture - "We want cough mixture, we want cough mixture!" "We want antibiotics - so it's going to give us trouble now."*

> Participant*: And then sometimes they don't want Panado* (Paracetamol), *they want something more than Panado (all laughing).*

> Researcher: And, and what do they consider as the next thing up from Panado?

> Participant*: A Brufen* (Ibuprofen).

This puts enormous pressure on the nurse - who knows that it is probably not appropriate - but sometimes finds it difficult to refuse. To counteract patient demands, CNPs have used the guidelines to show the patient that medication is not required. This seems to give them the authority that they lack.

> Participant: *We do have such cases. Especially, they can, for example, somebody else has given them antibiotics.*
>
> Participant (Male): *And now I don't want to give them antibiotics. Why? Some of them, even if you explain the way, they just don't want to understand. They say "This helped me before and now why are you not giving it to me?" Then you tell them it wasn't the antibiotic that helped, it was going to go away anyway after certain days. So sometimes it takes a lot that you have to sit the patient down and explain to them.*

Showing the patient that a treatment is written in the guideline helps for the nurses in this clinic:

> Participant 1: *I'll show you because sometimes they query us - why don't you give me something because I know people want antibiotics, and with a virus … So now I let them read. So I don't do things out of myself, I use this book, it's been prescribed, and I know it works, so come lets read. You know what? It's then that they understand, because the bed rest is there, high fluid intake and no smoking. But sister will you give me something? I say - have you seen there? It's Panado.*
>
> Researcher: Sounds like you actually explain to the patients this is exactly what it is, this is the treatment.
>
> Participant 1: *They need simple information, they don't even argue with you. It's written down.*
>
> Researcher: Now how is that different from when you didn't have guidelines? You were saying basically the same thing, because that book doesn't tell you anything that you didn't know before. What's different?
>
> Participant 2: *You know what? Our people, they believe in seeing.*

In this clinic the pattern was the same: *The response sometimes is not so good because people expect you to give them something. And when they come to a clinic, they expect something. So sometimes there is no medicine, sometimes we do have, but especially with the antibiotic, if we explain, they don't really understand, but if we show them, then response is good sometimes.*

Nurses are challenged by patients who appear to believe that the more complaints they have, the greater the chance of being able to qualify for a disability grant. This puts pressure on the nurse, as patients tend to attend the clinic more frequently.

> Researcher: Is it a real problem, patients wanting grants?
>
> All participants: *Yes*.
>
> Participant: *Because they think that if they get, they take the medication, the blood pressure, whatever will be stabilized. This means that they would not qualify them for the grant. So if they don't take medication, their condition is going to get worse, then …*

> Participant (Male): *Because she must complain there every week, so that the week page must be filled. Then the doctor looks at the patient - this one is supposed to get a grant. So they are doing … today she is complaining …, the next day the shoulder and the neck, the next day the chest, you see. So that the doctor, when she sees that, and says that this patient can get a grant.*

The primary care clinic provides more than health care – it provides a place of hope, a point of social contact – and in winter it is warm. This participant reflects on what the real issues are for her patients: *but the patients like to shop around. Ok. They have social problem. Social problem makes people think that you're sick. And when you assess them you find that it's just social problem because of unemployment. When they stay at home, they are hungry, have nothing to do, so they think the clinic is better, we can just stand at the clinic and at the end of the day we go home. I think again, they come to the clinic because of boredom, there's no place for entertainment. When they are bored they just come to the clinic. For example one can come to the clinic and say in 1978 I had a fracture and I think it is starting to get painful. Then, you look at that there is nothing. That patient is bored at home, she just wants to … And another thing they believe that if the file is so thick they will get a pension.*

Whose decision?

It is challenging for the nurse to withstand pressure from her patients – particularly in relation to the prescription of medications. The guidelines not only provide the nurse with evidence based information but can also be used to "show" the patient what is needed. This enables the nurse to stand her ground and prescribe only what is appropriate for the patient's condition – even if that means that no medication is prescribed: *There was even this other lady here - I remember it was last week. She told me that I must give her the book* (clinic card); *she'll go to the other clinic. She said "I want (name of drug) - I was given it last time I had this condition. Now I want it again".*

> Researcher: OK. So how did you handle it?

> Participant: *I just said, "Listen, even if maybe that time this person found something that you don't have now then they did examine you - maybe there was something that was different from now, but still, it won't make any use. If you take my word for it then after a couple of days then this will subside." But when she left, she was not … she wasn't so amused, you know.*

Shortage of staff impacts on patient care

The constant struggle to maintain an acceptable level of care is compromised by the shortage of staff. This has the effect of the nurse trying to get through the patient load as efficiently as possible, and impacts on the amount of time she may spend with a patient – and therefore the risk of missing a symptom or observation which may have detrimental effects on the patient's treatment and outcome of the illness.

> Participant*: Basically is that one of shortage of staff because patients will be coming but sometimes like we are trying to give that quality care … We miss some of the things and then patients will be coming back. And then only to find out that you miss some important things there. Because you*

> *don't really have enough time to sit and ask the patient questions and they are impatient also to, to wait in the line for a long time …*

Doing the right thing

Doing the right thing for patients is important to nurses. They want to know that they are making a difference in their patients' lives - making their health status easier to manage. It seems as if there are times when nurses are uncertain - and the use of a guideline which is clear and accessible - especially in emergency situations, is critical to their confidence in being able to do what is needed.

> Participant: *It makes you feel good, like you know something. Sort of in the way that you master something. When you see this then you just know exactly, this is it. You get a picture of something - this is how to attend to it.*

Nurses tend to consult with each other before referring. In this clinic, CNPs, when faced with conflicting options for patient management according to different guidelines, consult each other, decide on the most appropriate one to use in their context, and reach consensus; they will discuss among each other when there is a problem: *but usually we used to sit together and say: "OK, can you remember what we were taught here? How do you go about this and that?"*

At another clinic a participant explains how the nurses work together and validate each other's actions: *She'll come to me and say "I've done this and this and this and this". So how do you think about … so both of us will be learning.*

There is a constant need to 'check' which the nurse experiences - is she doing the right thing? Does this relate to lack of knowledge or experience, or perhaps an inherent difficulty for some nurses to be confident in their clinical decision making? This contrasts with the reasons that nurses offer about why they enjoy primary care and choose to work in the community despite the obvious challenges.

> Researcher: What do you enjoy about the primary health care, apart from the overload of clinics? But the health care itself, what do you enjoy?

> Participant: *You know sometimes you feel great … You find … I refer this patient and the doctor agrees with you … It is great...*

Being a primary health care nurse is satisfying, challenging and frustrating. There is a real sense of being a much needed asset for the local community. Primary health care is where everything starts – the nurse is there when the patient first arrives with his/her initial complaint: … *not when you are in hospital just the patient coming in and then you continue with whatever. In a primary level it is where everything starts.*

The PHC nurse enjoys her independence, gains valuable knowledge and experience as she works with her patients – and this enable her to: *work in directing the community.* For this nurse, being independent makes her feel just like a doctor: *You tend to be so independent - you're an independent practitioner. You must use your own knowledge, you own … whatever for the patient. So independent.*

Yes, refer here, you can phone the doctor for advice at some point, but it is your decision, so that independence is just, is just like a doctor who is working as an independent person.

A guideline that gives confidence

When the PALSA guideline was followed - and appropriate treatment given - the patient could be treated at the local clinic and referral to second level was not necessary. This made the nurse feel proud that she had effectively managed her patient, particularly as the patient appreciated being treated on site without the inconvenience of having to be sent to the next level of care. The satisfied patient informs others about the quality of the treatment received at the clinic - this reinforces in the nurses' minds that the service they offer is of a high standard - and in turn bolsters their confidence and sense of competence.

> Participant: *It gives us … it makes us proud because when the patient was here and then was ill and then he or she was being treated at the same time … so it gives us confidence.*

Training and keeping up to date

It is important for PHC nurse to be kept up to date – and they want to have training. In-service training provides the nurse with a sense of security about her practice: *So those in-services really they keep us up to date with the information … I think also it's very important to us that is why we are still enjoying this, yes. Not to be up … to be outdated with the information …*

This nurse is aware of the usefulness of guidelines in keeping her up to date:

> Researcher: Would you be able to manage the patient without the guidelines? Because you're all trained. That's why I'm asking.
>
> Participant: *Yes, without the guideline, the thing is the guidelines are the new developments.*
>
> Participant: *We are being trained some time ago.*
>
> Researcher: So guidelines keep you up to date?

Training also helps the nurse to utilize the guidelines more effectively.

> Researcher: … it seems to me that you've got lots of guidelines in the clinics. You've got diabetes guidelines, and eye treatment guidelines, and just about everything there is a guideline for. How do you manage with all the guidelines?
>
> Participant: *You know, if you've been trained then you've been given the guidelines, at least it can be easier to manage. And at least someone has to be responsible for that … all of us, OK, we have to have the knowledge, but at least if someone can be responsible for that … we do get training, but support - not much. Because I think the management also know. They always get the statistics. They know … about the head count, you know. But what are they seeing?*

The nurse in this clinic was very aware of the need to keep up to date: *because you must upgrade yourself and have the necessary knowledge - new knowledge and to learn - you forget something on the way.*

Nurse, manager or practitioner?

Nurses in the primary care settings are very aware of their multiple roles and responsibilities, and this is a source of frustration and tension. This participant expressed the deep conflict that she experiences in her day to day working responsibilities: *… you will always be a nurse. And the nursing part is always good, but you know, like you said, it is difficult, because you are, it's a lot of paper work if you just go out of your room and you come five minutes back, it's a lot of paper and it's work - it's not papers, it's work … it's just a , it's like a war - a paper war that you've got, but you, it's less attention to the patients - that is the most important thing that you have to do. So just rush through the patients and I can tell you the chronics … they must not complain - there's no time for complaints. Must just give the medicine and they must go out. That's how you feel - please don't complain, because there's no time. There's forty other people wanting to be attend to and that is not the way we really want it to be, but it is a shortage of staff …*

There are enormous challenges for nurses in primary care – and guidelines cannot solve most of them. This participant continues: *… I don't know - how can they make it better for the nurses, because shortage of staff is the most important thing that they can attend to and you know, that affects a lot of things in a person - your morale is not the same. You're demoralized and you burn out and if there's enough staff then we can see to all that type of thing and the morale problem can also be better, because then we can give some more time for each other, time for the clients, time for in-service training. Now we must just rush everything through and it is not good. Not good for the morale.*

Concluding comments

The nurse in the primary care setting works within an environment of people who need her expertise and care, as she is the first point of contact. Despite being a diagnostician and manager, she is also a carer. She copes with layered stress – organisational, contextual and individual. Her patients are the people for whom she stays, yet this in itself creates an anxiety and inner conflict. If she is not there – who will be?

Anxiety, whether conscious or unconscious, is part of the daily fabric of the life of the primary care nurse. She cares about her patients, has to deal with the stresses of an overburdened service as best she can, meet the demands of her patients, colleagues and managers, whether reasonable or not. The nurse has little control over her workload, as from day to day the patient numbers and patient acuity will differ. The anxiety cannot easily be verbalised, as there is an expectation that she will cope – failure to do so reflects badly on who she is, her capabilities and possible on the patient outcomes.

Guidelines are a tool which, while useful may also create further tensions. They provide guidance, if the patient's complaint fits into the standardised presentation of symptoms, but do not provide the emotional and structural support that will enable her to feel better about herself and her role as a primary care nurse practitioner. This will be explored further in the discussion chapter.

CHAPTER SEVEN

GUIDELINES FOR PRIMARY CARE IN THE FREE STATE PROVINCE: SUB-STUDY 2

In this chapter I provide: an overview and description of the guidelines available to nurses to assist them with management of patients at primary care level; a review of two selected guidelines in regular use by nurses in primary care facilities; and a description of the training programmes for PHC nurses with reference to specific training on guideline usage.

Introduction

Guidelines have been provided for health practitioners for a number of reasons, including risk management, keeping practitioners up to date with current practice, speedier translation and integration of best evidence (research) into accessible information and practice, standardisation of practice to provide a more cost effective and efficient health system and improving the quality of patient care. In short, guidelines or clinical protocols should promote the delivery of high quality evidenced based health care (Lawton & Parker, 1999; Shiffman, Michel, Essaihi, & Thornquist, 2004; Thomas, McColl, Cullum, Rousseau, & Soutter, 1999). Clinical practice guidelines are defined as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances", making explicit recommendations with a definite intent to influence the practice of clinicians (The AGREE Collaboration, 2001, p. 61). Guidelines need to take into consideration the resources of the health system in which they will be implemented (Raine, Sanderson, & Black, 2005).

Dissemination of guidelines for clinical practice is done passively or actively. Passive dissemination includes journal publication, postal or hand delivery. These methods have however, been shown to have little impact on changing physician behaviour and active dissemination strategies, including educational activities have a greater impact on behavioural change (Brand, et al., 2005; Eccles & Grimshaw, 2004; Thomas, et al., 1999). A detailed literature review and description of guideline development, construction and dissemination is provided in chapter three.

Primary health care is the key element for transformation of the health services in South Africa. In 2001, a set of norms and standards was published as the Primary Health Care Package for South Africa (Department of Health, 2001b). This comprehensive PHC package provides for the priority areas of health care at primary level (Department of Health, 2001a). These are listed as:

- Child health, in particular infectious disease;
- Sexually transmitted infections and AIDS;
- TB;
- Reproductive health: ante-natal; family planning and maternity;
- Mental health;
- Chronic diseases (hypertension, diabetes, asthma);
- Trauma and injuries;
- Disabilities.

Guidelines for use by primary care practitioners in the public service in South Africa originate mainly from the directorates of the Department of National Health, and certain guidelines are locally adapted in the provinces. An example of the provision of guidelines is that of the Directorate Chronic Diseases, Disabilities and Geriatrics. Objective 1 of the directorate is: "to provide clinical management guidelines, tools, strategies and policies which enhance quality management of such persons". This directorate lists eighteen guidelines pertaining to the management of chronic diseases, twelve pertaining to geriatrics and four with respect to disabilities at primary care level (Department of Health, n.d.).

What constitutes a good guideline?

A 'good guideline' is one that leads to improved patient outcome, and in addition needs to be scientifically valid, usable and reliable (Broughton & Rathbone, 2003; The AGREE Collaboration, 2003). Transfer of research findings into practice is at best unpredictable and can be a slow and haphazard process (Eccles, Grimshaw, Walker, Johnston, & Pitts, 2005). Concern has been raised in the literature about the inconsistency of guidelines for specific diseases and the lack of systematic and rigorous development and validation of such guidelines (Cluzeau, Littlejohns, Grimshaw, Feder, & Moran, 1999). The AGREE collaboration have specified criteria for high quality clinical practice guidelines under six domains (Table 7.1).

Table 7.1 Criteria for high quality clinical practice guidelines (The AGREE Collaboration, 2003, p. 22)

	Criteria for high quality clinical practice guidelines
1	*Scope and purpose* Contain a specific statement about the overall objective(s), clinical questions, and describes the target population.
2	*Stakeholder involvement* Provide information about the composition, discipline, and relevant expertise of the guideline development group and involve patients in their development. They also clearly define the target users and have been piloted prior to publication.
3	*Rigour of development* Provide detailed information on the search strategy, the inclusion and exclusion criteria for selecting the evidence, and the methods used to formulate the recommendations. The recommendations are explicitly linked to the supporting evidence and there is a discussion of the health benefits, side effects, and risks. They have been externally reviewed before publication and provide detailed information about the procedure for updating the guideline.
4	*Clarity and presentation* Contain specific recommendations on appropriate patient care and consider different possible options. The key recommendations are easily found. A summary document and patients' leaflets are provided.
5	*Applicability* Discuss the organisational changes and cost implications of applying the recommendations and present review criteria for monitoring the use of the guidelines.
6	*Editorial independence* Include an explicit statement that the views or interests of the funding body have not influenced the final recommendations. Members of the guideline group have declared possible conflicts of interest.

Criteria of high quality clinical practice

The AGREE collaboration protocol is used to evaluate the quality of guidelines, and is provided for contextual information. The focus of my document analysis is not to evaluate the quality or whether the information contained in the guidelines is best evidence, but merely to reflect the nature of guidelines available for nurses in the Free State Province.

The national Department of Health (DoH) provides health care consumers and health care providers with information in the form of fact sheets, guidelines, norms and standards. Current fact sheets available from the DoH website (http://www.doh.gov.za/docs/factsheets/index.html) include: severe acute respiratory syndrome (SARS), birth defects, immunisation, and polio. Guidelines provided by the Department of Health cover a wide range of issues and health conditions.

An example of the range of information is outlined in Table 7.2, reflecting the guidelines and other information pertaining to HIV and AIDS.

Table 7.2 Information for HIV management provided by Department of Health, South Africa

Information provided by Department of Health, South Africa with reference to HIV/AIDS
A National Human resources plan 2006
Guidelines for the management of HIV-infected children -2005
Monitoring and Evaluation of the Operational Plan for Comprehensive HIV and AIDS Care, management and Treatment for South Africa
Training Manual for Facilitators - April 2005
Training Manual for Participants - April 2005
National Antiretroviral Treatment Guidelines – 2004
Circular Minute on Prevention of Mother-to-Child Transmission of HIV - 16 April 2002

The policies and guidelines that have particular impact on the primary care clinical nurse practitioner are listed mainly under the section on prevention, control and treatment guidelines. These include: norms, standards, instructions, guidelines on research ethics, a manual for clinic supervisors, use of blood products, district health planning and reporting, gender policy guidelines, implementing of clinic supervision, oral health care as well as a number of miscellaneous documents relevant to health and health care. The Standard Treatment Guidelines and Essential Drugs List (commonly known by health practitioners as the EDL) for South Africa comprise three manuals: primary health care (2003 edition), paediatric hospital level (1998 edition) and the adult hospital level (1998 edition). A new EDL edition was published in the latter half of 2008 and is electronically accessible.

In addition to guidelines issued by the national Department of Health, provincial authorities may issue local adaptations or specific guidelines for a condition/disease with a high prevalence or of particular local health concern. Local adaptations enable provincial health authorities to respond within a shorter time frame and, based on local health data and on current best evidence, issue guidelines to address a specific health problem (Harrison, Légaré, Graham & Fervers, 2010).

Examples of these include locally adapted guidelines for the treatment of HIV positive pregnant women in the Western Cape.

Methodology: Document analysis of guidelines available to nurse practitioners at primary care facilities

To provide an indication of the plethora of guidelines available to nurses at the primary care level, guidelines available for use at primary care level were sourced from clinics, distribution centres or electronically.

Sourcing of guidelines

A variety of guidelines are available to nurse practitioners, in a variety of formats, ranging from A5 booklets to larger A4 book formats, some bound, some ring bound, some photocopied.

I requested that nurse practitioners in the clinics to which access was given provide me with copies of the guidelines which were available in each clinic, and if not available, CNPs were asked to indicate which guidelines they had knowledge of or used personally. Guidelines which were indicated as being used but were not available in the clinic, were sourced from the websites of the national Department of Health, provincial Departments of Health in the Western Cape and Free State, colleagues and other sources of information.

These were categorised as follows: general guidelines and policies, chronic disease management, elderly persons, non-communicable disease (cancers), disabilities, infectious and communicable diseases (including TB and HIV/AIDS); sexually transmitted infections and integrated guidelines. Provincially specific guidelines for the Western Cape were identified. This does not constitute an evaluation of the guideline as to quality, consistency, use of current evidence or acceptability. It aims to provide a comprehensive overview of the nature of guidelines to which nurses at primary care have access. From table 7.3 it can be seen that a wide variety of guidelines exist, not all of which are to be found in every primary care clinic. Guidelines are delivered to provincial centres from where they will be distributed to the clinics. The distribution appears to be erratic, however, and is not necessarily accompanied by formal announcements or relevant update sessions. What is evident is that, when new guidelines are issued, there is no plan in place to remove older versions. This may have the effect of different version of guidelines being available and used. Only regular updates of immunization schedules and protocols are evident, and these protocols are implemented with training or updates where necessary.

I developed a template for the document analysis based on the information drawn from the literature review, which I thought should be the minimum information available in all guidelines. As mentioned earlier in this chapter, this document review does not include the evaluation of quality.

Each guideline is described under the following sections in Table 7.3.

- Title of guideline
- Date of publication (the latest publication date has been sought). Not all guidelines were found to be dated, which makes it difficult to assess the current usefulness of the guideline.
- National/local applicability. Provinces have discretion to tailor health care provision to local needs without contradicting the national guidelines.
- Target population
- Target disease/condition
- Type of intervention. This includes prevention, diagnosis, referral pathways, acute and chronic management
- Length of document.
- Origin/publisher

- Inclusion of scientific references.
- Provision of information pertaining to stakeholders and other sources of evidence.

Where possible, the latest version of the guideline was accessed and last checked in October 2009. Electronic versions were taken from the Department of Health website pages and are listed, although it is evident that this page is not maintained with current version of the guidelines. An example of this is the SA hypertension guidelines. The 1998 primary care version is on the Department of Health website, where as the South African Medical Journal published updated hypertension guidelines in 2006.

Table 7.3 **Description of guidelines available for use by nurses in primary care facilities**

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
CHRONIC DISEASE MANAGEMENT									
Primary prevention of **chronic diseases of lifestyle** [CDL]	Not given	National	Adults and older persons	Cancer, circulatory disease, mental disorders, chronic respiratory conditions and musculoskeletal disease Obesity	Prevention and identification of modifiable risk factors	20	**Department of Health**	No	Department of Health, national and provincial offices Universities National Heart Foundation Department of Welfare and Population Development Department of Education Cancer Association of South Africa South African Diabetes Association National Council against Smoking Medical Research Council The South African Medical Association
National programme for control and management of **Diabetes type II** at primary level	April 1998	National	Adults and older persons	Diabetes type II	Diagnosis, Prevention, detection and management of complications, education, pregnancy planning, referral, monitoring	26	**Department of Health**	No	Department of Health, national and provincial offices Diabetes Working and Consensus Groups Society for Endocrinology, Metabolism and Diabetes of SA Diabetic patients Universities Medical Association of SA Nursing Colleges SA Diabetes Association
Long term **domiciliary oxygen therapy** (LTDOT)	March 2001	National	Adults and older persons	Chronic Obstructive Pulmonary disease [COPD]	Assessment, management, support and care		**Department of Health**	No	Department of Health, national and provincial offices
Prevention and management of **overweight** and **obesity** in SA	These guideline are listed as being available but I was not able to source these either in hard copy or electronically.								
Management of **asthma** in adults at primary level	December 2002	National	Adults with asthma	Chronic asthma	Recognition and diagnosis Prevention, detection and management of complications		**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	National Department of Health colleagues Provincial health authorities National asthma education programme South Africa Pulmonology Society Universities and tertiary institutions
National guideline on **stroke** and **transient ischaemic** attack management	November 2001	National guideline	Adults and older persons	Stroke and ischaemic heart disease	Prevention, early diagnosis, management, prevention of secondary complications, effective resource utilisation		**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	Department of Health: national and provincial offices Universities and tertiary institutions The Stroke Foundation of South Africa

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
Hypertension National programme for control and management at primary level	April 1998	National	Adults and older persons	Hypertension and associated complications/ conditions	Primary prevention of high blood pressure Rational cost-effective comprehensive management of hypertension Secondary prevention by reducing cardiovascular disease, cerebrovascular diseases, renal and retinal damage associated with hypertension	16	**Department of Health**	No	Hypertension Society of SA Medical Research Council Departmental colleagues Primary Essential Drug List (EDL) Committee Universities Hypertensive patients Medical Association of SA Provincial authorities
Hypertension guidelines 2003 update	2003 update	National	Adults and older persons	Hypertension and associated complications/ conditions			**Department of Health**	No	
Management of **menopause**. Health promotive measures at primary level	March 2004	National guideline	Women	Menopause	Prevention, early management, referral		**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	Provincial Health Departments Universities SA Menopause Society SA Society of Obstetricians and Gynaecologists
Early detection and management of **arthritis** in adults at primary level	March 2004	National guideline	Adults	Arthritis		16	**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	The SA Rheumatism and Arthritis Association Provincial Health Departments Bone and joint Decade committee Colleagues: Department of Health
National guideline on osteoporosis: national guideline on management of **osteoporosis** at hospital level; preventive measures at primary level	December 2001	National guideline	Adults	Osteoporosis			**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
ELDERLY PERSONS									
Refractive errors screening persons 60 years and older		National guideline	Older persons ≥ 60 years					No	
National guideline on prevention, early detection/ identification and intervention of **physical abuse** of older persons at primary level	March 2000	National	Older persons ≥ 60 years	Physical abuse			Government Communication and Information System (GCIS) on behalf of the **Department of Health**	No	Department of Health, national and provincial offices Universities and tertiary institutions NGOs Human Sciences Research Council Medical Research Council SA Medical Association
Clinical management of **psychogeriatrics** at hospital level	March 2004	National	Older persons ≥ 60 years with socio-psychiatric disorders	Psycho-social conditions, including dementia, depression, anxiety	Identification, diagnosis, care, therapeutic intervention	40	**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	Yes – for assessment scales	Universities of Stellenbosch and Cape Town Provincial Health Departments Colleagues, Department of Health
National guidelines on **foot health** at primary level	March 2000	National	Children and mothers [education] Persons with muscular disease Older persons ≥ 60 years	High risk – person with diabetes, peripheral vascular diseases Persons using anti-coagulants People who walk barefoot	Screening, prevention Treatment and referral	14	Government Communication and Information System (GCIS) on behalf of the **Department of Health**	Yes – for foot exercises	Department of Health, national and provincial offices Universities and tertiary institutions The Diabetic Association of SA Andrew Clarke and other individual podiatrists
National guidelines on prevention of **falls** of older persons	March 2000	National	Older persons ≥ 60 years	Falls	Prevention	17	Government Communication and Information System (GCIS) on behalf of the **Department of Health**	No	Department of Health, national and provincial offices Universities and tertiary institutions NGOs Human Sciences Research Council
Guideline for the promotion of **active aging** in older adults at primary level	June 2000	? National	Older persons ≥ 60 years		Preventive and promotive	25	Government Communication and Information System (GCIS) on behalf of the **Department of Health**	No	Department of Health, national and provincial offices Universities and tertiary institutions NGOs Department of Sport and Recreation Bioenergetics of Exercise unit
National guideline on prevention, early detection/identification and intervention of **physical abuse of older persons** at primary level	2000	National	Older persons ≥ 60 years	Abuse of the elderly – all types	Broad-based prevention, promotion of rights and well being	22	**Department of Health**	No	Department of Health, national and provincial offices Universities and tertiary institutions NGOs Human Sciences Research Council SA Medical Association

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
CANCERS									
Testing for **prostrate cancer** at primary level and hospital level	October 2003	National	Adult male	Prostate cancer	Early detection and referral		**Department of Health** Directorate: Chronic Diseases, Disabilities and Geriatrics	No	No information available
Cervical Cancer Screening Programme	No date 2003 website	National	Adult female	Cervical cancer	Early detection and referral	12	**Department of Health**	No	Department of Health, national and provincial offices The South African Institute for Medical Research Women's Health Project Cancer Association of South Africa National Institute for Virology Medical Schools
Information on **female breast cancer** for primary level health care providers http://www.doh.gov.za/docs/publication/breastcancer/index.html	July 2002	National	Female adult	Breast Cancer	Early detection and referral	On line only	**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	Not listed
DISABILITY									
Recommended minimum criteria to improve **access** to health care facilities for **disabled people**	January 2002	? National	All disabled persons	Barriers to access in health care facilities	Promotion of accessibility		**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	None listed
Guidelines for **cataract surgery** in South Africa	January 2001	National	Persons at risk of impaired vision and blindness	Cataracts of the eye	At primary level: Provision of information, marketing of cataract surgery Recognition and diagnosis of cataracts Referral for surgery	16	**Department of Health**	No	Department of Health, national and provincial offices Bureau for Prevention of Blindness Christoffel Blinden Mission Ophthalmological Society of SA Departments of Ophthalmology St John's Eye Hospital

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
Management and control of **eye conditions** at primary level	No date	National	Adults and children with common eye diseases and conditions	Xerophthalmia Bacterial and viral eye infections Trachoma Ophthalmia neonatorum Occupational hazards and trauma Chronic diseases - risk factors [e.g. diabetes]	Prevention, management and referral	24	**Department of Health**	No	Department of Health, national and provincial offices Departments of Ophthalmology Bureau for Prevention of Blindness Ophthalmological Society of SA SA Optometric Association St John's Eye Hospital Pretoria Eye Institute
Prevention of **blindness** in South Africa	December 2002	National guideline	Adults Older persons Children	Cataract [treated in separate guideline] Glaucoma Diabetes Refractive errors Low vision Conditions of childhood	Preventive Early detect ion of conditions which cause blindness	18	**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	Departments of Ophthalmology Bureau for Prevention of Blindness Christoffel Blinden Mission Lions Club International Ophthalmological Society of SA Private Eye Care Institutions and ophthalmologists SA Optometric Association The Order of St John International Centre for Eye Health, Institute of Ophthalmology, London
GENERAL GUIDELINES AND POLICIES									
Standard Treatment guidelines and Essential Drugs List for South Africa [Primary Health Care]	2003 [3rd edition]	National	Adults; older persons, children	Common diseases and conditions seen at primary care level	Diagnosis and treatment	366	**National Department of Health**. Directorate: Pharmaceutical Programmes and Planning	No	National Essential Drugs List Committee [names listed] BW van der Waal – co-ordinator of PHC expert review committee Expert review committee Cluster Manager: Pharmaceutical Policy and Planning Manager: Access to affordable medicine
Standard Treatment guidelines and Essential Drugs List for South Africa [Primary Health Care]	2008 edition (electronic)	National	Adults; older persons, children	Common diseases and conditions seen at primary care level	Diagnosis and treatment	407	**National Department of Health**. Directorate: Pharmaceutical Programmes and Planning	No	Information not available – electronic link broken

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
The Nine Step Guide to **Implementing Clinic Supervision**	April 2005	National	Health care managers			36	Health Systems Trust		Davids S, Loveday M. The nine step guide to implementing clinic supervision. Durban: Health Systems Trust; 2005.
Human genetics policy guidelines for the management and prevention of **genetic disorders, birth defects and disabilities**	2001 (on website only)	National	Affected individuals or those with a family history of a genetic disorder or birth defect Person at high risk	All genetic disorders	Prevention, diagnosis counselling, support, treatment and referral; to facilitate the integration of genetic services into the comprehensive Primary Health Care package, focussing on patient care and primary prevention	66	**National Department of Health**, Subdirectorate: Human Genetics	Yes	Human Genetics Task Team [representatives from all 9 provinces] WHO Temporary Advisory to the National Department of Health
National **Drug Policy** for South Africa	1996	National	All persons	Effective and efficient use of drugs		28	**National Department of Health**.	No	National Drug Policy Committee World Health Organisation's Action Programme on essential drugs
National guideline on **home based care/ community based care**	December 2001	National	Effective care of persons at home by formal and informal caregivers	Primarily persons with HIV/AIDS	preventive, promotive, therapeutic, rehabilitative, long-term maintenance and palliative care Needs assessment Integrated management and referral service organisation Training and development of community personnel and professional /technical support personnel. Integration into the district health system (decentralisation).	38	**Department of Health**. Directorate: Chronic Diseases, Disabilities and Geriatrics	No	National and Provincial colleagues within the Department of Health Universities and tertiary institutions Non-governmental Organisations (NGOs)

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
National **Rehabilitation** Policy	November 2000	National	Persons with disabilities Persons with conditions that can lead to disability	Persons with disabilities Persons with conditions that can lead to disability	Prevention of impairments and handicap Identification and diagnosis of impairments and disabilities Rehabilitation Monitoring and evaluation of policy		**Department of Health**	No	Department of Welfare Department of Education Department of Labour Provincial Health Departments Office on the Status of Disabled Persons Occupational Therapy Association of SA SA Society for Physiotherapists SA Speech-Language–Hearing Association Disabled People SA National Council for Persons with Physical Disabilities in SA Deaf Federation of SA National Council for the Blind Hospital Association of SA Physical Rehab Libertas Hospital
INFECTIOUS AND COMMUNICABLE DISEASES									
Guidelines for the treatment of **Malaria** in South Africa	2009	National	Adults and children at risk, including pregnant women	Malaria	Diagnosis and treatment	48	**National Department of Health**	Yes	Individuals listed
Guidelines for the prevention of **Malaria** in South Africa	May 2003 [on website only]	National	Adults and children at risk	Malaria	Prevention Emergency treatment	44	**National Department of Health**	Yes	Sub-Committee for Chemoprophylaxis and Therapy (SCAT) of the Malaria Advisory Group University of Cape Town Medicines Information Centre
The South African **Tuberculosis** Control Programme Practical guidelines	2004	National	Adults, children and contacts of persons with TB	Tuberculosis	Preventive, diagnostic, monitoring, treatment	47	**Department of Health** **National tuberculosis control Programme**	No	Individuals listed
The South African **Tuberculosis** Control Programme Practical guidelines	2008	National	Adults, children and contacts of persons with TB	Tuberculosis – all forms, including MDR	Preventive, diagnostic, monitoring, treatment	114	**Department of Health** **National tuberculosis control Programme**	Yes	None listed

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
Rabies: Guide for the medical, veterinary and allied professions	2003 [second print]	National	Adults, children	Rabies	Preventive, diagnostic, monitoring, treatment	82	Department of Agriculture and Department of Health	Yes	G.C. Bishop D.N. Durrheim P.E. Kloeck J.D. Godlonton J. Bingham R. Speare Rabies Advisory Group
Guideline for **Leprosy** Control in South Africa	2008	National		Leprosy	Early diagnosis, treatment, management, prevention of disability	6	Department of health: communicable disease cluster	No	No
INTEGRATED GUIDELINES									
PALSA Plus Practical Approach to **Lung Health and HIV & AIDS** in South Africa	2006 edition	Provincial [Western Cape and Free State]	Adults attending primary health care facilities	Adults with respiratory disease, sexually transmitted infections and HIV/ AIDS	Diagnostic, treatment and referral	50	Knowledge Translation Unit, University of Cape Town Lung Institute / Provincial Departments of Health	No	All contributors Medicines Information Centre
PROVINCIAL GUIDELINES [WESTERN CAPE]									
Guide to diagnosis and management of **asthma**	Not stated	Provincial/ local	Children	Asthma	Diagnosis and management	3	Provincial Government of Western Cape (MCWH): Provincial Reference Group	No	Contributors from Provincial Government Western Cape Metro Health Department, PGWC: Overberg Region; Southern Cape; West Coast University of the Western Cape University of Cape Town Community Health Services Organisation Cape Town City Council
Integrated Management Guidelines: **Child Abuse**	August 2003	Provincial/ local	Children 0-14 years	All forms of child abuse	Identification, investigations, management and referral	19	Provincial Government of Western Cape (MCWH): Provincial Reference Group	No	Cape Metropolitan Council, Cape Town City Council, PAWC: MCWH, Child Health Unit, University of Cape Town: Red Cross Hospital, Karl Bremer Hospital, University of Western Cape South African Police Services and Tygerberg Hospital.

Title of guideline	Date of publication	National/ Local applicability	Target population	Target disease/ condition	Type of intervention [preventive, promotive, diagnostic etc]	No. of Pages	Origin [published by]	Scientific references included	Stakeholders and involvement in the provision of information/ development of guideline [nature/quality of evidence]
Integrated Case Management Guidelines: **Meningitis**	1999	Provincial/ local	Children	Meningitis	Diagnosis, management, referral	4	Provincial Government of Western Cape (MCWH): Provincial Reference Group	No	Cape Metropolitan Council Cape Town City Council Provincial Government of the Western Cape Child Health Unit, UCT Red Cross Hospital
Integrated Case Management Guidelines: **the Critically Ill Child**	1999	Provincial/ local	Children	Critically Ill Child	Recognition, diagnosis, emergency management and referral	9	Provincial Government of Western Cape (MCWH): Provincial Reference Group		Cape Metropolitan Council Cape Town City Council Provincial Government of the Western Cape Child Health Unit, UCT Red Cross Hospital
Prevention of **Mother to Child** **Transmission of HIV** [full protocol]	March 2002	Provincial/ local	Pregnant women	Women who are HIV positive and pregnant, or who are pregnant and may be HIV +	Preventive, diagnosis and management	69	HIV/AIDS Directorate Department of Health, Provincial government of the Western Cape	No	MTCT sites in Khayelitsha Department of Public Health, University of Cape Town NGOs Clinicians and staff in health facilities
Summary **MTCT** Protocol	March 2002	Provincial/ local	Pregnant women	Women who are HIV positive and pregnant, or who are pregnant and may be HIV +	Preventive, diagnosis and management	15	HIV/AIDS Directorate Department of Health, Provincial government of the Western Cape	No	MTCT sites in Khayelitsha Department of Public Health, University of Cape Town NGOs Clinicians and staff in health facilities

Review of selected guidelines

Two guidelines were selected for in-depth review.

- Guideline I: **The South African National Tuberculosis Guidelines**. The current version (released in 2009) is the 2008 version. As document analysis was conducted on the earlier edition, the 2004 guidelines are reflected in this review.
- Guideline II: **The Practical Approach to Lung Health in South Africa (PALSA) and PALSA PLUS** guidelines.

The selection of the two guidelines for analysis is based on the current context of chronic respiratory conditions/disease in South Africa, and in particular TB, which is endemic in the Western Cape province and high burden of disease in the Free State (2008: new cases : 21,111; retreatment cases: 4300), and a condition seen by all primary care health practitioners. As TB is linked to HIV in South Africa, and the co-infection rate is estimated as 73% (World Health Organization, 2009), both guidelines include aspects of HIV management in the guidelines. I specifically opted to review the TB and PALSA PLUS guidelines as the PALSA PLUS study initially targeted respiratory conditions (PALSA), only later incorporating HIV. The TB guidelines evolved in a similar manner, initially focusing only on TB and subsequently having included aspects of HIV. There are a number of guidelines dealing with HIV, TB/HIV and ART. The management of HIV was initially at physician level only. It is only since approximately 2007 that nurses have become more involved in the routine management of persons with HIV, and prescribing for persons with HIV was limited to trials and ART speciality nurses. The co-infection rate of TB/HIV however, has made it imperative that these diseases not be seen in isolation. Integrated management has become critical to the achievement of a reduction in new infections and in improved quality of life.

The South African National Tuberculosis Guidelines

Background to the management of TB in primary care settings in South Africa

The global increase in lung diseases, especially tuberculosis, is a concern to the international community. Nowhere is that increase more evident and the problem more pressing than in sub-Saharan Africa where the impact of the HIV epidemic has been greatest. South Africa is one of 22 high burden countries that contribute approximately 80% of the total global burden of all TB cases, and has the seventh highest TB incidence in the world (Department of Health South Africa, 2007), although it ranks fourth in the world in terms of absolute numbers (World Health Organization, 2008). Fairall, Donald, English, Zwarenstein and Scherpier (2001) reported that 28% of patients presenting to primary care facilities have respiratory symptoms, which may be undifferentiable to the PHC nurse practitioner; such patients' symptoms may not be accurately diagnosed, resulting in the issuing of a sick certificate or inappropriate antibiotic prescription, failure to detect and refer emergencies, or to diagnose life threatening and infectious diseases like pneumonia and TB.

Tuberculosis is one of the oldest diseases known to humankind (Glatthaar, 1978) and has left its mark on all spheres of life – including the arts, biomedical sciences and health care (Leão & Portaels, 2007). TB was South Africa's biggest communicable disease health problem prior to the emergence of HIV and has been endemic in many parts of sub-Saharan Africa for decades (Coetzee, Hilderbrand, Goemaere, Matthys, & Boelaert, 2004). It was declared a global emergency by WHO in 1993, and a priority disease in South Africa in 1996, yet continues to be responsible for 25% of preventable deaths in the developing world (Redelinghuys & Van Rensburg, 2004).

One of the major problems in TB treatment is that it occurs in contexts of limited resources, high caseloads, understaffing, high staff rotation and turnover, task orientated care and limited privacy. This serves to inhibit effective health care (Dick, Lewin, Rose, Zwarenstein, & Van der Walt, 2004). Immune deficiency increases the risk of developing active TB disease. HIV increases TB incidence as it reactivates latent infection, allows the infection to progress rapidly, and diagnosis of TB in persons with HIV may be more difficult (Evian, 2000; Hausler, et al., 2006; Wilson, 2005). In 2007, almost 40% of notified TB patients were tested for HIV, and 35% and 67% of HIV-positive TB patients were provided with ART and CPT (co-trimoxazole prophylaxis treatment) respectively (World Health Organization, 2009, p. 145).

The drug treatment of tuberculosis was initiated with the advent of streptomycin in 1944, followed by isoniazid (1952), pyrazinamide (1954), ethambutol (1962) and rifampicin in 1963 (da Silva & Aínsa, 2007; Department of Health and Human Services Centers for Disease Control and Prevention, 2001). Drug treatment, although effective when taken by the patient on a regular basis for the prescribed period (usually 6 months) was hampered by an inadequate national TB control programme, lack of coherent national policy, information systems (the first South African tuberculosis register was introduced only in 1995), laboratory services, among others (Edginton, 2000). Since the emergence of HIV, the management of TB has been further compromised due to the complications of co-infection, which include difficulty in initial diagnosis, and the need for careful initiation and management of treatment for the person who is HIV positive. South Africa, although representing only 0.7% of the world's population, has 28% of the global number of HIV positive TB cases (Stop TB Partnership, 2008). In 2008, the South African TB incidence rates were reported as 940 per 100,000 population. The challenges faced by the health services are growing caseloads in the face of an over-burdened health infrastructure, extremely poor cure rates in some provinces, high mortality and treatment interruption rates, high levels of TB-HIV co-infection, increased levels of multi-drug resistant TB (MDR-TB) (World Health Organization, 2009) and the emergence of extensively drug resistant TB (XDR-TB) (Department of Health, 2008).

The WHO TB management strategy of Directly Observed Therapy Short course (DOTS) has five key elements: i) political commitment with increased and sustained financing; ii) case detection through quality-assured bacteriology; iii) standardized treatment with supervision and patient support; iv) an effective drug supply and management system; v) monitoring and evaluation system, and impact measurement (Stop TB Partnership, 2008).

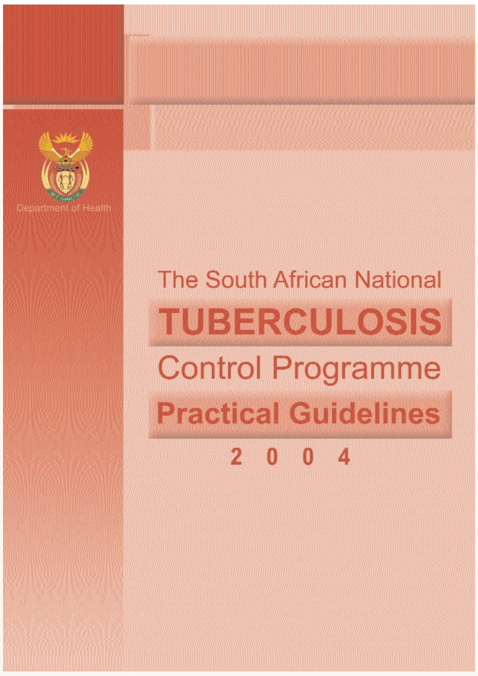
The targets for TB control in South Africa are:

- To cure 85% of newly detected cases of sputum smear-positive TB;
- To detect 70% of TB cases
- To reduce interruption rates to less than 5% (Department of Health, 2008)

Guidelines for the treatment of tuberculosis were first published by the Department of Health in 2000: The South African Tuberculosis Control Programme - Practical Guidelines. Nurses in primary care clinics are familiar with the South African National Tuberculosis guidelines. The current edition is 2008. Short course multi-drug pharmacotherapy has been the treatment of choice for the management of TB in South Africa. The standard treatment regimen for new cases is regimen 1, which comprise an intensive phase of two months, and a continuation phase of four months. "Treatment with 4 drugs (isoniazid, rifampicin, pyrazinamide, and ethambutol) in the intensive phase results in rapid killing of tubercle bacilli. Infectious clients become non-infectious within approximately 2 weeks. Symptoms abate. The vast majority of clients with sputum smear-positive TB become smear-negative within 2 months. In the continuation phase, 2 drugs (isoniazid, rifampicin) are used, but for a longer period of time" (Department of Health, 2008, p. 35).

Table 7.4 provides an example of the title page of the TB guidelines, and page 14, in which the signs and symptoms of TB are listed. Figure 7.1 has an example of the algorithm for diagnosis of a new case taken from the 2008 TB guidelines. Table 7.5 outlines the features of the South African National Tuberculosis Guidelines.

Table 7.4 The South African National Tuberculosis Control Programme Practical Guidelines (2004 edition)[10]



Department of Health

The South African National
TUBERCULOSIS
Control Programme
Practical Guidelines
2004

Page 14 of the guidelines

Diagnosis Of TB

4.1 Symptoms and signs of TB

The most common symptoms of pulmonary tuberculosis are:

- persistent cough for more than 2 weeks; every patient who is presented to a health facility with this symptom should be regarded as a "tuberculosis suspect",
- sputum production which may be blood-stained,
- shortness of breath and chest pain,
- loss of appetite and loss of weight,
- a general feeling of illness (malaise),
- tiredness and loss of motivation, and
- night sweats and fever.

A patient showing these symptoms who is, or was, in contact with a person with infectious tuberculosis is more likely to be suffering from tuberculosis. Symptoms of extra-pulmonary tuberculosis depend on the organ involved. Chest pain from tuberculosis pleurisy, enlarged lymph nodes and sharp angular deformity of the spine are the most frequent signs of extra-pulmonary tuberculosis.

4.2 How is Diagnosis of Tuberculosis Confirmed?

In all instances, individuals identified as tuberculosis patients must have an examination of their sputum performed to determine whether or not they are infectious cases of tuberculosis, prior to the commencement of their treatment. The examination consists of microscopic examination of the sputum specimen (smear microscopy).

Smears may be prepared directly from clinical specimens or from concentrated preparations. The acid fast staining procedure depends on the ability of mycobacteria to retain dye when treated with mineral acid or an acid alcohol solution. Two procedures are commonly used for acid fast staining: the carbofuschin methods, which include the Ziel-Neelsen and Kinyoun methods, and a fluorochrome procedure using auramine-O or auramine-rhodamine dyes.

If micro-organisms (commonly referred to as acid-fast bacilli, or AFB) are detected by this method then the patient is said to have smear positive tuberculosis. It is important to carry out smear microscopy because it correctly and efficiently identifies the cases that are infectious and therefore have the highest priority for care.

4.2.1 Sputum collection, labeling, storage and transport

At least two sputum specimens should be taken from a TB suspect:

- **First specimen:** At the first interview with the patient a "spot specimen" is collected. This specimen is obtained immediately after the patient undergoes a bout of coughing and the back of the throat is cleared. This should always be undertaken with the supervision of a health worker.
- **Second specimen:** The patient is then given a sputum container for the collection of an early morning specimen, usually the following day.

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[10] Note: The 2008 version of the guidelines was not available in print format at the time of writing, and no title page was available

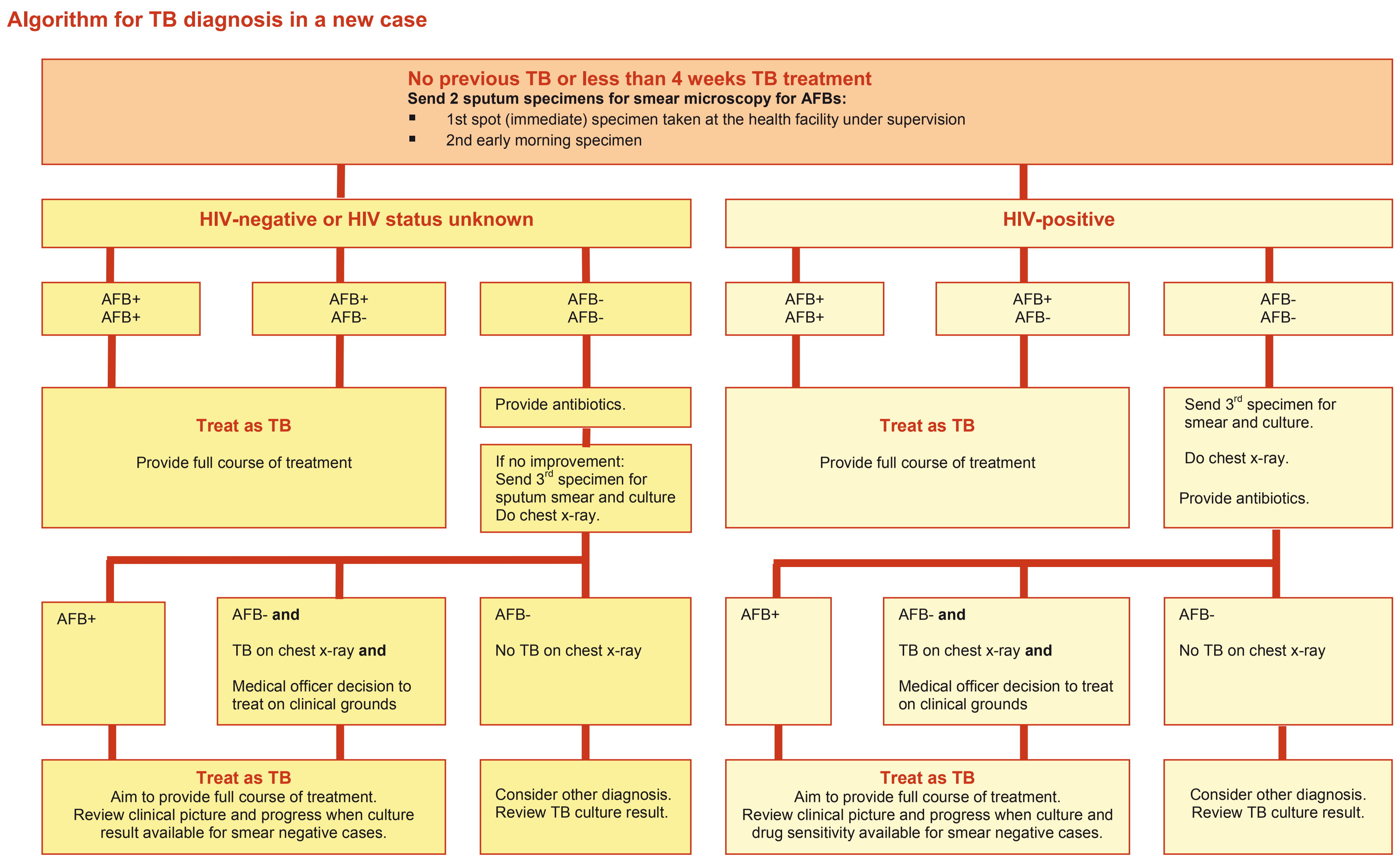


Figure 7.1 Algorithm for TB diagnosis in a new case (Department of Health, 2008, p. 23)

Table 7.5 Features of the South African National Tuberculosis Guidelines

Features of the South African National Tuberculosis Guidelines	
Title of guideline	South African National Tuberculosis Control Programme Practical Guidelines
Date of publication (the latest publication date has been sought)	2008
National/local applicability	National
Target population (who should use the guidelines?)	All clinical staff at primary care level (nurses, nurse practitioners, primary care doctors, pharmacists.
Target disease/condition(s)	Tuberculosis [all forms]
Type of intervention. This includes prevention, diagnosis, referral pathways, acute and chronic management	Prevention, diagnosis, referral pathways, acute and chronic management
Format of document	A4 book format, printed on standard paper and staple bound
Origin/publisher	National Department of Health
Inclusion of scientific references	No
Provision of information pertaining to stakeholders and other sources of evidence	Acknowledgement to persons who have been involved in the compilation of the guidelines
Specific features of the guideline	Two colour format, used for algorithms and highlighting specific issues
Updating of guideline	Every four years (2000; 2004; 2008), but amendments are distributed as necessary

The PALSA PLUS logo, depicting lungs in the background and the HIV red ribbon

The Practical Approach to Lung Health in South Africa (PALSA/PALSA PLUS) guidelines

The PALSA guidelines were developed as part of a pragmatic randomised control trial to assess the care by nurse practitioners of persons with respiratory disease (upper and lower respiratory chest symptoms/infections, asthma, chronic obstructive airways disease, TB) at primary level in the Free State Province. Although nurses had been using a variety of guidelines in their practice, the clinical outcomes were considered unsatisfactory, and the PALSA guidelines were developed, based on the national guidelines for the specific disease conditions (Bheekie, et al., 2006; English, et al., 2006; Fairall, et al., 2005).

The PALSA study has involved: research into barriers hampering the use of guidelines, development of evidence-based guidelines, development of materials and training of nurse practitioners in the use of the guidelines. Master trainers were trained by the project team, and in turn trained the clinic nurses, using a process rather than content training approach, in which the nurse trainers use the materials to train using a personalised, rather than a traditional didactic approach. “This training strategy assumes that the clinician has little prior knowledge of the targeted diseases, and few or no diagnostic and therapeutic preferences. It assumes that any gap between ideal and actual practice is remediable by making available structured, clinical information and by providing intensive, highly supervised clinical exposure and training" (PALSA project summary, 2002).

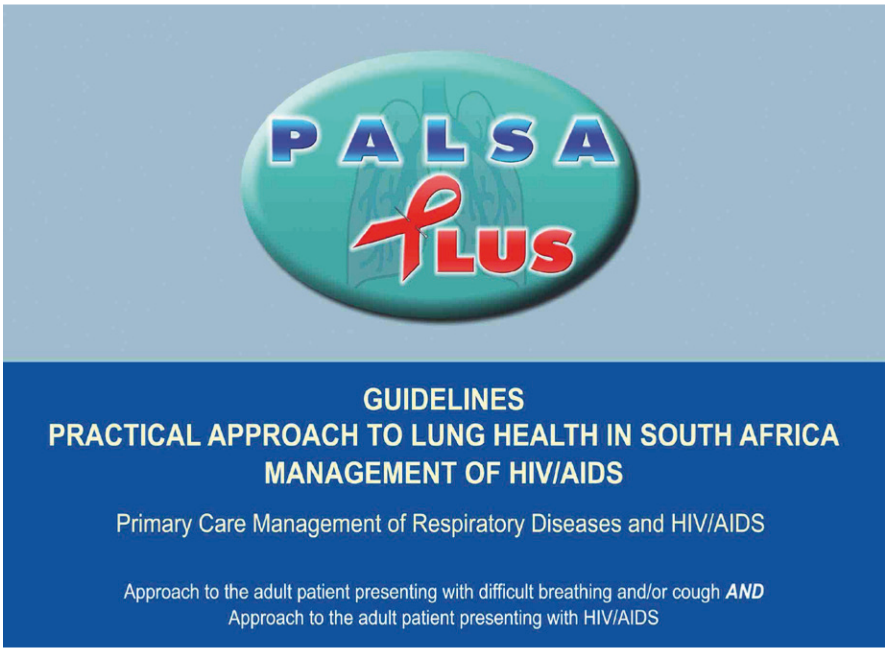
This programme, the impact of the guidelines, training and implementation has been evaluated using quantitative and qualitative methods: a pragmatic randomised trial evaluated impact of the intervention in 40 primary health care clinics in the Free State (20 intervention and 20 control clinics) (Fairall, et al., 2005) and a qualitative study evaluated the training programme and implementation thereof by nurse trainers as well as the nurses' response to the implementation of the PALSA guidelines.

Subsequent to the announcement of the antiretroviral drugs programme in 2003, the PALSA research team was requested to expand the guidelines for the Free State Province in order to incorporate treatment and management guidelines for the care of persons with HIV. This was done in 2004, and renamed PALSA PLUS. It was evaluated in a similar manner to that of the PALSA trial (Booysen, Van Rensburg, Bachmann, Louwagie, & Fairall, 2007; Louwagie, et al., 2007; Stein, Lewin, & Fairall, 2007; Zwarenstein, et al., in review). Subsequent to this the PALSA Plus guidelines has been updated to reflect the current practice/policies every year, and adapted for use specifically in the provinces which are currently using the guidelines (Western Cape and Free State).

The PALSA PLUS guidelines and TB

The diagnosis and management of TB is an essential intervention at all primary care clinics, and it was therefore essential that the PALSA PLUS guideline not only be congruent with the South African national TB guidelines, but promotes the diagnosis and management of TB integrated with HIV/AIDS management. The challenge for the guideline developers was to ensure that the context was evidence-based, up to date, and consistent with all relevant national guidelines as well as being attractive, user-friendly and acceptable to nurses (English, et al., 2006; English, et al., 2008) in primary care. Buy-in from key policy makers and managers in the Free State Department of Health was critical to the success of implementation.

The design of the guideline facilitates easy use. It is ring-bound, folds flat, printed on high quality paper with laminated finish for protection. Examples of the front cover, TB algorithm and pages indicating management of specific symptoms management of patients are provided in figures 7.2 – 7.5. Features of PALSA PLUS are outlined in Table 7.6.



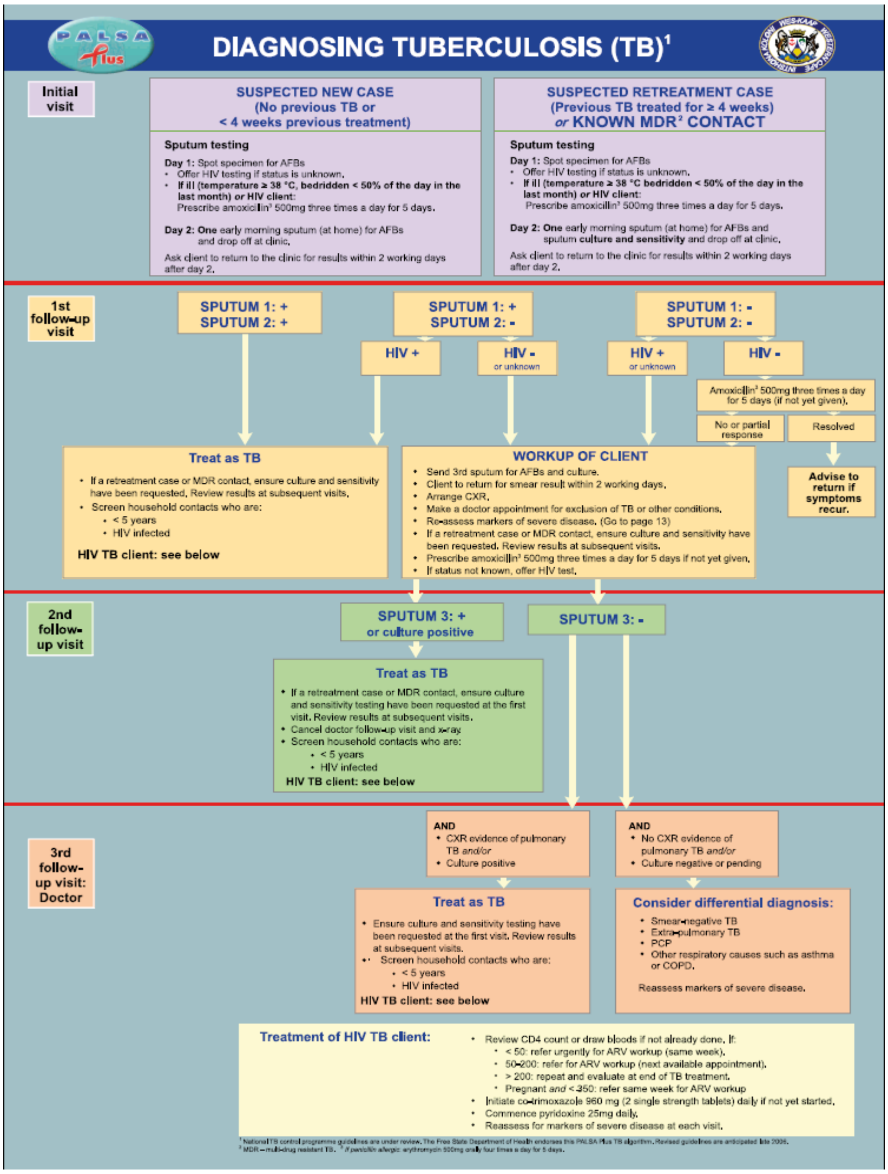
GUIDELINES
PRACTICAL APPROACH TO LUNG HEALTH IN SOUTH AFRICA
MANAGEMENT OF HIV/AIDS

Primary Care Management of Respiratory Diseases and HIV/AIDS

Approach to the adult patient presenting with difficult breathing and/or cough ***AND***
Approach to the adult patient presenting with HIV/AIDS

Figure 7.2

The PALSA PLUS guideline cover page: a symptom and sign based guideline for HIV/AIDS, STIs, TB and respiratory disease



DIAGNOSING TUBERCULOSIS (TB)[1]

Initial visit

SUSPECTED NEW CASE
(No previous TB or
< 4 weeks previous treatment)

Sputum testing

Day 1: Spot specimen for AFBs
- Offer HIV testing if status is unknown.
- **If ill (temperature ≥ 38 °C, bedridden < 50% of the day in the last month) *or* HIV client:**
  Prescribe amoxicillin[3] 500mg three times a day for 5 days.

Day 2: One early morning sputum (at home) for AFBs and drop off at clinic.

Ask client to return to the clinic for results within 2 working days after day 2.

SUSPECTED RETREATMENT CASE
(Previous TB treated for ≥ 4 weeks)
***or* KNOWN MDR[2] CONTACT**

Sputum testing

Day 1: Spot specimen for AFBs
- Offer HIV testing if status is unknown.
- **If ill (temperature ≥ 38 °C bedridden < 50% of the day in the last month) *or* HIV client:**
  Prescribe amoxicillin[3] 500mg three times a day for 5 days.

Day 2: One early morning sputum (at home) for AFBs and sputum **culture and sensitivity** and drop off at clinic.

Ask client to return to the clinic for results within 2 working days after day 2.

1st follow-up visit

SPUTUM 1: +
SPUTUM 2: +

SPUTUM 1: +
SPUTUM 2: -

HIV +

HIV -
or unknown

SPUTUM 1: -
SPUTUM 2: -

HIV +
or unknown

HIV -

Amoxicillin[3] 500mg three times a day for 5 days (if not yet given).

No or partial response

Resolved

Advise to return if symptoms recur.

Treat as TB
- If a retreatment case or MDR contact, ensure culture and sensitivity have been requested. Review results at subsequent visits.
- Screen household contacts who are:
  - < 5 years
  - HIV infected

HIV TB client: see below

WORKUP OF CLIENT
- Send 3rd sputum for AFBs and culture.
- Client to return for smear result within 2 working days.
- Arrange CXR.
- Make a doctor appointment for exclusion of TB or other conditions.
- Re-assess markers of severe disease. (Go to page 13)
- If a retreatment case or MDR contact, ensure culture and sensitivity have been requested. Review results at subsequent visits.
- Prescribe amoxicillin[3] 500mg three times a day for 5 days if not yet given.
- If status not known, offer HIV test.

2nd follow-up visit

SPUTUM 3: +
or culture positive

SPUTUM 3: -

Treat as TB
- If a retreatment case or MDR contact, ensure culture and sensitivity testing have been requested at the first visit. Review results at subsequent visits.
- Cancel doctor follow-up visit and x-ray
- Screen household contacts who are:
  - < 5 years
  - HIV infected

HIV TB client: see below

3rd follow-up visit: Doctor

AND
- CXR evidence of pulmonary TB *and/or*
- Culture positive

AND
- No CXR evidence of pulmonary TB *and/or*
- Culture negative or pending

Treat as TB
- Ensure culture and sensitivity testing have been requested at the first visit. Review results at subsequent visits.
- Screen household contacts who are:
  - < 5 years
  - HIV infected

HIV TB client: see below

Consider differential diagnosis:
- Smear-negative TB
- Extra-pulmonary TB
- PCP
- Other respiratory causes such as asthma or COPD.

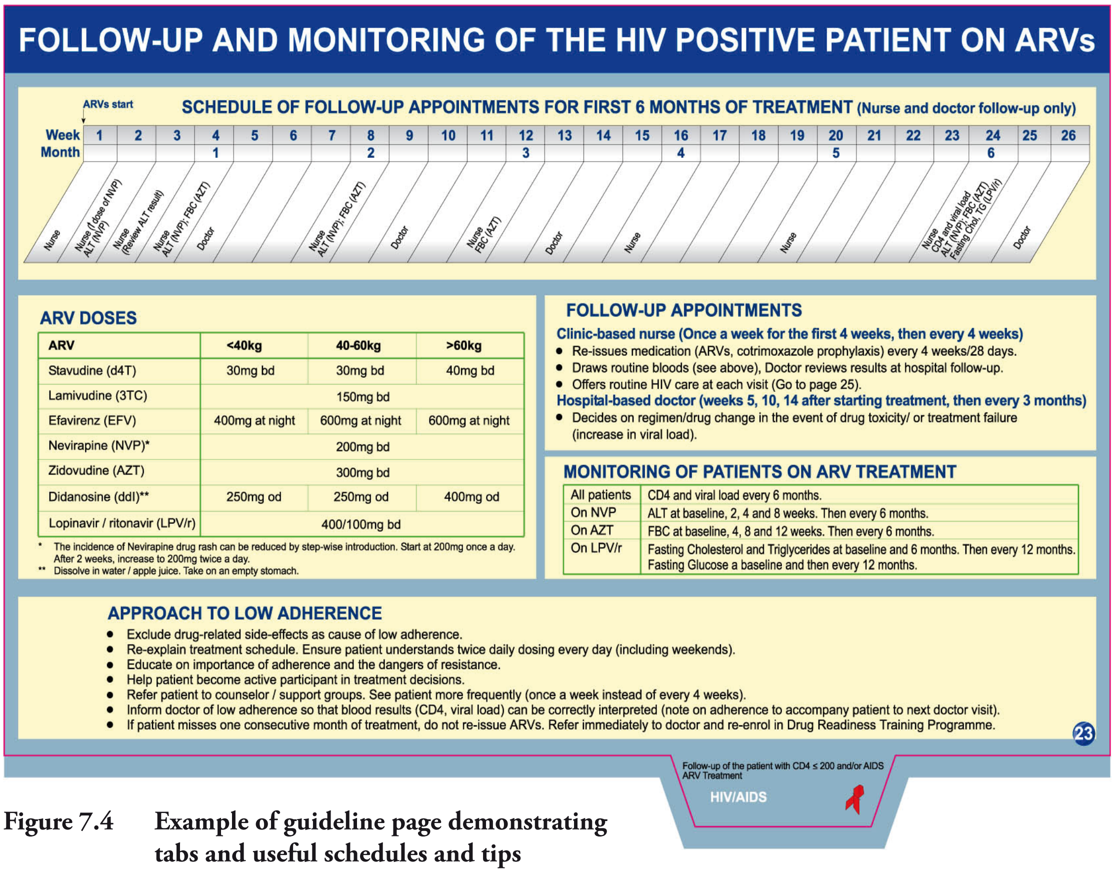
Reassess markers of severe disease.

Treatment of HIV TB client:
- Review CD4 count or draw bloods if not already done. If:
  - < 50: refer urgently for ARV workup (same week).
  - 50-200: refer for ARV workup (next available appointment).
  - > 200: repeat and evaluate at end of TB treatment.
  - Pregnant *and* < 350: refer same week for ARV workup
- Initiate co-trimoxazole 960 mg (2 single strength tablets) daily if not yet started.
- Commence pyridoxine 25mg daily.
- Reassess for markers of severe disease at each visit.

[1] National TB control programme guidelines are under review. The Free State Department of Health endorses this PALSA Plus TB algorithm. Revised guidelines are anticipated late 2006.
[2] MDR – multi-drug resistant TB. [3] *If penicillin allergic: erythromycin 500mg orally four times a day for 5 days.*

Figure 7.3

The TB algorithm in the PALSA PLUS guideline



FOLLOW-UP AND MONITORING OF THE HIV POSITIVE PATIENT ON ARVs

SCHEDULE OF FOLLOW-UP APPOINTMENTS FOR FIRST 6 MONTHS OF TREATMENT (Nurse and doctor follow-up only)

ARVs start

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Month				1				2				3				4				5				6		
	Nurse	Nurse (1 dose of NVP) ALT (NVP)	Nurse (Review ALT result)	Nurse ALT (NVP); FBC (AZT)	Doctor			Nurse ALT (NVP); FBC (AZT)		Doctor		Nurse FBC (AZT)		Doctor		Nurse				Nurse				Nurse CD4 and viral load ALT (NVP); FBC (AZT) Fasting Chol, TG (LPV/r)		Doctor

ARV DOSES

ARV	<40kg	40-60kg	>60kg
Stavudine (d4T)	30mg bd	30mg bd	40mg bd
Lamivudine (3TC)	150mg bd		
Efavirenz (EFV)	400mg at night	600mg at night	600mg at night
Nevirapine (NVP)*	200mg bd		
Zidovudine (AZT)	300mg bd		
Didanosine (ddI)**	250mg od	250mg od	400mg od
Lopinavir / ritonavir (LPV/r)	400/100mg bd		

* The incidence of Nevirapine drug rash can be reduced by step-wise introduction. Start at 200mg once a day. After 2 weeks, increase to 200mg twice a day.

** Dissolve in water / apple juice. Take on an empty stomach.

FOLLOW-UP APPOINTMENTS

Clinic-based nurse (Once a week for the first 4 weeks, then every 4 weeks)

- Re-issues medication (ARVs, cotrimoxazole prophylaxis) every 4 weeks/28 days.
- Draws routine bloods (see above), Doctor reviews results at hospital follow-up.
- Offers routine HIV care at each visit (Go to page 25).

Hospital-based doctor (weeks 5, 10, 14 after starting treatment, then every 3 months)

- Decides on regimen/drug change in the event of drug toxicity/ or treatment failure (increase in viral load).

MONITORING OF PATIENTS ON ARV TREATMENT

All patients	CD4 and viral load every 6 months.
On NVP	ALT at baseline, 2, 4 and 8 weeks. Then every 6 months.
On AZT	FBC at baseline, 4, 8 and 12 weeks. Then every 6 months.
On LPV/r	Fasting Cholesterol and Triglycerides at baseline and 6 months. Then every 12 months. Fasting Glucose a baseline and then every 12 months.

APPROACH TO LOW ADHERENCE

- Exclude drug-related side-effects as cause of low adherence.
- Re-explain treatment schedule. Ensure patient understands twice daily dosing every day (including weekends).
- Educate on importance of adherence and the dangers of resistance.
- Help patient become active participant in treatment decisions.
- Refer patient to counselor / support groups. See patient more frequently (once a week instead of every 4 weeks).
- Inform doctor of low adherence so that blood results (CD4, viral load) can be correctly interpreted (note on adherence to accompany patient to next doctor visit).
- If patient misses one consecutive month of treatment, do not re-issue ARVs. Refer immediately to doctor and re-enrol in Drug Readiness Training Programme.

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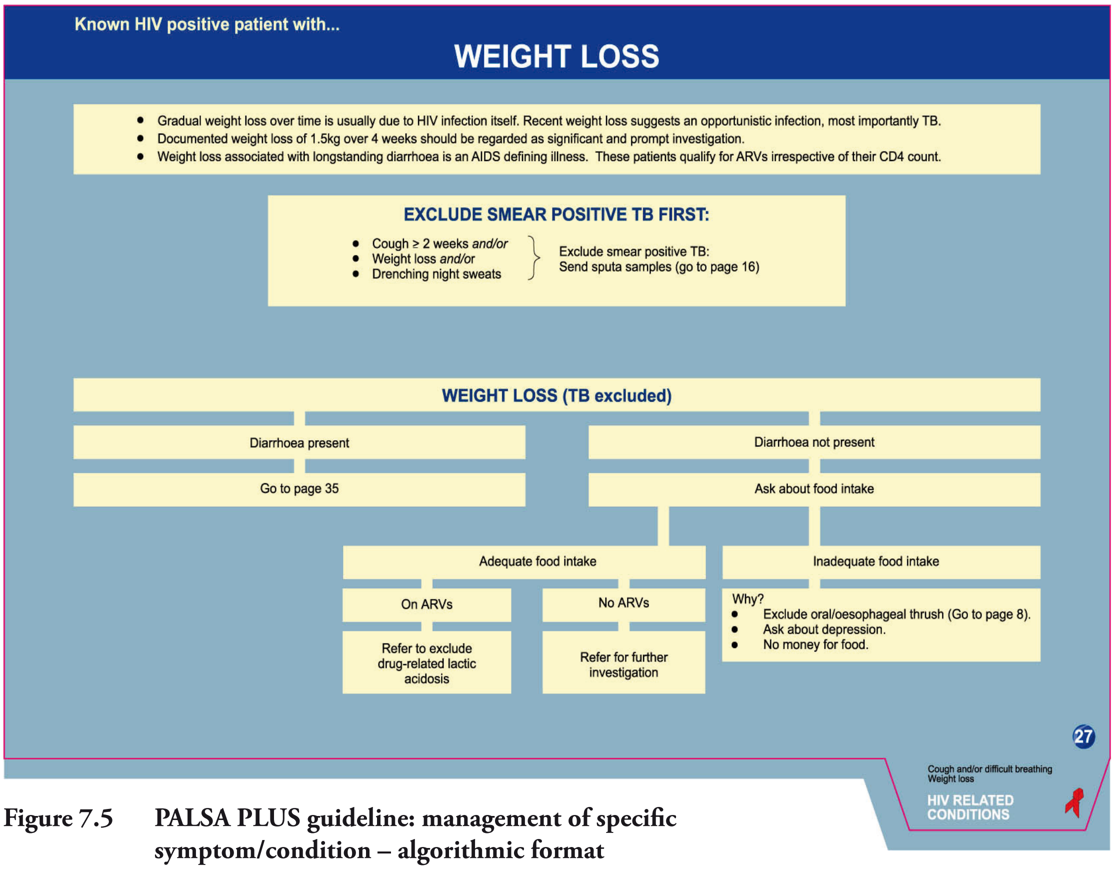
Follow-up of the patient with CD4 ≤ 200 and/or AIDS
ARV Treatment

HIV/AIDS

Figure 7.4 Example of guideline page demonstrating tabs and useful schedules and tips



Known HIV positive patient with...

WEIGHT LOSS

- Gradual weight loss over time is usually due to HIV infection itself. Recent weight loss suggests an opportunistic infection, most importantly TB.
- Documented weight loss of 1.5kg over 4 weeks should be regarded as significant and prompt investigation.
- Weight loss associated with longstanding diarrhoea is an AIDS defining illness. These patients qualify for ARVs irrespective of their CD4 count.

EXCLUDE SMEAR POSITIVE TB FIRST:

- Cough ≥ 2 weeks *and/or*
- Weight loss *and/or*
- Drenching night sweats

Exclude smear positive TB:
Send sputa samples (go to page 16)

WEIGHT LOSS (TB excluded)

Diarrhoea present

Go to page 35

Diarrhoea not present

Ask about food intake

Adequate food intake

On ARVs

Refer to exclude drug-related lactic acidosis

No ARVs

Refer for further investigation

Inadequate food intake

Why?

- Exclude oral/oesophageal thrush (Go to page 8).
- Ask about depression.
- No money for food.

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Cough and/or difficult breathing
Weight loss

HIV RELATED CONDITIONS

Figure 7.5 PALSA PLUS guideline: management of specific symptom/condition – algorithmic format

Table 7.6 Features of PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa guidelines (Free State edition)

Features of PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa guidelines	
Title of guideline	PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (Free State edition)
Date of publication (the latest publication date has been sought).	2008 Previous edition 2007
National/local applicability	Complies with national guidelines, locally adapted according to the provincial needs and protocols
Target population (who should use the guidelines?)	Nurses and CNPs in primary health centres. Also available for doctors, pharmacists and allied health personnel if required.
Target disease/condition(s)	TB, HIV/AIDS; Asthma/COPD (Chronic Obstructive Pulmonary disease); Sexually Transmitted Infections (STIs)
Type of intervention. This includes prevention, diagnosis, referral pathways, acute and chronic management	Primary level practitioner Diagnosis, referral pathways, acute and chronic management
Format of document	Full colour; 48 pages; hard wearing heavy duty gloss paper; includes photographs and diagrams
Origin/publisher	Knowledge Translation unit, University of Cape Town Lung Institute
Inclusion of scientific references	No. Available from guideline developer on request
Provision of information pertaining to stakeholders and other sources of evidence	Yes: contributors to the guideline and all previous editions are listed; endorsement of the guideline by the Provincial government
Specific features of the guideline	Indexed according to disease/syndromic approach Tabbed pages which facilitate access to specific conditions, e.g. TB.
Support materials	Desk blotter with key messages, a two year calendar and essential interventions e.g. taking of sputum; PALSA coffee mug, PALSA badge for all nurses who have been through the training programme,
Updating of guideline	Every year – 18 months at present

Training of nurses for guideline use at primary care level

Training is an important component of any programme which aims to deliver high quality health care. Nurses, particularly at primary care level, have limited access to up-to-date information in the form of journals, web-based information or continuing education seminars. Thus there is a training department in each of the provincial health departments to facilitate the ongoing in-service training and updates for all staff, but in particular nurses. The provincial training department in the Free State makes use of centralised training programmes in each district, as well as a video system in designated clinics in each district, known as I-Cam.

Training for the use of the SA TB guidelines

The Free State province has appointed in each of the districts, in each of the clinics, a TB co-coordinator and TB nurse. The function of the TB co-coordinator is to ensure that the statistics for diagnosis treatment, follow-up, defaulters and cure rates are kept up to date and entered monthly into the electronic data base. Clinics for the most part until fairly recently have entered the data manually onto record sheets, which are in turn entered on to the data base. With the advent of a fully electronic record system, this process has been made simpler, however the TB coordinator is still responsible for ensuring that all records are kept up to date, following up missing data and submitting the data on line into the provincial and national data bases.

Most patients with TB at primary care level are seen by nurses, who manage the initial diagnosis, treatment and follow-up. The second major responsibility of the TB co-ordinators is to provide continuing education for the nurses in their districts. This is done through a variety of mechanisms. The TB co-coordinator may hold district level training and update sessions, visit clinic staff or provide update via email communication, circulars and distribution of updates and guidelines.

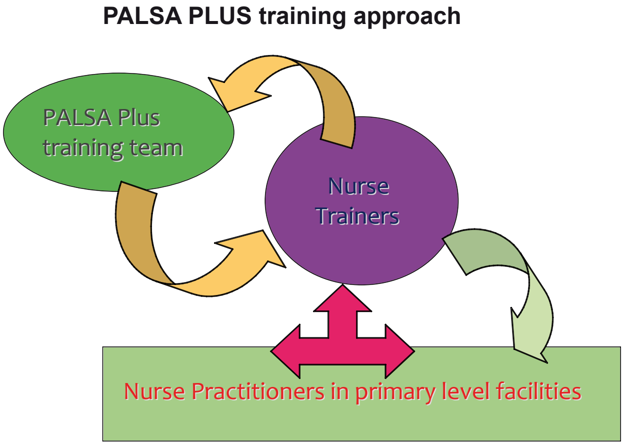
A summary of the training approaches for the selected guidelines is provided in table 7.7.

Table 7.7 Comparison of provincial and PALSA PLUS training approaches

Comparison of provincial and PALSA PLUS training approaches	
Provincial training approach	**PALSA PLUS training approach**
• Centralized by district • Doctors and nurses trained together (for HIV/ART) • Attendance by ART/TB nurses only • Conference-type format: Expert presentations (primarily didactic and uni-directional) by multiple specialists • Predominantly disease specific training e.g. TB; HIV and ART; STIs	• Decentralized (on-site at individual clinics) • Training designed specifically for nurses • Attendance by all nurses in each intervention clinic • Educational outreach (facilitative, interactive) by trained group facilitators • Lung health (including TB), STIs, HIV/AIDS (including ART) care

The PALSA PLUS training approach and support

The training package provides South African primary care nursing practitioners evidence based information and guidelines on integrated management of priority acute and chronic respiratory illnesses, including tuberculosis; combines integrated respiratory case management guideline (based on WHO PAL) with training methods designed to change professional practice (Bheekie, et al., 2006; Fairall, et al., 2005).


PALSA PLUS training approach

The Master trainers (a content and process trainer) train the nurse managers/ trainers (who are selected from each district). These trainers in turn train the nurses in the PHC clinics in onsite training sessions – approximately 8 sessions of 1½-2 hours each).

Figure 7.6 Schema of the PALSA PLUS training approach

Educational outreach training is an on-site approach to training, which differs from most training programmes offered within the Departments of health at provincial level in South Africa. The frequency of the training visits and number of training sessions depends on the existing knowledge and skills base of the nurse; the burden of respiratory and HIV related disease; clinical responsibilities of the nurse; staff turnover and availability for training and distance of the clinic from the trainer's home base.

All nurses in each facility are exposed to the training, regardless of their category of training or task allocation. Thus the enrolled nurse, who may be responsible for observations, dressings and ongoing monitoring of routine adherence to treatment, is able to utilise the principles of the guideline, and use the specific sections to trigger appropriate practice. The CNP and clinic nurse will be able to utilise the guideline to identify symptoms, prescribe the appropriate treatment, advise the patient on specific behavioural, nutritional and other adaptations that may be required, identify the patient who needs urgent management and immediate referral and those who can be safely treated at the clinic and referred for a follow up appointment to a doctor or referral hospital. The guideline promotes consistency in the care and treatment of clients who present to the primary care clinic/community health centre.

The adapted educational outreach approach to training of nurses is a three step approach.

Step I: Training the Nurse-Trainers (Train the Trainer to Train programme -TtTtT)

Master trainers, based at or linked to the Knowledge Translation unit at the UCT Lung Institute, University of Cape Town, provide a week long intensive training of selected persons with a nursing background who have been identified by the management of Provincial Departments (currently Western Cape and Free State provinces) of Health as being suitable and available for training of nurses. Persons with background as clinical nurse practitioners, primary care experience, and good communication skills experience at middle management level are sought where possible (table 7.8). Current knowledge and expertise in the field of TB, HIV, respiratory disease and STIs is preferred but not an essential requirement.

Table 7.8 Criteria for selection of PALSA PLUS trainers
(Acknowledgement: G Faris, UCT Lung Institute)

Selection of Trainers for PALSA PLUS TtTtT (Train the Trainer to Train)	
Essentials	**'Nice-to-have'**

• Nursing background
• Time:
  • one full week for TtTtT
  • 1 day 6 weeks post TtTtT
  • 1 day per quarter
  • 1-2 hours weekly / 2 weekly
	• Already a supervisor *or* middle- manager *or* trainer *or* nurse practitioner
	• Passion
	• Within reasonable distance of clinics to be trained
	• Good communication skills
	• Primary care experience

Past training experience or HIV and respiratory know-how is not an essential requirement	

The training programme is a structured five-day programme, held at a venue which provides the trainees with the opportunity to be away from work and family commitments and focus on the challenges of a new training approach and learn the skills of educational outreach.

Table 7.9 Overview of Train the Trainer to Train Programme (Acknowledgement: G Faris, UCT Lung Institute)

Overview of Train the Trainer to Train Programme	
Content (What)	**Process (How)**
• Content of guideline	• How to facilitate a group
• Principles of adult learning	• How to promote life-long learning
• Theory of how groups function	• How to support nurses

Nurse Trainers working with the guidelines during a training session

Key tenets of the programme are the use of the principles of adult learning and teaching, experiential and interactive learning. Trainers work through cases designed to help them work through the guidelines, and learn facilitative skills to enable them to train in small groups. Each trainer gets several opportunities to train colleagues and get feedback.

Step II: Training the Nurses in the Primary Care Facilities

Educational outreach: Clinic-based, short, repeated, interactive training by a trusted outsider

Outreach training

- On-site
- For *all* nurses in facility
- 1½-2 hour sessions
- 2-weekly for about 16 weeks
- Trainer trains one facility at a time

Example of case scenario: NOSIPHO

Nosipho was treated 4 weeks previously for an lower respiratory tract infection. She returns saying she is still coughing, and the left chest pain is no better.

How do you assess her?

During her examination, her respiratory rate is 32 breaths per minute and she says she's been in bed for most of the day over the past month. She's breathless while talking.

How do you manage her?

She comes back from hospital 1 week later with a diagnosis of pneumonia and her sputum results are 1 positive for AFBs, 1 negative for AFBs. She refused HIV testing 4 weeks ago when you first saw her.

How do you approach her now?

CORE LEARNING:

Managing client with chest pain
Managing severely ill TB suspect
Using TB algorithm – aim to diagnose TB within 4 visits
Determining HIV status
Dealing with an "HIV unknown" client
Communication skills: Listen Empathise

REFER TO AND INTEGRATE:
Guideline pp 6, 7, 8
Waiting room scene
Key interventions

Trainers are provided with training schedules and allocated to clinics. They are expected to negotiate training schedules with their clinics, and visit the clinics on a fortnightly basis for approximately 16 sessions. This is flexible, and dependent on the number of staff in each clinic, their availability and workload.

Challenges for the trainers are to ensure that as many nurses as possible attend each session. The trainer and nurses work in an small informal group, using paper based cases (see example taken from the PALSA PLUS training manual) as an approach to work through the guidelines. Cases have been designed to ensure that each disease condition is addressed during the training sessions. This ensures that the nurses know how to use the guidelines, what information is available in the guidelines, and serves to assist them to identify their own areas in which they need extra information, without the sense of 'being told what to do'. The aim is to provide a safe supportive environment for facilitated learning.

Ongoing contact, during the training period and afterwards, provides the continuity and facilitates relationships. Training and use of guidelines is contextualised (linked to local health issues), new information and amended protocols are provided by the trainer as guidelines/policies change. Questions are directed to the trainer, who can direct these to local experts or the guideline developers.

Step III: Trainer support and continuing education

Support for the nurse-trainer is a vital component of the training approach. This takes the form of a post-training follow-up workshop, held approximately six weeks after the training. By this time trainers should have commenced the training programme in their allocated clinics. This feedback is useful for the nurse-trainers, as they interact with their colleagues and for the master trainers, who are able to identify any difficulties that trainers may be facing and propose mechanisms to deal with these. Examples of such challenges are lack of communication with relevant district managers, lack of access the clinics, transport, other work commitments and clinic staff who struggle to find time to be trained.

Support of the nurse-trainers is multi-facetted. An initial six week follow-up is done with each new group of trainers, and is based in the district. Subsequent support and update sessions are held every quarter, to which all trainers are invited. The master training team is available by email or telephone for queries, problems and other support. Trainers are encouraged to bring questions about the guidelines from the nurses to the master trainers and guideline developers. Questions are dealt with individually and where necessary a general issue is dealt with in the monthly newsletter, sent to all trainers (Appendix E).

Support for trainers

- 6-week post training support session
- Monthly newsletters
- Web SMSs
- Quarterly meeting with master trainers
- Peer support

Figure 7.7 PALSA PLUS support materials highlighting key messages: desk blotter with calendar, treatment wheels and lanyard with drug information

Integration of patient management, guidelines, and training

The integration of programmes is now recognised as critical to the success of delivery, particularly for HIV and TB. The combined epidemics have made it impossible to continue to manage the diseases in isolation from each other. The guidelines and training programme of the two selected intervention tools differ with respect to the design and implementation of the guidelines, style of presentation and training. Each approach has merit, yet it is evident from the feedback from the trainers and nurses that there are added benefits to the PALSA PLUS training approach, as all clinic nurses receive training, thereby facilitating the clinic-wide integration of TB and HIV/AIDS care. The PALSA PLUS programme supports integration by summarising all relevant national protocols (ART, PMTCT, TB, STIs, EDL) in a single user-friendly algorithmic guideline for primary care health workers and training all nurses and staff together in a group at the clinic (Zwarenstein, et al., 2009).

Concluding comments

This review of guidelines available to primary care nurses demonstrates the plethora of guidelines, the possibility for confusion and lack of up to date evidence for practice, and the need for a clear structure and strategy for providing health care personnel with evidence-based, easily accessible information produced in a format which is useful and practical to their everyday practice. The disjuncture between theory, evidence and practice has the potential to impact on quality patient care. There is a clear need for an integrated approach at policy, guideline development and practice level.

CHAPTER EIGHT

PRACTITIONERS AND PATIENTS, PROTOCOLS AND PRACTICE: NURSING IN PRIMARY HEALTH CARE: SUB-STUDY 3

"Whatever comes through the door – I can handle it"

"Here we are the doctors"

"If you have a problem, you go to the nurse"

(Quotes from participants in this study)

In this chapter, I describe the current experiences of clinical nurse practitioners and nurses in three primary care settings in the Free State province with respect to being a nurse in primary care, and their use of guidelines in the diagnosis, treatment and management of patients.

Introduction

In this sub-study, I returned to the Free State primary care clinics. Over a period of ten days, I observed nurses in three PHC settings in the Free State Province – a small rural clinic, a small town clinic and a large busy central clinic which serves as a referral centre as well as managing its own caseload.[11]

A typical landscape in the rural Free State

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[11] In this chapter I have used the first person and present tense in order to create a sense of the reality of the clinic setting and the daily activities (Patton, 2002; Ponterotto & Grieger, 2007; Webb, 1992).

In each clinic I spent time in the consulting rooms of the nurses, held informal conversations during breaks and between patients, and conducted a focus group with all the nurses who were available. I have described the typical day in each clinic. Patient consultations were selected to depict the variety of patient health problems and the clinical activities of the nurses. In table 8.1 I provide a profile of the three clinics.

Table 8.1 Profiles of clinics and nurses[12]

Clinic	Setting	Number of professional nurses	Nurses with whom I interacted
Clinic A	Rural	2 [1 vacant post]	**Sister H** – 30 years experience in primary care; has a qualification in clinical diagnosis and treatment **Sister P** – 5 years experience in primary care; currently studying part time for the qualification in clinical diagnosis and treatment
Clinic B	Small town	3 [1 vacant post]	**Sister R** – extensive experience in the mining health services and primary care; 13 years in this clinic **Sister T -** doing the PHC training through the distance option **Sister D -** was born in the area and knows it well. Has been working in this clinic for some years, previously in a hospital setting
Clinic C – a referral centre for number of smaller clinics in the townships	Large township on the outskirts of a mining town	12 [2 vacant posts]	**Sister B –** clinic manager with many years of experience in primary care in the area. **Sister S** - experienced CNP who has been working in this clinic for 6 years **Mr J –** A young nurse who has had some clinical experience in the mines, and has worked at this clinic for about three years**.**

Clinic A

Clinic A is a small facility in a rural setting. It serves the local community of approximately 7000 persons who rely on the clinic for all their primary care, antenatal care and childhood development services. The nearest hospital is approximately 40 kilometres to the north, and public transport is limited to infrequent minibus taxis. The clinic, a modern building, is staffed by two clinical nurse practitioners, a clerk, pharmacy assistant, cleaner and two part-time HIV/AIDS counsellors. There is a vacant post for a third professional nurse. The clinic operates weekdays from 07h30 – 16h00. Every two weeks a doctor spends a morning at the clinic. Patients are referred to the doctor for non-emergency conditions that cannot be managed by the nurses. Patients who need emergency attention are sent to the hospital by ambulance. At monthly intervals there are services provided by a social worker, a dentist, physiotherapist and speech therapist.

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[12] All identifying information has been changed to protect the identity of the nurses.

An example of a township in rural Free State served by one of the clinics at which I observed practice

The clinic day begins at 07h30. Already patients are sitting in the waiting room, quietly waiting for their turn to be seen. All the staff congregate in the waiting room, and one of the staff leads everyone in a hymn, sung in the local language, Sesotho. Those who don't know the words, hum the tune. This is followed by a prayer. One of the CNPs then greets everyone and informs them of the activities for the day. On this day the dentist, who has a monthly session, will be seeing patients. As the researcher, I am introduced to staff and patients and my role is explained to everyone. The patients nod, no one objects to my being there. It appears to me as if the daily ritual is an integral part of the clinic functioning.

This is followed by a health education talk in the local language. Health education is considered to be a core component of the primary health care nurse's work, and the nurses are required to record their health education activities/interventions with each patient. Providing generalised health education every morning covers at least some of this, sometimes, onerous, duty. No visual aids are used, and it is evident from the responses of the patients that some of them have heard the information before. I am unsure of the usefulness of this activity, but don't feel that I can ask this question at this early stage of the visit.

The day begins without fuss. The work is divided between the nurses. Everyone knows what they are required to do, and the patients know which queue to join – depending on the reason for attendance. One nurse deals with sick patients who have new symptoms or minor ailments, and the other manages the "fast line", patients who need a refill of regular medication, repeat of a contraceptive, or a child who must be immunised. Between them, they see about 1600 patients a month. Adults are encouraged to attend in the morning, which leaves the afternoons free for the school children to attend. The clinic is an integral part of the community and its day-to-day activities are linked to events in the community. The community has grown over the last few years as people come to the town to look for work, as it is in the centre of a growing tourism area. This has created tension between the locals and the new work seekers. There is pressure on the available housing. A number of humanitarian and welfare projects have emanated from the clinic. A feeding scheme for 140 children occurs on the clinic site, in which a number of church or local businesses take turns to cook and serve food. "It is not a place where you stagnate", says Sister H.

Patients present throughout the day with a variety of problems. Each nurse will see between 20 and 40 patients per day. Numbers vary according to the weather pattern, days of the week and holidays and which category of patients is seen, as certain days are scheduled for the regular follow-up of a particular group of patients with chronic condition such diabetes. In fixed clinics, there is a provincial target of 35 patients per day which should be managed by each nurse.

A challenge in this clinic, although not unique to it, is the fact that patients carry their own clinic records – known as the 'carry card'. The clinic no longer keeps detailed patient records, although a record of the visit and a brief description of the patient's complaint and treatment are kept for audit purposes. Detailed information is recorded in the patient's card. There are advantages and disadvantages to this system. Patients who work away from home or move to another area take their health information with them, making it easier for another health professional to have correct information and treat accordingly. Problems arise when the treatment card is kept at the hospital, lost or forgotten, a not infrequent occurrence. Cards, which are nothing more than record sheets, over time, become crumpled, dirty and illegible, although some patients keep them in a plastic packet to protect them as much as possible. Although there is continuity of care in this clinic, there is, for some patients, a lack in continuity of information which in turn impacts on the care.

By eight a.m., the first patients are being seen, collecting their medication and there is a constant stream of patients joining the queues. As a participant observer, I join Sister P who is dealing with patients with new complaints. Sister P has five years experience working in this clinic, and knows many of the patients from previous consultations.

Guidelines and the use of these in the clinic setting

On the walls of the consulting rooms are a variety of protocols and guideline charts. These have been provided by pharmaceutical companies and the provincial and national departments of health. They include protocols for management of pregnant women who are HIV positive, treatment of asthma, management of HIV exposed infants, and management of chronic diseases such as hypertension and diabetes. Hand washing notices feature prominently in each room in the clinic. A patient rights charter is on the wall of the corridor where patients wait to see the nurse. On the cupboard doors are more guidelines – treatment of cholera, immunisation schedules, vitamin supplementation. I am particularly intrigued with a poster entitled K I S S! I then see that it is a poster with guideline for an injectable contraceptive, and the acronym is for ***Keep It Simple Sister***. I wonder what this is really saying to the nurses. I recall that the explanation that I know for this acronym is 'keep it simple stupid'!! The PALSA PLUS desk blotter is on the desk. The only guidelines that are visible on the desk are the IMCI guidelines, and on the bookshelf is a copy of the EDL. It is evident that the clinic nurses are surrounded by guidelines and protocols of all types.

The consulting room walls are covered with a variety of posters, containing protocols and guidelines on topics such as hand hygiene, management of children on ARVs, and a graphic depicting the stages of pregnancy.

For most of the consultations, neither nurse uses guidelines. Guidelines are used when there is a need to check on specific protocols for management, or if the nurse is uncertain about assessing severity, particularly of a respiratory condition. I have summarised the instances in which I observed nurses using guidelines in table 8.2. Each of the instances reflects the uncertainty of 'not knowing', and for specific conditions such as TB, the need to comply with strict and monitored protocols.

Table 8.2 When do nurses use guidelines in primary care?

When do nurses use guidelines in primary care?
• When there is no doctor to consult
• When uncertain about a diagnosis
• If the patient presents with multiple problems and complaints
• For patients who are HIV positive
• When managing children (IMCI)
• For specific conditions for which strict protocol care is required (TB and ART)
• What the patient's condition requires the decision which may involve the use of more than one guideline (e.g. a pregnant woman with asthma)
• When there is more than one option for treatment

When do nurses use guidelines?

When patients are HIV positive or suspected to be HIV positive

For Sister P, the guidelines are there for reference and further information, particularly when a patient is HIV positive *it directs me what to do*. When she realised that I was interested in the use of guidelines, she retrieved the PALSA PLUS guidelines (Knowledge Translation Unit, 2008) from the cupboard. She asks the next patient, who is obviously unwell, whether she knows her HIV status. The patient has come from a large city in another province. She says that she had a test, but was not told the results or told to return. Sister P consults the PALSA PLUS guidelines, prescribes treatment, and makes a follow-up appointment for a morning when the patient can be tested for HIV and other conditions.

Maria[13] is a patient who has been on antiretroviral therapy for the past two years. She had complained of abdominal pain a week previously, had been referred to the hospital, her ARVs discontinued and referred back to the clinic with a letter stating that she must be restarted on another regime. Sister P is puzzled – what does this mean? There are many unanswered questions. How long can patients be without their ARVs? When should the patient restart medication? Why has she been referred to the clinic when the nurses here are not permitted to initiate ARVs? Sister P consults the PALSA PLUS guideline but can't find the answers. Visibly concerned, she decides to consult her colleague, a CNP with more general experience, although in the field of ART neither has had much. Sister H however, has been doing most of the follow-up of patients on ART. Sister H listens to the sister P's description of the situation, and says that this is not a problem; the patient can stay off the medication for a while, but doesn't explain why. She recommends that the patient be booked into the next doctor session, which is in ten days. Sister P, although still appearing concerned, explains the plan to the patient and makes an appointment for her. She says that she was not aware that patients could stay off the medication, as their viral load would increase. It is apparent that the section of the guidelines in which this is covered was not clear to her.

A woman comes into the clinic room, complaining of a headache. She is overweight and a known hypertensive patient. On measurement, her blood pressure is raised. Sister P advises her about managing her weight, checks that she is using the appropriate contraceptive, adjusts her medication prescription and asks her if she knows her HIV status. The patient does not know, but agrees to consider getting tested. No guidelines consulted.

A 28 year old woman enters the consulting room. She is HIV positive, not yet on ARVs, and is complaining of abdominal pain. Sister P pages through the PALSA PLUS guidelines, cannot find what she wants, then goes to the index pages to determine what should be done. The guidelines indicate a number of procedures, most of which she says that she is not able to do. *Young girls don't want to hear that they are HIV positive*, she says as the woman leaves the room.

When managing children

The Integrated Management of Childhood Illness (IMCI) guidelines (World Health Organization, 1997) are mandatory for use by all nurses in the primary care facilities. All nurses who work with children, particularly in primary care, are being trained in the WHO IMCI protocol, which is supposed to be followed for assessment and management of every child. This manual has been variously described by the nurses with whom I have had contact throughout this study as "wonderful", "very useful", "changing the care of children" and "eliminates the need for the use of medical instruments such as the stethoscope" but also "time consuming" and requiring

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[13] To protect the patients, all identifying information has been changed.

"too much paperwork". The nurses find it laborious to complete all the forms, particularly when the ailment is minor.

A three year old child is brought into the clinic consulting room by her mother. They live on a farm in the district, which is usually served by the weekly mobile clinic, however, for urgent attention, patients have to arrange to travel to the clinic. Sister P uses the IMCI when seeing children, but does not complete all the paperwork if the child's complaint is minor, as it is time consuming and she tries to *save paper*". For this child, however, she completes the relevant forms, asks the mother whether she knows her HIV status and that of her child and prescribes treatment for the child.

I ask Sister P about her experience of working in a PHC setting. The challenges of moving into this setting with only basic training as a nurse and very little support are evident: *For three months I was anxious, I kept thinking of the consequences of missing something …* To cope with her anxiety, she suppressed her feelings and just carried on, *I just kept pushing it down, telling myself that I could do it … I'm trying my level best*. Guidelines have helped to reduce the anxiety as well as having access to a doctor: "*I consult the guidelines when I'm unsure… in the beginning I used to phone the doctor…* After working in this setting for a while, the accumulated experience begins to help and she has learned to manage her anxiety: *but we are coping … you have to be strong …*

On my second day at the clinic, after the morning rituals, I join Sister P again. She has an easy relationship with her patients, who obviously feel comfortable as she speaks the local language. Today sister P has the PALSA PLUS (Knowledge Translation Unit, 2008) and IMCI (World Health Organization, 1997) guidelines visible on her desk. Our first patient, a middle aged man, is coughing and wheezing. He is underweight. Sister P consults the PALSA PLUS guidelines, asks the patient about a history or symptoms of TB. She consults guidelines again; checks the triage page to assess the severity of his symptoms; asks more questions. She pages to another page in the guideline. She diagnoses a respiratory condition and prescribes the recommended medication.

When uncertain about diagnosis

Another patient enters the consulting room with respiratory symptoms, obviously ill. She is complaining of headache, chest pain and difficulty in breathing. Sister P consults her guidelines, finds the page which she needs, does a physical examination and asks the patient more questions. She is obviously puzzled and concerned at the patient's symptoms. I wonder, is sister P certain of what do to next? She appears to be thinking about her options. Decision making about respiratory symptoms in particular appear to be challenging. Sister P asks about the colour of the patient's sputum; she then goes through the symptoms as outlined in the guideline and checks each with her patient, who answers in monosyllabic sentences. Sister P then outlines the management plan to the patient as indicated in her guideline. She has considered TB as one of the possible differential diagnoses and proceeds to manage the patient accordingly.

Her next patient comes into the consulting room – she has been injured at work and is complaining of chest pain. Sister P is not sure whether there is any internal injury. This time the guideline is not useful, so she decides to consult with her colleague, Sister H. Sister H comes to see the patient – she thinks that there is bruising, but no fractures. A mild painkiller is prescribed, as there are no stocks of the preferred medication. The patient is given a follow-up appointment for review.

It is time for me to move across to Sister H's consulting room. She is managing the children and patients who attend for chronic disease follow-up [such as hypertension checks] and repeat of medication. Sister H does not speak the local language very well, although she has worked in the area for some years and understands more than she speaks. She is assisted by a volunteer. A male patient arrives for his regular check-up. He had a nose bleed at work two days previously, with an extremely high blood pressure. Today however, he is much better and appears to be stable on the new medication.

Sister H sees a constant stream of regular patients who attend for follow-up and repeat scripts – hypertension, diabetes, epilepsy and HIV, interspersed with women who require contraception and mothers with their children. It is all in the day's work. One of the frustrations is the lack of consistency of drug supply, which necessitates changing patients who are doing well on one drug to another, and then back again once the supply has been reinstated.

For specific conditions for which strict protocol care is required (TB and ART)

A young woman arrives. She has been diagnosed with TB and treatment commenced at the hospital, and will be followed up by the clinic Sisters. We move to the TB room. In this room guidelines are stuck to walls and TB wheels which provide information about the regimes, return dates and follow-up are used extensively. It seems as if TB guidelines (Department of Health, 2004) are followed to the letter. There is a very strict national protocol, updated every few years, and this is one of the disease conditions for which nurses receive regular updates and refresher training.

Our TB patient treated, we move back to the other consulting room. We see a mother with a sick baby, for whom Sister H consults the IMCI guideline, but makes a decision to prescribe an alternative medication to that which is recommended. She says this is because of her experience and the patient's history.

A woman and her infant arrive. She no longer has her 'carry card' as it was not returned to her by the hospital when she was discharged after delivery. The clinic now has no record of the patients' health status, medication or contraceptives. The hospital, 40 kilometres north of the clinic, is not easily accessible and this means that the clinic staff will have to create another clinic record for this patient. The nurses feel that patients seem to have limited knowledge of their bodies, and although they have been provided with information about their condition, seem unable to make the changes or do what they need to do. It is frustrating and even futile, as patients regularly return with the same problems. All patients are asked whether they know their HIV status, and if not whether they are willing to be tested. The nurses work within an environment of incomplete information, particularly in respect of previous treatment.

A mother brings her child into the consulting room. He has sores on his head which have not healed with treatment. Sister H searches in the EDL guideline (Department of Health, 2003) for options for further treatment. For the rest of the day she manages all the patients without referring to guidelines.

In the early years, according to Sister H, nurses were only allowed to **describe** the patient's condition, but not to make a diagnosis. This has changed since 1994. Nurses may also dispense, with the appropriate training and certification. Both nurses express their frustration at policies that are good, but cannot be implemented, due to lack of human resources and infrastructural capacity.

Clinic B

Clinic B is a 'town clinic'– situated in a small town about 50 kilometres from the large town in the district. It serves primarily people from the surrounding farming communities and local businesses. This is not a tourist town; although it straddles the national road, there is little to encourage travellers to stop, unless it is for provisions, fuel and a brief stop to rest. It has a truck layover area, and this is linked to an increase in sex work in the town.

The clinic is in reasonable condition, and staffed by three professional nurses (with one vacant post), two nursing auxiliaries, a pharmacy assistant, cleaner, receptionist and a TB data capturer. The clinic records approximately 1400 patient visits per month. The staff struggle to cope, hampered by lack of equipment, scales that have not been regularly calibrated, and fluctuating medicine stocks. The clinic serves a large area and has many HIV positive patients. It has been identified as a clinic which will provide nurse-initiated ARVs; however this has not yet been implemented, and patients who require ARVs have to travel 30 kilometres to the nearest ARV site. This has been a real problem for the local community, most of whom survive on 'piece jobs' (casual employment), grants, and work in the mines in the area.

The township in the vicinity of the clinic

I am greeted by Sister R, who has been working in this clinic for 13 years and knows everyone and everything in the area. The largest group of patients are 'chronics' – patients with conditions such as hypertension, diabetes, gastric problems and lifestyle related conditions. Sister R sees this as a problem, as the patients take up a disproportionate amount of time, partly because they 'don't understand' their conditions and are apparently unable to adhere to the management of chronic conditions and required lifestyle changes.

Tasks are allocated for the day. One nurse usually sees all the TB patients in a separate consulting room. Sister R is seeing mainly the mothers and children today. The nurses share the duties on a weekly basis – rotating so that they can 'keep their hand in'. We move into the consulting room. On the wall I see a PALSA PLUS desk blotter and ARV guidelines for children: testing, drug regimens and side effects. On the desk is a copy of the 2003 EDL – they have not yet been given the 2008 version.

A patient enters the room. She is due to start TB treatment and has been counselled by the VCT counsellor[14] and has consented to be tested for HIV. Sister R fetches the testing material from the cupboard, all the while talking through the consent for testing and the procedure which will be done. There is no formal counselling at this point – she will return to the counsellor with the results, which will be explained to her by the counsellor. It is evident that the patient is happy to talk to Sister R – she has probably been here before. If the volunteer counsellor is not available, the nurses do all the counselling and testing.

Our next patient is a young child brought by his mother. The child is listless and sneezing. Sister R likes the PALSA PLUS guidelines, *they do help – when they tell you what to look for*. But not all guidelines are useful. For Sister R, the IMCI misses what nurses with experience know. Sister R believes that, in children, the ears are the most important organ to check – *when you see what is in the ear – you know what is happening in the throat*. The IMCI emphasises the importance of checking the respiratory rate of a child – but this is sometime difficult to do. Sister R asks the mother to lift up the child's jacket, and then counts the respiratory rate, which is normal. The diagnosis is rhinitis, and the mother is advised to give the child fluids. A decongestant is prescribed, but Sister R is not sure whether the pharmacy will have it in stock. There is a sense of pessimism in her voice – *I don't even know whether we have the medication!*

The mother is not feeling well, so Sister R looks in her throat and listens to her lung sounds. She diagnoses pharyngitis. *Most of the time we catch the TBs here* she says. She complains about the amount of time the IMCI takes – *this IMCI mesmerises you*. It is difficult to manage the paperwork associated with the guideline, particularly for clinics which are understaffed: *they drop you in the sea* she says, *no boat, no nothing; you just have to swim in the ocean*. At this clinic there is often only one nurse – nurses have to attend meetings, attend centralised training sessions or may be ill. Patients get impatient with the staff if they take too long to see them.

A young woman enters the consulting room. She has a sore throat which is diagnosed as tonsillitis, which will need antibiotic treatment. She also has a painful tender abdomen, which is diagnosed as salpingitis, which will also need treatment. Sister R wonders whether there is an antibiotic which can be prescribed for both conditions. The clinic has a copy of the new STI

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[14] VCT – Voluntary Counselling and Testing is provided prior to testing for HIV. This is done by a trained volunteer counsellor, who is usually a member of the local community.

guidelines, but the clinic does not yet stock the medications for the new regime, so Sister R cannot follow the most recent guidelines to treat this patient.

A woman from a local farm with two children is next. Her obviously underweight five-year old child is sick. The mobile clinic will not visit the farm for another week, so she has had to arrange for a local taxi to fetch her to attend the clinic. This is costly, and sometimes patients cannot afford to attend the clinic. In this case, the child has been sick for about a month. Sister R listens to the child's chest sounds, calls me to listen. I ask whether child has been tested for TB, and Sister R agrees – this is one of the tests that will be done today. The 11-month old infant is restless and also appears to be malnourished. He should have a measles immunisation today, but the clinic is waiting for new stock. Sister R examines the infant, who is found to have an ear infection.

The last patient comes into the consulting room; a young adolescent boy, complaining of sore throat. He has chronic tonsillitis. Sister looks at his clinic card; this is the fifth time the boy has been seen with the same complaint – and he was last treated less than four months previously. In any other setting, the boy would be referred for specialist consult and possibly a tonsillectomy, but in this semi-rural setting, referrals are not encouraged due to the long waiting lists. Sister R has few treatment options – should she prescribe the same antibiotic again (as per guideline)? The boy will be referred to the doctor, who has only a weekly two-hour session and therefore only complex cases are referred to him.

The clinic runs in its own rhythm. Patients arrive, wait; are seen by one of the nurses; wait for the medications and leave. Everyday there is another line of patients to see, to advise, to treat, to support. Some patients attend infrequently, but most are regulars – they have little option for other, more expensive health care. *In small towns they are like sheep* says Sister R; *our people don't have insight. Patients do not stand up for their rights*". The PHC system is like a funnel – large numbers of patients who need to be managed at the primary level (first contact) - and referred as necessary to the secondary and tertiary levels of care; but the system cannot cope.

Sometimes, Sister R says, the nurses are fearful of diagnosing and prescribing, especially when patients have multiple or complex health problems. *We use broad spectrum antibiotics – we don't talk about narrow spectrum antibiotics*. Training does make a difference, but not all the nurses have completed the course in primary health care [clinical diagnosis and treatment at primary level]. Some nurses join the primary health care clinics having just completed their basic training, or having only had hospital experience, and are ill-prepared to take on the challenges of working independently in the primary setting.

Despite the challenges, the nurses are committed to the patients and their work. Sister R obviously loves the work: *The thing about primary health care is that you have to enjoy it – if you don't you won't last. You have to do it with love.*

On day two I join Sister T. She manages the antenatal clinic before seeing the patients with general problems. Our first patient is a teenager who is 32 weeks pregnant, accompanied by her mother. She is doing well. She will return to school until the next appointment in four weeks.

The next pregnant woman is HIV positive, on HAART, has raised blood pressure and is complaining of headache. The foetal heart is faint, but regular. She is a high risk patient. Sister T is concerned. This is a difficult decision. Her patient is already on antihypertensive medication – what are her options? Should she increase the dosage? By how much? She reads through the relevant section in the antenatal guideline and in the EDL. She finally decides that it is permissible to increase the dosage of antihypertensive medication, and proceeds to do this and advise the patient about her activities and medication. Sister T makes frequent use of her guideline throughout the day.

A 32 year old woman enters the consulting room; she has four children, and is pregnant again. Terminations are routinely offered to women if less than weeks 12 weeks gestation when the pregnancy is confirmed. This woman has opted not to terminate. She has agreed to have an HIV test and been counselled. Her test is positive, and blood is then taken for CD4 count. The room has insufficient light and the examination lights are not functional, so Sister T takes the patient to another room to conduct the physical examination, which in turn disrupts the other nurse's consultation. The examination complete, Sister T and the patient return to our consulting room, and Sister T asks about the patient's family and social circumstances. This patient has multiple social problems, very little emotional or financial support. Three of the four children say with the patient's aunt. The father of her unborn child works in the mines and visits at weekends. Sister T works through these as much as she can, but there is very little she can do. No guidelines help a nurse to manage and support patients whose socio-economic problems impact so greatly on their physical and emotional health.

My presence in the consulting room appears to be anxiety provoking for Sister T – I have a sense that she thinks I am 'watching' rather than observing. I have tried to reassure her of my reasons for being at the clinic. Sister T is doing the PHC training through the distance option in the Free State. With family responsibilities, she finds it difficult to keep up with the after-hours studying. Training for nurses in primary care is offered through a variety of courses – but most are vertical in nature – i.e. training on a specific condition or set of diseases – e.g. TB training, ARV training, immunisation update etc. No formal training is offered on the use of the EDL.

A young boy and his mother arrive. He is complaining of a cough, and is writing exams, so does not want to miss school. Sister T diagnoses a cold but has no cough mixture or decongestants in stock, so advises the mother to get her son to gargle with warm water. I reflect on the traditional remedies that I grew up with in my own home, and wonder how many of these would be considered acceptable in today's sophisticated medical world – yet more and more, nurses at primary care level are having to resort to prescribing the traditional remedies.

I move to the last consulting room – where Sister D is seeing a male patient who has migrated from Mphumalanga to work on the farm in the area. She examines him, asks about his HIV status and counsels him about safe sex practice. This patient is on an antihypertensive drug which is out of stock. Patients are therefore being provided with an alternative medication, and will be swapped back when the new stocks arrive. This is annoying and confusing for the patients, whose only alternative is to buy the medication, which is not an option for most.

The staff in this clinic know one another well, and depend on one another to manage the patient load and the associated social and economic problem of the communities. With very little consultation or referral options, they consult one another, do the best they can for their patients, and trust that they will make a difference. What keeps these nurses going? Sister R captures at least one of the motivating factors: it is the patient who comes back and says: "*Hey Sister R – I feel better – you really helped me*".

Clinic C

Clinic C is situated just off a major road in a large township in the northern part of the province. The large sprawling township comprises mainly brick structured houses. There are few work opportunities, as the area is in the centre of a farming district, with some mining operations. The town which it borders is one of a number of towns in the province which service the farming community and mining industry. The recession has hit hard. In the town itself, businesses are boarded up, shelves in the supermarkets are depleted, and I notice many people wandering aimlessly around the township as I drive through.

On my first day, I arrive in time to join the staff for their regular morning meeting. I am introduced, and I explain the purpose of my visit. Sister B, the Clinic manager, shows me around the facility. This is a large clinic, which acts as a referral site for ARV treatment. The facility offers a 24-hour service and has a maternity section. It also is a site in which nurses, who have been trained to use the STRETCH[15] (Fairall, et al., 2007) guidelines, are able to initiate antiretroviral treatment for patients with uncomplicated HIV. The clinic is approximately two kilometres from the local secondary hospital. Although this is convenient for urgent referral, it also creates problems as patients often do not attend the 'correct' facility. A strict referral system operates in this area. Patients must be seen at their local first level PHC clinic, referred to this clinic, and from there to the hospital if necessary. Although the referral hospital is relatively close to the clinic – there is no transport provided except in cases of emergency and patients must pay for their transport, which may mean that the patient does not attend the hospital as the cost of transport is unaffordable. The clinic is continually busy. Patients arrive from early morning, and are initially seen by the nurses in the 'observations room', where they have their vital signs (temperature, blood pressure etc.) measured and recorded. Those who are attending for repeat of medication and whose health status is satisfactory and stable are allocated to the 'fast line'. High patient loads, inconsistent supply of essential medications, staff shortages, non-adherence of patients with chronic disease conditions, including HIV, are just some of the issues with which the clinic staff has to cope.

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[15] **S**treamlining **T**asks and **R**oles to **E**xpand **T**reatment and **C**are for **H**IV: A cluster randomized controlled trial of an educational and organisational intervention to expand antiretroviral treatment access in the public-sector primary care clinics in South Africa: the STRETCH trial, currently being conducted in the Free State Province.

The graves of the Free State - the increase due to HIV epidemic has caused pressure on the available ground

I join Sister S, an experienced CNP who has been working in this clinic for six years, but has worked in the area for many years. She takes me to the consulting room, and then fetches her own supply of books, guidelines and forms, as she says they will disappear if she does not lock them away at the end of the day. The consulting room, though small, is adequate and has a screened area for physical examination. There are a variety of guidelines and protocols on the walls, and the standard ones [EDL, HIV and STI and PALSA PLUS] on the desk.

Sister S has been trained to initiate ARVs in uncomplicated patients who require these (STRETCH protocol). The protocol for this has been carefully constructed and this clinic forms part of a trial to establish the safety of prescribing of ARVs by nurses, and the health outcomes for the patients. Sister S is quite comfortable with this, and feels that it is important for nurses to prescribe ARVs as it enables patients to have increased access to these lifesaving drugs.

The first patient we see is a woman who has been referred for initiation onto ARVs. She has completed the drug readiness training.[16] Sister S confirms that she is not pregnant and is not taking any traditional medicines. Consulting the guideline, Sister S works through the requirements for initiation of the drugs, completing the relevant forms. She assesses the patient to be physically ready and proceeds to explain to her how the drugs work, the routine of taking them and the importance of adherence. She emphasises the side effects of which the patient must be aware and when to report these. The patient is then sent to the pharmacy to collect her medication. She will return later in order for Sister S to explain how to use the medication.

Sister S has created a chart onto which a sample of each of the drugs used for ARV management has been affixed. She says that the shape, size and colour of a particular drug will change, depending on the current pharmaceutical provider – and patients get confused. The chart makes it easier for her to explain the regime to her patients.

The patient is given a form to record each time she takes her medication. On her next appointment, this form will be checked against the number of tablets left in the patient's current

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[16] Drug readiness training typically comprises three sessions which the HIV positive patient who has reached the stage of illness which requires ART must attend (preferably with his/her treatment buddy) prior to commencing ART. Topics include an explanation of the drug action, side effects and how to manage them, adherence, lifestyle and behaviour changes that may be needed.

supply. The patient leaves the room and Sister S completes all the required records, some of which are related to the STRETCH trial, most however are required by the health authorities.

The next patient is also is attending the clinic to commence ART. He has hypertension however, and therefore cannot be treated by a nurse (guideline protocol) and will be referred to the ART clinic at the local hospital. Sister S still has to complete forms, make copies of the patient's records to send to the hospital, as he will be referred back to the clinic for follow-up.

The patient comments to me *hierdie HIV is kwaai* [this HIV is fierce]. He blames his girlfriend for contracting the disease, and Sister S explains to him that he has probably been HIV positive for some time, although he had tested for the first time the previous week, as he had presented with symptoms.

The morning continues. There is a steady stream of patients who enter the consulting room. Each person is HIV positive, and having been referred by his/her local clinic to this STRETCH clinic for initiation of ART. Each patient is assessed, and if uncomplicated, Sister S proceeds to prescribe the ARVs and explain the drug regime to the patient. If the patient has a history of TB or other severe opportunistic infection, he/she is referred to the hospital, but will return for follow-up. More forms will be completed.

Sister S only occasionally refers to a guideline. She is an experienced nurse who knows what to do with respect to ARV management. Although she does not use the guidelines with every patient, she says they are useful, but she finds an HIV management guideline issued by an NGO working in the field of HIV more useful than the guidelines issued by the Department of Health. For children, the IMCI guidelines have *made a big difference* This guidelines enables the nurse to *go deeper*; the guidelines also help her to minimise the chances of *missing something* which could have deleterious effects when the child is back home. For this nurse, the guidelines available to her are there as a backup, providing her with a sense of security and a safety net.

ARV treatment and care is time consuming. Each patient who is initiated requires about 45 minutes with the nurse. By lunchtime, Sister S is tired. She says that she and other staff members feel burnt out – the patient load is large, and the enormous social and economic needs of the community affect everyone working at the clinic.

On day two I arrive at the clinic. It is a cold morning, and the clinic is quiet, but already the first group of people are sitting in the waiting room, waiting to been seen by the observations room team, who will record the necessary observations and do the routine tests prior to moving into the line for consultation with the clinic Sisters. Sister B, whom I will be joining today, is out for a few minutes, so I sit and wait and observe. The activities in this clinic are a mix of routine while waiting for the unexpected. Emergencies are seen as they arrive, which can disrupt the flow and increase the waiting time for the regulars. Pharmacists struggle to cope with the issuing of medicines, especially when stock is limited or unavailable.

Sister B has arrived and we move to her consulting room. On the wall are TB, hypertension and Type II diabetes guidelines in poster format. Infectious and communicable disease and chronic disease management form a large part of the everyday case load. Our first patient is a young woman recently initiated onto the ARV regimen, and is returning for her second weekly checkups. Sister B checks the patient's blood results and explains to the patient the importance of this test [ALT]. She then counts the number of pills left in each of the patient's pill containers. This is done to at every visit check the patient's adherence to ARVs. There is a discrepancy between the number left in the container and the patient's record of adherence. An animated discussion follows about the medication and how the patient is taking her drugs. Sister B emphasises the important of taking the drugs correctly. Sister B is concerned about the patient's adherence, and will check this at next week's visit.

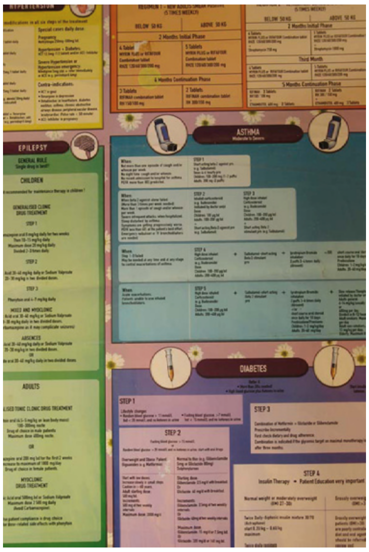
Our next patient has been referred from the local clinic for follow-up. Patients who have been stabilised on their ARV medication are 'down referred' to their local clinics, and followed up at clinic C [ARV clinic] every six months. The local clinic is required to monitor the patient's adherence, do the required blood tests (for CD4 count, ALT etc. as required in the guidelines). This patient has arrived without the necessary test results, and it is clear to Sister B that she has not been managed correctly. She phones the clinic and speaks to the nurse, obviously annoyed. *Ek gaan jou slaan* (I am going to hit you), she says to the nurse on the other end of the telephone. She explains her annoyance to me. The staff at this clinic work hard to get the patients on ARVs into a regular routine of adherence, and they find that when patients are referred back to their local clinics for management, the clinic staff do not comply with the routine care requirements, making it difficult to assess the patients' adherence to treatment. The issue is regularly addressed at district meetings, but the problems continue.

Patients need constant encouragement and information. This patient is not taking contraception, denies having a regular partner, but asks Sister B whether she must use condoms. Sister B explains about the risk of re-infection. As Sister B continues to discuss issues of finances, home life and employment, the woman bursts into tears, and tells us that her teenage daughter is pregnant and has dropped out of school, she has very little support from her former partner and it is evident that this patient needs assessment for depression and possible social assistance. Guidelines do not help for this type of situation, and it is only the experienced nurse who will be able to explore below the surface of the patient's symptoms to uncover the 'real' issues.

Sister B is a nurse who sees and cares beyond the limits of a primary health care clinic. She tells me about the young people in the area, with Matric exemption (a university entrance requirement), who do not have the financial means to further their education and do not know where to go for help. She has assisted a number of school leavers to access further education, because of her own passion about education. She proudly tells me of one such person who is now in third year of a medical degree.

Another woman on ARVs enters the consulting room. She is doing well on her medication, but her husband doesn't know about her status or her treatment. The woman is sure that he is HIV positive, but he has not been tested. Both were heavy drinkers, but since starting her medication she has stopped, but he continues to abuse alcohol. They have had no intimate relationships for some time. How does a nurse deal with this type of situation in a busy clinic? Time for counselling is limited, and referrals to social support services hampered by insufficient resources.

Yet this woman trusts Sister B enough to share her deep personal problems with her. I can see that Sister B wants to help this woman to deal with her social and home circumstances – but how?



Protocols govern the life of the clinic nurse

Our next patient commenced her ARV treatment a week ago. This is her first follow-up visit. She has a rash which Sister B checks. The woman has relocated from the Eastern Cape, and has very limited support in the community. She has struggled with adherence, but has managed to stop using alcohol. She and her husband are both HIV positive, but he has not yet commenced ARVs. The woman is diagnosed with a STI, and Sister B does not have a copy of the new STI guideline on her desk, so phones to the reception office to ask for this. The new protocol allows for expanded prescribing powers for CNPs at primary care level, so this patient will not have to be referred to a doctor. Sister B explains the treatment is important for her and her partner, condom use and the risk of reinfection. Education of the patient is a critical aspect of every consultation, and the information needs regular repetition.

Social problems add to the complexity of almost every patient's health status and treatment needs. A young woman and her family – husband and two children - have recently arrived from a town about 60 kilometres from the clinic. They fled their home town because of the stigma and discrimination of being HIV positive. Both partners in the marriage have had extramarital affairs. She is taking ARVs, her husband not yet requiring the drugs. She has occasional casual employment – known as 'piece jobs'; her husband is unemployed; they stay in an abandoned church with no ablution facilities and the only source of income is the grant she obtains for her children. She is desperate, and as Sister B talks to her, the tears flow down her cheeks. She does not know what to do and where to go for help. She feels down, and probably meets the clinical criteria for depression, but is not formally assessed by Sister B. Sister B phones the Social Services office for advice, but receives little. They give her an appointment date. She decides to refer the woman to the psychologist who visits the clinic monthly for psychological management, and provides what support she can to the patient. I can see that this patient has affected Sister B deeply. She turns to me and says – *do you know where they stay – I went to see the place the other day – it is dreadful – the woman and her children are at risk. I will take you there later*. And indeed she does – and the place is as described. I reflect on the usefulness of guidelines for nurses in such a situations. What support do the nurses get?

After the complexities and challenges presented by the last few patients, it is a relief to see the next patient, a male who has been taking ARVs since 2006, and is clinically well, having protected sex and has stopped drinking; but everything is *not really* going well – his wife has died in the preceding six months and his girlfriend is also HIV positive. He is unemployed and needing food parcels in order to take his medication correctly. Sister B then discovers that the down referral[17] clinic has not monitored the patients CD4 blood levels as required and he is behind in the CD4 checks. She is furious – apparently the clinic staff is reluctant to draw patient bloods – as they *don't do our filthy work*. She explains to the patient what needs to happen and manages as best she can. She explains to me that she **could** do the necessary bloods at the clinic – but that is not going to solve the problem of the down referral clinics. This patient will have to go back to the local clinic for the blood monitoring.

The ARV patients, who get priority with the 'ARV nurse', are finished for the day. Our next patient is a grandmother with a child on her back, who is complaining of pain down her right leg. Her ankle and hands are swollen and she has been coughing for more than two weeks. I know there is a clear protocol for managing cough in the guidelines – according to the guideline, a patient who have been coughing for more than two weeks must have TB excluded. Will Sister B do this? She does not use the guidelines, but decides to follow the protocol and refers the patient to the TB Sister for the necessary sputum tests. TB is a problem, she tells me. Patients have been 'found out' – trying to access the grant which is provided to TB patients who cannot work. Patients have tried various 'tricks' such as selling sputum. The TB Sisters are very watchful for any irregularities.

Our last patient is 'MJ', a young girl of 13 in grade 6. She was born HIV positive and is on ARVs. She is a bright teenager who knows about her medication and how to take the drugs. She is complaining of a skin rash. Sister B consults the PALSA PLUS guidelines – which have photos of the typical skin rashes that are seen in primary care. She asks MJ about her menstrual cycle and if she has a boyfriend, to which there is a shy negative reply. As she counts tablets with MJ, she reminds her of the importance of safe sex when she does have a boyfriend, at which the teenager blushes.

The day is drawing to a close, and there is a trickle of patients waiting to be seen. Sister T and I talk about her life as a clinic operational manager and clinician. She believes in creating an empowering environment for her staff and the patients. She takes me to the HIV support group, who are meeting. Sister T has been very involved since the formation of the group, and they have a choir, are doing their own fundraising and she puts newly diagnosed patients in touch with

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[17] Down referral refers to the primary health clinics which refer patients who require ARVs to the main clinic for initiation of therapy. After six months, if stable, patients return 'referred down' to the local PHC clinic for follow up, thereafter attending the main clinic 6-monthly or when new symptoms or complications present.

them and they provide information and support to them. She asks them to sing – and they don't need a second invitation. I am treated to a variety of songs and dances– ranging from semi-gospel to those on HIV which have been created by the group. I am struck by the beauty and wonderful voice of a 19-year old HIV positive woman who leads the singing, and wonder whether in different circumstances – would I be listening to an emerging opera singer?

I arrive a little late the next day, and the clinic is in full swing. I am allocated to Mr J, a young nurse who has been working in primary care only a short time. Our first patient is here for a routine follow-up of his HIV status and repeat of ARVs. The pill count doesn't tally with the patient's record. The patient says that the pharmacy keeps adding more tablets. After some discussion, Mr J decides to keep all the extra medication, and prescribes medication for the next month.

A middle aged woman, diabetic and hypertensive, who is well known to Mr J enters the room. Today she complains about the gastric pains and vomiting. Mr J examines her briefly, says this is not a new complaint. He decides to focus on helping her to manage her blood pressure and sugar levels. There are no pain killers in stock, so antispasmodics are the only other option. He sends the patient to the observation room to be monitored for an hour, after which he will make a decision about referral.

Patients know the routine. They collect their folders, go to the observation room and then wait outside the consulting rooms. Today the doctor will see patients who have been referred during the week.

A patient arrives – he is scheduled to be commenced on ARVs. Mr J goes to collect the register and all the necessary forms. *Niemand will dit doen nie. Almal is bang – doen* ***jy*** *dit, doen* ***jy*** *dit* (no one wants to do this – everyone is scared – you must do it) he exclaims as he leaves the room. It seems that there is still a level of uncertainty with respect to certain conditions. Mr J confirms my opinion when he says that some nurses just avoid certain patients, and show definite preference for others. He is of the opinion that the reason for this is that a nurse may have made a mistake in diagnosis or treatment, and may be anxious about repeating the same mistake.

What's so nice about PHC is that when you come in, you don't know what's waiting for you. In the wards there is a set routine, which for Mr J was unstimulating. There is no differentiation of patients – even patients with mental health problems are managed by the PHC nurses. *If you panic* he says, *you just don't know what to do. You need to stand back and think*.

Reflections on my observations in the three clinics

Working as a PHC nurse is a constant challenge – the 'not knowing' as every patient who enters the consulting room has a different set of symptoms and complaints. Even though the patient may be familiar, the symptoms are new. How does the nurse make clinical management decisions? Primary care clinics such as this have no supporting investigative options such as X-Rays or ECG machines. It is evident that the PHC nurse has to dig deep within herself, particularly when faced with a set of unfamiliar or confusing symptoms. The clinics, and the clinic nurses, are for many patients the only access to any kind of health and social assistance. The clinic nurses carry heavy emotional burdens, even if the day to day work is routine. The burden of care is 'hidden beneath the obvious' - perhaps this is really what you see is **not** what you get.

Guidelines are just that – guidelines – they can never deal with everything that a practitioner needs in a consultation. So much depends on the practitioner's ability to integrate the symptoms as verbally described, the physical assessment, her knowledge and experience in order to make a holistic assessment of the patient's conditions. How do nurses deal with the limitations of their knowledge? Guidelines are useful tools to guide the nurse through a myriad of symptoms and complaints. Familiarity and experience contribute to a sense of "knowing" and this in turn reduces her anxiety and enables the practitioner to function effectively.

I wonder if there isn't always an underlying anxiety – would the doctors with their greater knowledge and training have done things differently? What is it that makes doctors appear to be so confident in their diagnosis and treatment? Nurses are not 'free' to manage patients in their own unique way, a privilege which is more acceptable for other health professionals. Doubt in any aspect of a diagnosis compounds the nurse's anxiety – there is a sense of 'not being sure'. One mechanism is to bring the patient back for review. This is an entirely legitimate management decision when the practitioner is faced with a complex clinical problem, but do nurses do this more frequently than other health professionals? If so why?

Nurses' anxiety may be relieved by the checking of guidelines, consulting with more experiences colleague and referral to the doctor. This could be explained in terms of Menzies Lyth's socially structured mechanisms of defence – reducing the weight of responsibility by checks and counter checks, delegation to superiors and managing the emotional pain of working with patients by denial – which is observed as the strong coping mechanisms that the nurse demonstrates in their day to day work. They cannot allow things to get them down.

Nurses are governed by guidelines, protocols, records and report forms. We seem to have re-constructed nursing in terms of the forms we complete and the records we keep. It is almost as if 'if you didn't fill in the form, you didn't do it'. This may be because nurses are not trained in the writing of concise logical case notes and are therefore seen as poor report writers. Writing of comprehensive reports has been replaced by forms which need to be completed. It really is a case of protocol-based care (Rycroft-Malone, Fontenla, Seers, & Bick, 2009). Forms of all types, in the pursuit of efficiency, rule the lives of health care workers, and in particular nurses. It is not that records are not important, they are critical to the efficient operation of a primary health service, as they inform the planning, ordering of equipment, medication and human resource allocation. This could be linked to the structural defence described by Menzies Lyth (1970) as ritual task performance. So much of the PHC nurse's time is spent performing the rituals and tasks of reporting and completing paper work. This may also be a mechanism for minimising blame and spreading responsibility.

For Menzies Lyth, the role of the nurse is idealised which reduces their anxiety; thus they perhaps cannot tell their stories of pain and grief, as to do this may open them to recognising that they may need support.

Findings from the focus groups

In each clinic I conducted a focus group with the available staff. Creating space for a group discussion in a busy clinic day is difficult, and despite the groups being scheduled for quieter periods, it was impossible to ensure that everyone would be able to attend, or stay for the duration of the focus group. As the focus group facilitator, I had to cope with interruptions, and maintain the focus of the discussion.

All the nurses in clinics A and B participated in the focus groups. In clinic C all but two of the nurses on duty participated. In this clinic the manager and a nurse were attending to emergency admissions during this period. The questions which were used for each focus group are listed in table 8.3:

Table 8.3 Questions used for focus groups

Focus group questions
• What do you enjoy about working the primary health care setting?
• What are the main challenges that you as a primary health care nurse face?
• What guidelines do you have available to you in the clinic/health facility?
• Which do you find are the most useful?
• In what way are they useful/helpful?
• Are there guidelines that are not often used?
• What training is offered in using new/updated guidelines?
• Anything else that you haven't yet mentioned that you would like to say?

Three broad themes emerged from the analysis of the focus groups: **more than a nurse; guidelines – enabling, containing or oppressing?** and **PHC: patients, practitioners and practice.**

More than a nurse

The nurse in the PHC clinic is *more than a nurse.*[18] With an extended scope of practice, she *does the doctor's work* and this places a value on her as a nurse. She is exposed to a variety of patients, diseases and clinical conditions, and every day she gains more experience. In primary care, there is no one else, and so the nurse, unlike her hospital colleague, who will say "*I'm waiting for the doctor to give it*, just has to *get on and do it*" (FG C).[19] In primary care the PHC nurse[20] diagnoses and treats patients who, in a hospital setting, would be managed by the doctor, *all those things are actually under the doctor's EDL* (FG C).

The PHC nurse likes to be independent - feel as if she is able to work without relying on the doctor. She has had more training than a hospital nurse, and is therefore able to practice

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[18] All text in italics is a direct quotation from a focus group participant.

[19] FG = focus group, coded A, B and C.

[20] In this chapter the terms PHC nurse is used for all categories of nurse to minimise confusing terminology.

independently. There is also a system of ongoing training, in particular with respect to the implementation of new or updated guidelines, *because you work at your own here, on your own* (FG C). PHC nurses see themselves as more up to date in knowledge and skills, as having to use their own judgment and can therefore *most of the time manage without the doctor* (FG C).

The nurse knows more than just the patient's health status *because you know the social problem of this patient, you know everything about this patient* (FG C). She is *everything to everybody* (FG A) – a nurse, a social worker, a doctor, a dietician, counsellor, pharmacist and a policeman – and sometimes even a minister: *If you have a problem, you go to a nurse* (FG C). A participant describes her role: *those people are taking you as your mother, as a mother, as everything*. Patients come to the nurse with a health complaint, *but when you probe him, you find that this person is having a social problem* (FG B). For this nurse, *primary health care is that you're not doing only the nursing duty … you are everything.* The group agrees … *ja, everything. You are all in one,* says a participant (FG B), *you can't say I'll refer you to the social worker, because it takes time and sometimes the problem had to be solved immediately.*

She is trusted by the patients, is dependable and is most likely the first person to be contacted if there is an emergency, as explained by a nurse who runs a mobile clinic: *I will get a telephone from a farm, 'Sister, I'm ill here. Please call the ambulance' ... but they know the number (the ambulance), but they trust me.* The participant laughs and continues: (they think that*) … if I phone, the ambulance will arrive in time* (FG C).

The PHC nurse who works in the rural districts and mobile clinics may be in some way even closer to her patients, who rely on her for more than their health care. She deals with the effects of family violence and has to help the victim report this: *they are going to tell you, 'On the weekend, my husband punched me' and then, that one did this and that one ...* Helping a new mother to register a birth is part of the job: *I must go to Home Affairs ….* In emergency cases, she will drive the patient to hospital. A participant describes her involvement with her community: *every time when there's a death in the house, in the family, they phoned me at home. No matter it's 1 or 2 o'clock in the morning, they phone. 'Sister, my father is dead'. How do I feel?* (FG C). It is hard to get away from being a nurse in the community – everyone knows who she is. A male participant reflects on how difficult it is to avoid patient contact after hours: *even I go to socialise they ask, we say, Listen, I didn't come here for this thing about Nursing. I'm here to socialise, to relax myself.* Patients know about the medication shortages: *I just maybe took my wife out, we go to, maybe to go … When I arrived there, someone out of the blue asked me, …, did the medication arrive at your boss place? (FG C).*

PHC nurses feel the weight of the responsibility of being there for their patients. Being more than a nurse is satisfying, but comes with a price. It is impossible to *get away from your work*, even over weekends. There is the underlying, often unspoken fear that she cannot meet everyone's expectation of her, which makes her *feel bad* (FG A). *There's a poor communication and understanding of what you can do*, says a participant, referring to the expectations of others in the health care team.

Patients managed at primary care level are generally assumed to be suffering from minor/acute ailments or chronic manageable conditions. Seriously ill patients are referred to the secondary and tertiary level of care; therefore if a patient dies in the primary care setting, it feels wrong. This has happened more frequently with the HIV/AIDS epidemic. Caring for an increased number of patients requiring palliative care is costly. There is the pain of helplessness; the anger and disillusionment when their patients are unable access the life saving drugs that the nurses know are needed: *It's a waste of money, energy and everything, because if you have been treating this patient, you have been treating this patient and then suddenly she's dead* (door slams loudly)*, it's a pain, a pain. You feel it in yourself* (FG C). Even if a patient has been given medication, there may not have been sufficient supply due to drug interruption. The nurse feels responsible, even for this, and may even be blamed for the outcome.

> Participant 1: *The patient was here, his blood pressure was high, you gave Adalat (*antihypertensive medication*), she went to the pharmacist; she got only half of her medication. She goes home, she's dead. Management are aware of all these problems that we are saying now. Now say for example, the patient was now here on Monday, nè?*
>
> Participant 2: *Mm, mm*
>
> Participant 1: *and he died now on Wednesday… The first thing they're going to say is that Sister P1 saw this patient and you killed this patient.* (FG C)

Another participant expresses her frustration and desperation at, for her, unnecessary loss of life:

> Participant: *And then, you know what? The other, the other, last year, it was September, I was having two clients of TB. They were supposed to get ARV, because their CD4 counts were a little bit low… So I made it a point that before I go for leave (*vacation*), I want to see these patients getting ARVs, before I could even think of going to, for leave, they were dead, both of them. I cried. I remember I was in Hill Street, I was telling the supervisor that, I cried. I said to her, 'I'm going to leave this job, because if, if you, you think you are healing a patient and then the patient dies'.*

Although the PHC nurse provides a health service without which the majority South Africans would have very limited access to essential health care, she often feels unappreciated and undervalued by the system which does not seem to recognise her contribution. The caring of the PHC nurse is evident in her undocumented actions - the extra trip that she makes in her own vehicle to ensure that the patient gets to the hospital, the food parcels that she sources, the phone calls that she makes on behalf of the patients, using her own resources, *the small money that I'm getting, I'm using again for the patients … I don't have a subsidy for my cell phone* (FG C).

Guidelines – enabling, containing or oppressing?

For the nurse who works on her own or who has limited opportunity to consult colleagues and specialists, the guidelines become her consultant, her referral point, her second opinion. There is no one to ask. The guideline has the advantage of being always available. It is not, however, the panacea – because it cannot answer all the questions, is too restrictive at times, is time-consuming, particularly if the nurse is unfamiliar with the layout and content. If the nurse is familiar with a guideline – it is there for her when she needs it: *because you get used to knowing them, you'll ... them for week after week, you know, "For this, I know it's this treatment", but if you feel, "I'm not sure, let me check", then you go and check* (FG B).

Guidelines also validate the nurse's competence and allay concerns that she may have missed something or managed the patient incorrectly. PHC nurses see themselves as *making the doctor's job easy*, as they do everything that they are able to do before referral, and the test results and relevant paperwork are there for the doctor. *I think nurses at the clinic, they do everything before, ja, when you send to the doctor, it will be an easy job, because she will be asked everything, everything will be there* (FG A). Does this add to anxiety - if the nurse hasn't done what is necessary prior to referral? Guidelines remind the nurse **when** to refer the patient to the doctor or other health professional, and also **what** to do before referring the patient. This is considered as important- as explained by this participant (FG C): … *maybe there's this patient, I have to refer this patient and before I have to refer, I must put drip in. I know that this patient is supposed to be transferred and I have to put up a drip.* Guidelines provide legitimacy and validation. In this focus group extract the nurse explains how she followed the IMCI guidelines and the response she received from the hospital doctor to whom she referred the child:

> Participant 1: *It (IMCI) has everything you need … you can be able to diagnose and give treatment with it…*
>
> Participant 2: *And then you know exactly how to treat the baby … in case of an emergency, or if not an emergency*
>
> Participant 3: *And it works so well that you treat the patient. They say you must get this treatment first before you refer … and I've given it, the patient is waiting for the ambulance, they go to the hospital - by the time they get to casualty, the baby's okay. Then the doctor is now saying, "Why did they send us this baby?" This baby is alright. But you ... just got IMCI guideline* (FG C).

I ask what the doctors' response is to this and similar incidents which the group have recounted: … *they don't even know IMCI guidelines … and some of them still use that white medication which stops diarrhoea (gives name of medicine), whereas we are no longer using it.* It is evident that the participants are pleased that they are the practitioners who are up to date, providing the correct treatment.

Guidelines can reduce the anxiety of the nurse in primary care. They are particularly useful when the nurse has to deal with the uncommon, different - *really helps when you haven't seen something for a while (FG C: P1)* - or complicated condition: … *you know, because sometimes you, take for example, for a long time, you didn't get this type of complication … and you forgot it. You remember something of this and this, but it's nice ... you go in there and you look and see, Okay, what must be done next* (FG C: P3).

Guidelines are useful if a nurse 'has not been trained'. Training is considered important – it is another means of legitimisation of the nurse. The guideline reduces anxiety about 'not knowing'. Referring to the new PALSA guideline, a participant comments: *and I don't find the solution in the EDL, then what can we do best for the patient … It's what makes it easy …* The group reflect on the anxiety that being 'lost' and 'losing' causes them.

> Participant: *that's something I've lost, you become anxious and frustrated. You don't become healthy if you have lost something ... a certain patient.*

> Researcher: What happens when you feel like that?
>
> Participant: *You feel angry to yourself, why, why didn't I look at that point? Why did I miss that?*
>
> Participant 2: *Like sometimes when you've missed like, there was that other, do you remember that lady who was like?*
>
> Participant: *Sometimes you'll see the patient, then you'll miss something. If you had the chance, you usually use, make use of the DOT*[21] *supporter, so ... to get there back up and say: "This is the patient, can you please ask that patient to come today so that I can", then you'll get the chance to say, "You know what? There's something that I missed, what about this and this and this?" Or if you feel that, "I know this thing, but I have to consult one of my books about this", then we can tell the patient, "Come tomorrow", then that patient, when he comes, then you know best about that ...* (FG B). The guidelines complete the gaps in knowledge.

Guidelines are not always useful or used, and the nurse cannot always find what she needs from a guideline, and then faces the option - does she consult? If so, with whom? Her colleague – available but may not have the answer; the doctor – not always available when needed, or should just she make her decision based on her clinical judgment. The nurse who is confident and experienced is prepared to deviate from the guideline. *There is a basic range of medication what you use for a cold, for a running tummy, for a thing, ja, but sometimes you get something different, ja, and then you've got to say, "Hey, but what now? What must I do now?" And then you go and look for it … or you ask and then we make our own combinations of…* (laughter in the group) (FG A).

Guidelines may also complicate the CNP's practice, as the guidelines for certain patients or conditions would, if adhered to, extend the time available that the CNP has for each patient. This in turn generates anger in the waiting patients. In clinic C:

> Participant 1: *And you do all the examinations, you have to do a Pap smear, you have to what, what, what, we don't have time for that R1: You see, it really doesn't fit, because if you are doing that with one patient, you're going to spend 45 minutes now on this one patient.* The group agrees. *The others are outside ... getting very impatient.*
>
> Participant 2: *The sisters is taking too long.*
>
> Participant 1: *Because if you have to follow everything just the way the guideline is, it's not practical.*

To cope with this dilemma, the nurses *just shortcut. You can choose what is more important … I mean, you're not going to do everything - you have to prioritise (*Participant 1).

PHC: patients, practitioners and practice

There is reward in seeing patients whose health improves after her interventions. Even if most of the patients accept her care and treatment as their due – for that is why they attend the clinic, it is the one patient who is appreciative of what she has done that makes it all worthwhile: *if you have*

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[21] DOT– Directly Observed Treatment TB programme

done something good and the patient comes, the one millionth patient come and say, 'Jong, we know you, my life has changed'. That is your salary for life. It's rewarding (FG B).

In primary care, nurses become inured to the complaints of their patients, which relate to long waiting times, medication stock problems and transport, among others. Patients may be rude and critical of the services provided and a patient who says thank you, makes her feel appreciated: *and the next one comes … being rude, Never mind, the other one appreciated m" (FG C).* This participant expresses her amazement at the patient's appreciation: *the gratefulness that you see in that face, you know. I was amazed today, I was totally amazed. That lady when I said I want to talk to her about the child, I've never seen such a thing. She was so grateful. I said, "No, that is what I'm getting paid for, to educate you, because that is the most important thing"* (FG C).

Nurse and patient relationships are complex, and the underlying tension of the patient as partner or the patient as opponent is evident:

> Participant 4: *Because some of the patients, we laugh with them, the others, they insult us, they're just laughing.*
>
> Participant 1: *We … we cry with them …*
>
> Participant 4: *Otherwise, they wanted to hit you* (FG C).

Many of the problems in patient–practitioner relationships are out of the nurse's immediate control. Ambulances which don't arrive timeously and medication shortages have caused extra stress for all staff at the clinics. The nurses feel that the patients hold them responsible for the erratic medication supply, although the reasons for the shortage are linked to budgetary constraints. The nurse is the person on the front line, and is subject to much abuse: *and somebody did not budget right, or the medicine didn't come, no - they come to you, because you are the first person they see ...* Nurses do what they can to deal with the patient's problems. This includes taking the patient to referral clinics in their private cars or government vehicles (which is against protocol). One of their greatest stresses is the 'out of stock' medication. Clinic C had been particularly badly affected earlier in the year.

> Researcher: I saw your list of out of stock medication.
>
> ALL: *Mm, ja*
>
> Participant 1: *It was worse ... it was a long the list, now it's actually very short … We were struggling and it was stress*
>
> Participant 2: *stressful*
>
> Participant 1: *Because it was all over the clinics, the people who go from their clinics and come to here … Others were fighting*

Nurses will even organise to get a prescription to enable a patient to obtain medication from a private pharmacy, but for most patients this is unaffordable: *you see and then they can't even have food on the table*.

The stress permeates work and for this participant, compromises his home and social life: *The stress is not at the workplace alone, even at home. You see, I've got a lot of stress at work. Sometimes I took my stress to my, at my workplace, at my house, it interferes with my living ... style and all those things.*

Occasionally, patients who expect and want to see a doctor, come to the clinic. This creates a dilemma for the PHC nurse, who knows that if she sends the patient to the doctor without first completing an assessment, she is likely to be seen as stupid and incompetent. Clinic B had experienced such a situation:

> Participant (Male): *(The patient) says, no, "I've got this problem, I want to see a doctor" - now I'll say to such a patient, "No, let me ... first, then I'll see the next time if it didn't work", because there's a doctor who will see as if I'm stupid referring such a case to him. So let me treat it first, then he'll come after ... feeling better, then we'll decide whether ... you should see a doctor, or what.*
>
> Participant: *But we explain to them that with us, you work with me, I treat you, then if I feel that your case, sometimes I don't have to treat you, if the case needs a doctor immediately, I'll refer you to somebody new, you don't have to go straight to the doctor, because they tell, "I won't be seen by a nurse. The person that I'll be seeing, I'd rather be seen by somebody higher", but if you explain to them nicely, they understand.*

Concluding comments

Nurses in primary care fulfil a vital role in providing first contact health care for the patients. Despite their many challenges, frustrations and disappointments, the nurses take pride in being there for their patients, going beyond what is expected of them. The nurse remains someone who is a carer, and to this role has been added that of diagnostician and health practitioner who will have to manage the variety of complaints, symptoms and crises with which her patients present, whether these be of a physical, psychosocial or spiritual nature. It is the uncertainty which generates anxiety yet this is also what challenges the nurse; indeed it is the unexpected which is satisfying, as expressed by this nurse: *each and every day when you come to work, you don't know what to expect*. She has to be clinically competent, and guidelines provide information, but do not meet all her educational and professional needs. The anxieties that the nurse lives with everyday are masked, managed and dissipated through a number of defences. The guidelines that reduce her uncertainly about 'not knowing' may also increase her anxiety if she does not follow them; she may miss a diagnosis and not treat her patient appropriately. The tension between her own knowledge and experiences and the power of the guidelines always present.

Relationships are important for the PHC nurse. She has to be able to co-operate with her colleagues, as she depends on them for support, for consultation and referral. Her ability to work with and develop constructive and collaborative relationships with her patients is equally important, as she will not be able to provide them with all that they need. Together they have to be innovative and practical in responding to the patient's health problems, thus becoming partners in promoting health.

CHAPTER NINE

DISCUSSION: CONTAINING ANXIETY OR COMPROMISING PRACTICE? NURSES, GUIDELINES AND PRIMARY CARE

"Anxiety is a fundamental part of health care;
not something we can change but something to be aware of"
(Firth-Cozens, 2002, p. 115).

In this chapter I interpret the findings of the three sub-studies, and reengage with the literature, in developing an understanding of nurses' experiences of using guidelines in a primary care context, and conclude by discussing the implications of the study.

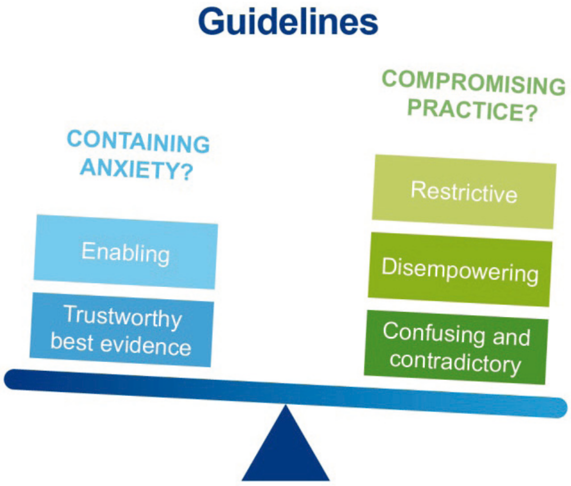

Figure 9.1 Guidelines in the balance

Introduction

In this dissertation I have explored the experiences of nurses in the primary care setting with respect to their use of guidelines for clinical decision making, drawing on the psychoanalytic work of Menzies Lyth, Hinshelwood, Skogstad, Obholzer and others as discussed in chapter four. I develop my understanding of whether guidelines contain anxiety or compromise practice. This is represented by the scale in Figure 9.1. It is of course possible that they may do both or neither; these possibilities are also considered.

Guidelines: guidance or governance?

In the initial sub-study, a secondary analysis of the nurses' responses to the introduction of the PALSA guidelines in 2003-2004, it was evident that the nurses liked the guideline format, the colourful pages and the useful key messages. The initial uptake was positive. The PALSA guidelines enabled nurses to expand their practice, particularly with respect to specific therapeutic interventions, such as for asthma management. Although this had required a special dispensation from the relevant authorities, it proved to be a useful extension of practice which has subsequently been formalised into the adult guidelines for primary care nursing practice. Nurses found that they felt more confident, as the guidelines were explicit and gave them clear direction as to when a patient would need referral to the medical practitioner; and when the guidelines were followed, and the patient responded positively to an intervention, this in turn gave them a sense of credibility and validated their role as health care providers.


[22]

These findings, however, left me with questions as to whether guidelines really played such a significant role in primary care nursing practice, or was it that nurses had not been doing a 'good enough job' and therefore needed extra guidance? Perhaps it was the support that was provided through the mechanism of small group contact in the PALSA study that had made the difference. In the initial motivation for the PALSA study, one of the concerns raised by the Department of Health in the Free State province had been the perceived poor management of respiratory conditions, despite guidelines such as the EDL, TB guidelines and others available to nurses. One of the provincial health department's concerns had been that nurses in the primary care clinics were over-prescribing antibiotics, and that improved prescribing guidelines and monitoring were needed. The PALSA RCT showed that this was not the case (Fairall, et al., 2005). I questioned the perception that nurses were perceived as needing clear guidance. Why would nurses need guidelines if other health professionals in primary care did not? This also raises the question: whose anxiety needs to be contained by the provision of guidelines at a primary level? At an organisational level, the DoH must contain the anxieties associated with its executive functions through a range of monitoring and evaluation mechanisms.

Science and certainty (guidelines) are used to regulate subjectivity and uncertainty (practitioner performance). Guidelines operate as the containers of organisational anxiety generated by the

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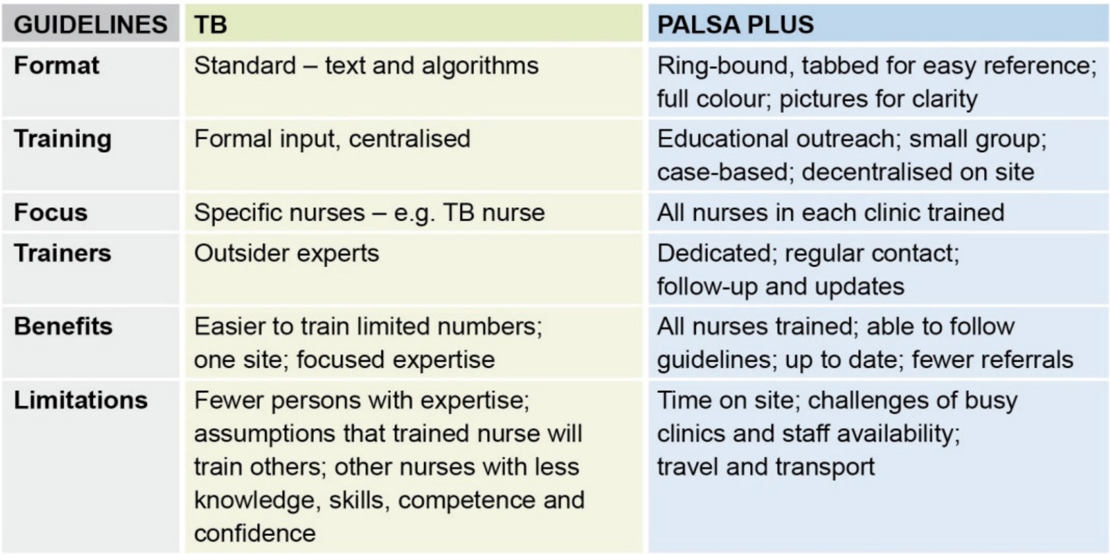
[22] As part of the PALSA training protocol, verbal and/or written permission was obtained for photographs to be used.

perceived loss of control in regulating practice at primary level. This led me to sub-study 2, in which I investigated the number, format and availability of guidelines accessible to nurses in primary care. I found that there were a variety of guidelines as described in chapter seven, spanning conditions of adults and children, maternity care, geriatric care, chronic disease management, HIV and AIDS, infectious diseases, and specialised guidelines for less common conditions. The differences in the guideline format, presentation, user-friendliness, inclusion of current best evidence for practice and training approaches have been described in sub-study 2. These are summarised in Table 9.1.

Table 9.1 Comparison of TB and PALSA PLUS guidelines



GUIDELINES	TB	PALSA PLUS
Format	Standard – text and algorithms	Ring-bound, tabbed for easy reference; full colour; pictures for clarity
Training	Formal input, centralised	Educational outreach; small group; case-based; decentralised on site
Focus	Specific nurses – e.g. TB nurse	All nurses in each clinic trained
Trainers	Outsider experts	Dedicated; regular contact; follow-up and updates
Benefits	Easier to train limited numbers; one site; focused expertise	All nurses trained; able to follow guidelines; up to date; fewer referrals
Limitations	Fewer persons with expertise; assumptions that trained nurse will train others; other nurses with less knowledge, skills, competence and confidence	Time on site; challenges of busy clinics and staff availability; travel and transport

Providers, protocols and practice

For the final phase of this study, I reengaged with primary health care nurses in the Free State (sub-study 3), doing participant observation and conducting focus groups. Nurses in the Free State province do use guidelines, but not consistently. The findings in study three indicate that nurses make clinical judgments and decisions based on experience, alternative knowledges and intuitive responses, in consultation with colleagues and guidelines. Very few guidelines were used regularly, and each nurse had her preferences for a limited number of guidelines which she found useful. Nurses used guidelines in situations in which they were uncertain and the potential for increased anxiety was present, for example: no doctor available to consult, patients who were HIV positive or suspected to be HIV positive; patients with AIDS, children and women in labour. In these examples the potential for harm from misdiagnosis or inappropriate management may be the underlying motivation. Although litigation cases in South Africa are not as common as in high income countries, with additional responsibility invariably comes increased professional risk and accountability (Young, 2009), and this too may be a factor in the nurse's use of guidelines to support her clinical decisions.

Anxiety affects the nurse's approach to her work and her patients, and impacts on her ability to make decisions and to her effective practice. The nurse who is not provided with the tools, both material and psychosocial, to manage her patient, may be overwhelmed by unconscious anxiety. When anxiety is not recognised and dealt with, the nurse may resort to a ritualised task orientation, doing what is required of her, in which she sees every patient as the same as the last, and fails to engage at a meaningful level with each individual. The anxiety may drive the nurse to consult the guidelines, so as to be sure that she is 'doing the right thing', not to be blamed and to stay in control of the situation (Collins, Block, Arnold, & Christakis, 2009). She is then able to demonstrate that she is technically competent as well as socially in control. At this point, nurses enact the projections and basic assumptions of the organisation: the nurse as competent and independent or nurse as uncertain and dependent.

Nurses who are confident about who they are as professionals and clinicians, manage the unconscious anxiety in a different manner, using guidelines as tools rather than rules. They are able to make clinical judgements based on a patient's history of illness, appropriate physical and other examinations and with regard to the patient's social context. Guidelines, for this nurse, provide a quick and easy reference for best practice and up to date information. For the nurse with less experience, confidence or training, guidelines may be followed in order to minimise the possibility of making a mistake. Regardless of knowledge or experience, however, a guideline such as the TB guideline is followed exactly. This may be due to the reporting requirements and monitoring of TB treatment. Guidelines, if introduced appropriately, trained and supported, can provide the nurse with the courage to discern not only the patient's immediate/presenting problem, but enable the nurse to go beyond what she sees to the situated problem – that of a person who attends the primary care clinic for much more than a health problem.

Guidelines may provide the best available evidence in the most accessible format, but unless they are located and grounded in the context of care, are nuanced and provide the flexibility to enable the concerned, creative nurse to explore not only the clinical encounter with her patient, but the cultural, socio-economic and political context of the community in which the patient lives, then she may continue to treat her patients without understanding what makes them sick. The nurse who is less confident, stressed and overburdened may simply follow the guideline, provide competent care for the symptom/illness, but fail to provide the comprehensive personalised care that is needed.

Anxiety and defences in nurse practitioners and the role of guidelines in containing or increasing anxiety (Figure 9.2)

In my theoretical framework, I proposed an interpretive understanding of the relationship between nurse practitioners' anxiety in the primary care context, their defences against anxiety and whether guidelines contain the anxiety or increase it, thereby compromising practice. In Figure 9.2 I suggest the relationships, from a psychoanalytic perspective, between the anxiety, defences against anxiety and guideline use by nurses in primary care.

The nurse practitioner experiences unconscious anxiety in relation to her role. The issues which may contribute to this anxiety are: an inappropriate skill mix – often she has not been adequately trained for her tasks; structural deficits – such as buildings, supplies and equipment; shortage of staff; expectations from management which may be unrealistic and even punitive; difference in knowledge bases – the caring versus curing; possible knowledge deficits; high patient load and patients with multiple health problems. Her defences against the anxiety are the use of guidelines, checking with other health professionals, blurring of roles, referral to the doctor, perhaps unnecessarily; coping by being task focused, using standardised approaches to care and moving from one department to another when the work becomes overwhelming.

When the nurse uses guidelines, these may be helpful, thus reducing anxiety, or create confusion and more anxiety if they do not meet her immediate need for knowledge and direction when treating a patient. Guidelines are not always up to date or consistent, assume a standardised presentation of disease, and may restrict treatment options. They are useful when they provide structure and a means of following an algorithm to come to the diagnosis and provide treatment options. The nurse needs to know that they are evidence-based, appropriate to the heath care setting, and she must have been trained to make best use of the guidelines.

Anxiety may have its roots in lack of adequate training, unrealistic expectations from management, knowledge deficits and roles conflicts, as outlined in the figure 9.1. In an attempt into reduce anxiety, the nurse may use the standardised approach to the patient, involving the use of guidelines. It is assumed that the patient's complaints are similar to many others, thus easily managed with the help of a guideline. This minimises the need for emotional engagement with the patient. If on the other hand, she does become interested, involved and care for the person beyond the presentation of the illness, this increases the nurse's anxiety as there is often very little she can do to deal with the patient's non-physical problems. I have reflected on this aspect of the work of the PHC nurse in previous chapters. When anxiety becomes overwhelming, often interpreted by the nurse as stress and overload, the nurse will cope by rotating departments where this is possible, or by taking on different tasks.

As the nurse experiences anxiety, she responds in a number of ways. In this study I have shown that the nurse consults guidelines, consults initially with colleagues with whom she feels safe, then with persons with more experience and/or knowledge, usually the doctor. This is usually done through a formal process of referral; to do this the nurse must be sure that she has done everything possible at her level of competence, in order that the referral will be seen as appropriate. Thus she checks and rechecks to ensure that she has not missed any symptom or treatment option.

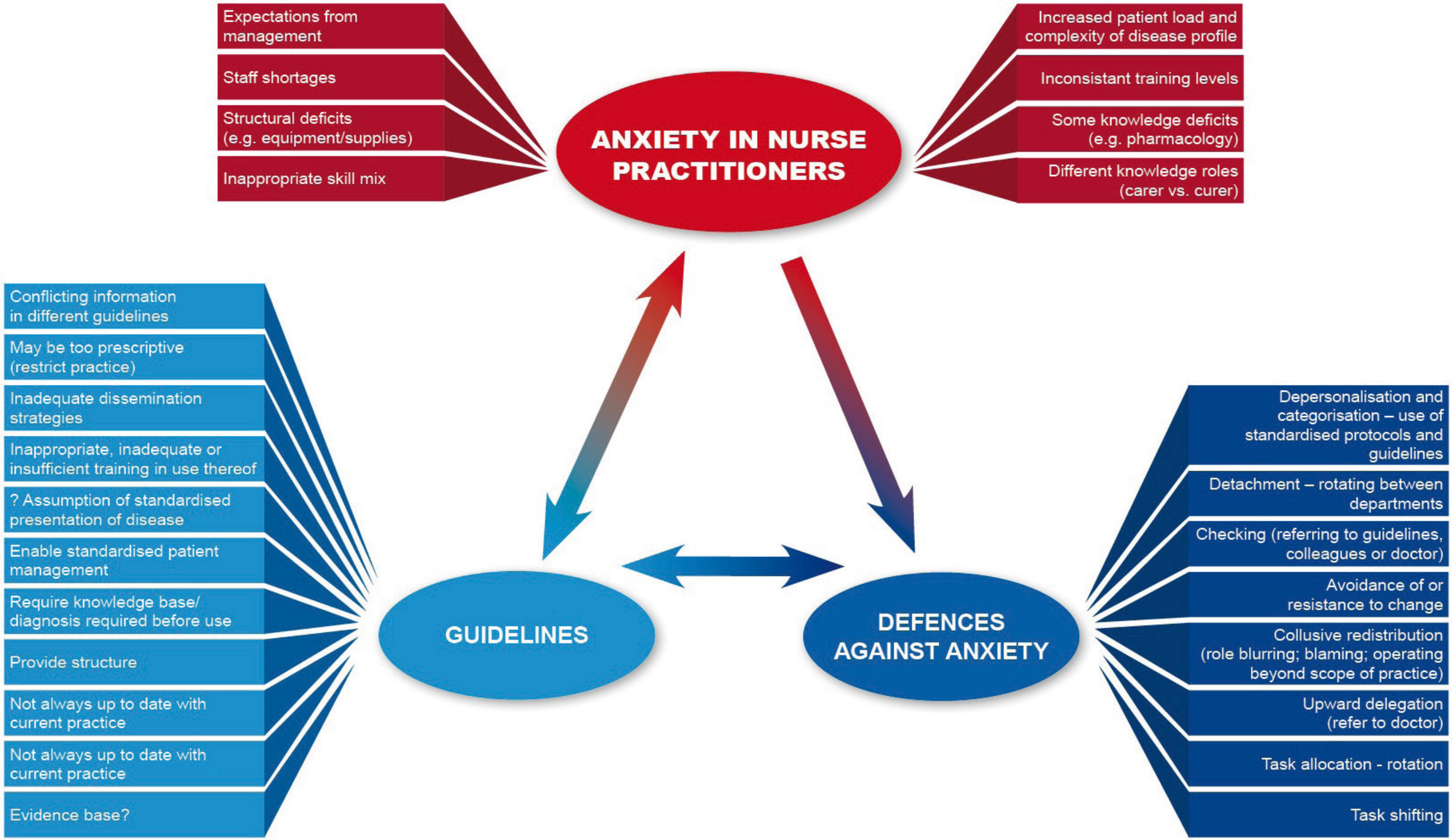


Figure 9.2 **Anxiety and defences in nurse practitioners and the role of guidelines in containing or increasing anxiety**

Causes of anxiety in nurse practitioners (red)
Nurse practitioners' defences against anxiety (deep blue)
Guidelines should reduce anxiety but may actually contribute to nurse practitioners' anxiety (light blue)

Caring, curing and co-ordination

The challenge for the nurse in primary care is to combine her traditional caring and co-ordination role (the nurse and nurse ward manager) – for which most nurses, at pre-registration level, are trained – to a role which encompasses curing, caring and co-ordination. This requires the incorporation of a new identity – that of the nurse who can diagnose, prescribe and treat in addition to her more traditional roles. This is portrayed in diagrammatic form in figure 9.3. For each nurse in the primary care setting there is the potential unconscious conflict of caring – curing and co-ordination of both.

Today's primary care nurse and nurse practitioner needs to be a ***competent clinician***, ***compassionate carer,*** and ***confident co-ordinator*** – the overlapping roles of caring, diagnosing and treating and managing.

Figure 9.3: The overlap of the competent clinician, compassionate carer and confident coordinator

What does it mean to be a competent, caring clinician, able to manage not only the patients but also the context – the clinic and the community issues which pervade the everyday operations of a primary care clinic? Parker (2004), in a study on medical nursing, stated that the medical ward is a place "where nursing makes a difference to patient outcomes, yet nurses feel that they are neither recognised nor valued for the work they do" (p. 217). In primary health care, nursing, although different in focus, setting and practice, is no less important to patient outcomes than the nursing care on the medical ward.

Guidelines, however well constructed and evidenced based, do not deal with the socio-economic determinants of health, or how to manage these. The concerned nurse has to think beyond the guideline, and take into account the context of care as well as the clinical picture of the patient's symptoms. This breadth and depth approach enables her to plan creatively for the best outcome. This is not 'one size fits all' health care, or cookbook medicine; it requires a creative, clinical thinker, able to work and make independent decisions based on all available information. For me, in the initial PALSA study, an anecdote related by a PHC nurse about how she had made the decision to prescribe an antibiotic for a farm worker, who had a severe flu-like symptoms (probably viral), but who would not be able to return to the clinic for at last another week if the condition worsened, demonstrates that so much more than the illness has to be taken into consideration each time a nurse sees a patient. For this patient, the prescription of an antibiotic probably meant that she would have recovered quickly, did not run the risk of succumbing to a secondary bacterial infection and being ill without access to health care. This nurse made a decision which was contrary to the guideline – and yet in my opinion, was the correct decision.

The nurse who has the knowledge, skills and clinical reasoning will be able to take advantage of guidelines. She will interrogate them, use them judiciously, and in doing so this will reduce anxiety as she has the tools to be able to provide appropriate care, using her clinical judgment supported by clinical guidelines. The guideline will act as a containment of anxiety for this nurse. Guidelines which control, leave no room for clinical reasoning, and are used as a mechanism to standardise and control the nurses' practice are doomed to failure. For this nurse, guidelines will compromise her practice – as she will not feel able to take decisions which would put her at risk of censure and blame, against which she would have to defend. The primary care nurse has to be able to function independently, deal with anxiety in creating for herself a support base which enables her to provide the frontline care on which so many patients depend.

The container and the contained: anxiety in nursing and the organisation

The nurse works in the context of a primary health care organisation which in turn forms part of the larger public health service. Organisational change impacts on established boundaries of practice which in turn creates both conscious stress and unconscious anxiety. James and Huffington (2004) note, with respect to the corporate business environment, that "when structures are changed, lack of clarity about tasks, roles, authority, and boundaries gives rise to uncertainty, fear, and anxiety" (p. 214). Hoggett (2006) argues that public service organisations have to deal with the projections of the state's citizens, and therefore have to manage social anxieties relating to concerns about survival. Our social defences reveal the existence of "an underlying anxiety about the world and one's place in it" (Kets de Vries, 2004, p. 193). The "social defence system comprises socially accepted (albeit unconsciously accepted) practices which support the individual's psychological defences" (Hinshelwood, 2009, p. 512). Nursing organisations and the traditional hierarchies have undergone and are continuing to undergo fundamental and transformative changes, which increases the anxiety about the place which the nurse holds in the world of health care.

Guidelines can also be viewed as the defence of the system against the possibility of its health professional not meeting its expectations. The projected anxiety onto the health care professionals is compensated for by the rationalised evidence – therefore it is assumed to be most appropriate method of treatment. The very rational approach makes it difficult for the practitioner to deviate, as this in turn would increase her anxiety – will she be blamed if she does not follow protocol and do the right thing and her patient suffers? Is this because she didn't follow the guideline? It is the uncertainty that becomes intolerable – the uncertainty of not knowing, not being sure, and the doubt of *what if*? Welsby (2002) aptly comments on the producers of guidelines who "eschew uncertainty and accordingly, attempt to minimise doubt by using reductionist techniques that seem to provide sought-after certainty" (p. 164).

The nurse therefore is in the invidious position of, for the most part, having been a student at an educational institution in which the organisational anxieties have been inculcated by the role models of teacher and clinical instructor (nurses), working in a state organisation with its own unrecognised and unresolved anxieties and providing care for patients who project their own anxieties and phantasies onto the state public service, which they perceive as being 'there for them' yet not providing what they need. The nurse in turn uses the mechanism of projection of her anxiety onto the system and the managers who represent the failure of the organisation to protect and support her. Hinshelwood (2009) reflects on this complex interplay, portraying the organisation at an unconscious level as a set of processes and defence mechanisms, each person influencing the unconscious of others.

The nurse may also use guidelines as a means of managing her patient's anxieties – the prescription is written; the patients get shown where the information is in the book, therefore there is a legitimacy created which ameliorates the anxiety about not being a good practitioner.

For the primary care nurse boundaries have changed, and "changing boundaries create the widespread experience of anxiety" (James & Huffington, 2004, p. 212). The changing boundaries are particularly evident in the upscaling of the provision of ARVs to HIV positive patients – no longer the specialty level and doctor driven, ARV provision and monitoring is being devolved to the primary care nurse (with guidelines being the container of anxiety), yet still with strict controls with respect to the monitoring and reporting systems. The contradictory expectations between caring, control (monitoring) and combatant (against the epidemics of TB and HIV) roles contribute to the anxiety and disorganisation at individual and organisational levels (Van der Walt & Swartz, 1999).

The nature of primary care management of HIV positive patients in South Africa today plays out in the context of poverty, inadequate resource allocation and barriers to accessing ARVs at the appropriate point in the course of the disease. The primary care setting, which should be first contact care which treats effectively, prevents or minimises the risk of deterioration or complications of an illness and where necessary refers promptly and effectively to secondary and tertiary care, is also the setting in which patients are managed in the terminal stages of illness. Obholzer (2005) refers to the importance of setting and agency in the management of bereavement and loss, and questions whether organisations set up systems for containing the anxieties emanating from their work with loss and pain. There are questions to be asked in the South African context, however, to the primary health care organisation, which may not have anticipated the level of pain, loss and bereavement in everyday practice. Is this recognised? Have the risks to staff and patients been assessed and are plans in place to deal with these? Are structures in place to contain the anxiety of the nurses who provide the front line care? What forms of containment are there? Guidelines will not suffice.

There are parallels that can be drawn from Menzies Lyth's hospital study. Containment, for Menzies Lyth, was a central organising principle in her explication of how nurses, in the hospital context, defend against anxiety (Menzies Lyth, 1970). In a 2002 interview with Menzies Lyth (Lawlor & Webb, 2009), she is quoted as stating that "they (the readers of her hospital study) have just focused on the aspects of primitive anxieties and the unconscious processes which are projected all over the place, without really paying attention to . . . the broader structural and management context" (p. 96). Lawlor and Webb (2009) clarify organisational containment as located in a systems perspective on organisations, within which the roles, structures, boundaries and even the physical environment contribute to the containment of anxiety.

The purpose for guideline development and implementation has been well documented in the literature and is outlined in chapter three. Protocol–based care for nurses is summarised in a recent report in the following way: "a key intent of standardised care is as a mechanism for safely extending the scope of nursing practice and establishing new services…where nurses provide the first point of contact and care is given in accordance with evidence-based, decision support systems" (Patterson, et al., 2008, p. 20). A standardised service on one hand promotes equity, yet at the same time does not allow for individuality. When does a guideline become a rule book? There is a fine line between these. What is the consequence for the health practitioner who does not follow the guideline? There is a need for balance between the standardisation of best practice approaches and individual clinical decision making choices (Rycroft-Malone, Fontenla, Seers, & Bick, 2009).

If guidelines contribute to the support of the organisation as well as the individual, then there is potential for benefit of the practitioner, the patient and the system, as boundary controls and maintenance (the availability of guidelines which support the practitioner by providing up to date, easily accessible information and support by trainers) reduce anxiety by supporting the nurse's primary need and purpose – to provide care for her patient.

Limitations of the study

This qualitative study was conducted in one of the nine provinces of South Africa. Each province has its unique physical, social and health characteristics, and the findings therefore cannot be generalised to primary health care services or nurses in other provinces. Qualitative studies, however, have the potential for transferability of findings, in that similar contexts can be interrogated for the applicability of the findings to that context. The credibility of the study will be judged by the readers who have experience in the field of nursing in primary care.

There are a number of limitations to the findings presented in this dissertation. The theoretical and methodological approaches taken in this study are an unusual combination and therefore may be challenged by researchers who take a more purist stance. Ethnomethodological accounts are more likely to be partial and filtered through the researcher's own values, beliefs and theoretical assumptions. In order to minimise this I have attempted to provide narratives and descriptions which are as rich and full as possible, in order that the reader can make his/her own interpretations of the data and engage with my findings and interpretations. This was particularly important as I have been involved in the PALSA PLUS study initially as an evaluator and then as a trainer; my objectivity could therefore be challenged. Throughout the study I have engaged in a reflexive process of writing and discussion with my supervisor and trusted colleagues, testing my own assumptions, being challenged as I gained insight into my own worldview.

Trans-disciplinary approaches have particular challenges, in that the researcher is not necessarily an expert in either, or both of the disciplines. I have a nursing background, particular expertise in mental health, but make no claim to be an expert ethnographer or psychoanalyst, but have drawn on both traditions to develop my exploration of nurses' experiences of guidelines in primary care. This has enriched my own theoretical understanding during this study.

During the period of the study, the health care landscape in South Africa has undergone significant changes. In 2003, there seemed to be no possibility that the South African government would relent on its stance of not providing ARVs at public health facilities. By the latter half of 2004, the policy had changed, and the process of 'catch-up' in the provision of the much needed treatment began. There was a concerted effort by all stakeholders to push the ARV rollout, and it quickly became evident that there were insufficient health professionals, in particular doctors at that point, who were familiar with ART. Training programmes and short courses were introduced to bring health care providers up to speed. Nurses needed to be provided with information about the routine care of persons with HIV, when to refer for initiation of therapy, and support of individuals and families. It was soon clear, as the epidemic began to peak, that this level of information was inadequate to cope with the increasing demand for ARVs. Thus, in 2007 the STRETCH trial in the Free State commenced, in which nurses selected facilities are trained to initiate ART (Fairall, et al., 2008), a study which may have influenced the nurses' use of guidelines. This sense of urgency may have influenced nurses' responses to guidelines, particularly for management of HIV.

Implications and Recommendations

The findings of this study have a number of implications for policy and practice and education.

Integrated health care service provision

At department of health level, there needs to be clear a policy for integrated service provision, to reduce the duplication which still occurs in the services. Much has been done already, but there is still much to do. An example of this is the move towards integrated TB and HIV management. This was driven by the high co-infection rate, yet this may prove to be the catalyst which facilitates a more holistic, integrated approach. The comprehensive service plans that are emanating from provinces are testimony to the new thinking that is taking place at the highest level and this is to be commended. It needs, however, to be translated coherently at the interface between health practitioner and patient, and support provided for this.

The role of the nurse in primary health care

It is clear that there is a critical role for the nurse in the provision of primary health care services in South Africa. There needs to be formal recognition and value placed on this role. It is more than task shifting; it is an entirely different approach to the provision of health care, an approach which goes far beyond guidelines. The task shifting approach has not sufficiently considered the holistic nature of nursing, its focus on whole person care, and allowed for this in the transfer of skills only approach. This in itself creates anxiety. The primary health care nurse role needs to be clearly defined for all health professionals, so she takes her essential place in the primary care services.

Guidelines in primary care

There is a clear need for integrated approaches to the development, dissemination and support of clinical practice guidelines for nurses at primary care level. Guidelines have a significant function in primary care, but need to be relevant, evidence-based, with an integrated approach to the care of the patient at primary care level. Guidelines do not, however, replace the clinical judgment of the skilled practitioner. They therefore need to be developed by, with, and for nurses in primary care and appropriate training for their use offered. Regular updates, support and feedback on patient outcomes will enable the nurse not only to provide quality care, but to gain personal satisfaction in doing so.

Education and training of nurses in the use of guidelines

Guidelines relevant to each area of practice need to be introduced at the pre-registration level of training, not in an attempt to minimise the development critical thinking skills which are vital for effective diagnosis and management of the patient, but to enable the student to understand the appropriate use of guidelines in practice. It is as important for the nurse to know when to use guidelines as when not to use a guideline.

Information on the structure and function of the health care system and the purpose and function of guidelines in cost effective health care management should be included in curricula at pre- and post registration level.

The use of guidelines needs to be contextualised. Guidelines can only provide the nurse with relevant information and management of a disease, but do not replace the skills need to obtain an adequate history, engage with a patient on changing behaviour or tailoring management to the patient's individual needs and context. Guidelines will then be more likely to be viewed as a resource rather than an imposition.

Implications of the study for further research

Nursing at the primary care level is challenging and complex, and nurses who are providing this essential service need to be adequately trained, supported and rewarded. Further research is required into the exploration of the nurse's role in the broader health care system, and the potential of the nurse driven primary health service.

Personal reflections of the study

On commencing the initial qualitative evaluation of the PALSA intervention in 2003, I knew very little about guidelines and their role in primary health care. My own primary level practice had been mainly in the mental health and substance abuse field, and I found that nurses in primary care in the Free State province were coping with patients with a multiplicity of health problems, complicated by the rapidly increasing HIV and AIDS epidemic, for which, at that time in the public health services, there were no drugs available. Over the two years of the initial study, I met and spoke to nurses, from small rural clinics where two nurses sometimes saw as many as 150 patients a day, to larger town clinics which had to deal with all the challenges of urbanisation. All were coping with enormous daily workloads, significant management and coordination responsibilities, too few appropriately trained staff, a dwindling complement of doctors in the clinics, and general resource constraints. Over the last two years, I have looked at the guidelines, returned to the Free State, observed nurses in their daily practice, listened to their stories, and reflected on my own experiences. I have learned much about the day to day life and work of the nurse in the primary care setting.

Conclusion

Anxiety and its role the in use of guidelines by nurses at primary care level has been the focus of this study. The tension in the dissemination and use of guidelines is between whether they *impose* control (Welsby, 2002) or *improve* care. Drawing on the work of the psychoanalysts, the tension can be reformulated as “do guidelines contain anxiety or compromise practice?” This study has demonstrated that there is potential for both effects. Guidelines, while useful and needed, will not bring about substantial, sustainable changes in professional practice if not an integral component of a supportive, incentivised (not necessarily monetarily) health service.

Nurses, as specialised primary health care providers, should be appropriately trained, effectively updated with accessible locally tailored information and valued in order to fulfil their role as primary care health providers. This study however, suggests that information through the provision of guidelines alone will not meet the needs of the nurse, the patient or the health care service, but forms only one component of an integrated approach to best practice and quality health care.

If South Africa is to provide a comprehensive, patient centred health service truly rooted in the primary health care approach of equity, accessibility, acceptability and affordability, the nurse as a key primary health care provider needs to be valued, equipped with the relevant skills and supported by appropriate tools and structures. A psychoanalytic approach to the experiences of guidelines by nurses in primary care can contribute to the overall understanding of the complexity of the role of the nurse in the primary care setting.

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APPENDICES

APPENDIX A

Task Shifting. Global Recommendations and Guidelines

Summary of Recommendations

A. **Recommendations on adopting task shifting as a public health initiative**

Recommendation 1:

Countries, in collaboration with relevant stakeholders, should consider implementing and/or extending and strengthening a task shifting approach where access to HIV services, and to other health services, is constrained by health workforce shortages. Task shifting should be implemented alongside other efforts to increase the numbers of skilled health workers.

Recommendation 2:

In all aspects concerning the adoption of task shifting, relevant parties should endeavour to identify the appropriate stakeholders, including people living with HIV/AIDS, who will need to be involved and/or consulted from the beginning.

Recommendation 3:

Countries deciding to adopt the task shifting approach should define a nationally endorsed framework that can ensure harmonization and provide stability for the HIV services that are provided throughout the public and non-state sectors. Countries should also explore a framework for the exploration of task shifting to meet other critical public health needs.

Recommendation 4:

Countries should undertake or update a human resource analysis that will provide information on the demography of current human resources for health in both the public and non-state sectors; the need for HIV services; the gaps in service provision; the extent to which task shifting is already taking place; and the existing human resource quality assurance mechanisms.

B. **Recommendations on creating an enabling regulatory environment for implementation**

Recommendation 5:

Countries should assess and then consider using existing regulatory approaches (laws and proclamations, rules and regulations, policies and guidelines) where possible, or undertake revisions as necessary, to enable cadres of health workers to practise according to an extended scope of practice and to allow the creation of new cadres within the health workforce.

Recommendation 6:

Countries should consider adopting a fast-track strategy to produce essential revisions to their regulatory approaches (laws and proclamations, rules and regulations, policies and guidelines) where necessary. Countries could also simultaneously pursue long-term reform that can support task shifting on a sustainable basis within a comprehensive and nationally endorsed regulatory framework.

C. Recommendations on ensuring quality of care

Recommendation 7:

Countries should either adapt existing or create new human resource quality assurance mechanisms to support the task shifting approach. These should include processes and activities that define, monitor and improve the quality of services provided by all cadres of health workers.

Recommendation 8:

Countries should define the roles and the associated competency levels required both for existing cadres that are extending their scope of practice, and for those cadres that are being newly created under the task shifting approach. These standards should be the basis for establishing recruitment, training and evaluation criteria.

Recommendation 9:

Countries should adopt a systematic approach to harmonized, standardized and competency based training that is needs-driven and accredited so that all health workers are equipped with the appropriate competencies to undertake the tasks they are to perform.

Recommendation 10:

Training programmes and continuing educational support for health workers should be tied to certification, registration and career progression mechanisms that are standardized and nationally endorsed.

Recommendation 11:

Supportive supervision and clinical mentoring should be regularly provided to all health workers within the structure and functions of health teams. Individuals who are tasked with providing supportive supervision or clinical mentoring to health workers to whom tasks are being shifted should themselves be competent and have appropriate supervisory skills.

Recommendation 12:

Countries should ensure that the performance of all cadres of health workers can be assessed against clearly defined roles, competency levels and standards.

D. Recommendations on ensuring sustainability

Recommendation 13:

Countries should consider measures such as financial and/or non-financial incentives, performance-based incentives or other methods as means by which to retain and enhance the performance of health workers with new or increased responsibilities, commensurate with available resources in a sustainable manner.

Recommendation 14:

Countries should recognize that essential health services cannot be provided by people working on a voluntary basis if they are to be sustainable. While volunteers can make a valuable contribution on a short term or part time basis, trained health workers who are providing essential health services, including community health workers, should receive adequate wages and/or other appropriate and commensurate incentives.

Recommendation 15:

Countries and donors should ensure that task shifting plans are appropriately costed and adequately financed so that the services are sustainable.

E. Recommendations on the organization of clinical care services

Recommendation 16:

Countries should consider the different types of task shifting practice and elect to adopt, adapt, or to extend, those models that are best suited to the specific country situation (taking into account health workforce demography, disease burden, and analysis of existing gaps in service delivery).

Recommendation 17:

Countries should ensure that efficient referral systems are in place to support the decentralization of service delivery in the context of a task shifting approach. Health workers should be knowledgeable about available referral systems and trained to use them.

Recommendation 18:

Non-physician clinicians can safely and effectively undertake a majority of clinical tasks (as outlined in Annex 1) in the context of service delivery according to the task shifting approach.

Recommendation 19:

Nurses and midwives can safely and effectively undertake a range of HIV clinical services (as outlined in Annex 1) in the context of service delivery according to a task shifting approach.

Recommendation 20:

Community health workers, including people living with HIV/AIDS, can safely and effectively provide specific HIV services (as outlined in Annex 1), both in a health facility and in the community in the context of service delivery according to the task shifting approach.

Recommendation 21:

People living with HIV/AIDS who are not trained health workers can be empowered to take responsibility for certain aspects of their own care. People living with HIV/AIDS can also provide specific services that make a distinct contribution to the care and support of others, particularly in relation to self-care and to overcoming stigma and discrimination.

Recommendation 22:

Cadres, such as pharmacists, pharmacy technicians or technologists, laboratory technicians, records managers and administrators, could be included in a task shifting approach that involves the full spectrum of health services.
(World Health Organization, 2007)

APPENDIX B

Examples of consent forms

Participant observation

Research Project:

Nurses' experience of guideline implementation in Primary Health Care Settings.

Dear colleague

As part of a PhD project, I am conducting research into the use of guidelines by clinical nurse practitioners and nurses at primary care level. It is hoped that the findings of this study will contribute to the improvement and user-friendliness of guidelines available to nurse practitioners.

I am requesting permission to be a non-participant observer in the primary care clinic for a period of 1-3 days. The purpose of this research is to observe which guidelines are available to nurses, how these are used, their user-friendliness and usefulness.

Any personal information or details of the clinic will be confidential and your name will not be revealed in any documentation pertaining to this research.

I will endeavour not to disrupt any clinic activities.

Permission for this study has been obtained from……….

Pat Mayers

Researcher

Contact number: 0824672302

Focus Group consent form

Research Project:

Nurses' experience of guideline implementation in Primary Health Care Settings

Dear

I am Pat Mayers, a researcher with the Knowledge Translation Unit University of Cape Town; I am conducting a study into the use of guidelines by nurses in primary care in the Free State Province. This study is part of a larger project but is also towards my PhD. Thank you for agreeing to participate in this research project. I appreciate your willingness to give of your time to assist me as the researcher

I will be part of the clinic activities for the period that I am at the clinic, sitting in with nurses as they consult with patients. My aim in doing this is to understand what guidelines are used, when they are used and the usefulness of these to nurses.

I will also be conducting a focus group with nurses during this time to explore how nurses find the use of guidelines in their practice.

It would be appreciated if you would sign the consent form below, granting permission for me to use the information obtained in the interviews, focus groups, and written reports relating to the project.

Pat Mayers

Researcher

PARTICIPANT CONSENT AGREEMENT

I agree to participate in the research study. This has been explained to me by the researcher. I understand the purpose of this study and am participating voluntarily. I grant permission for the information to be used to prepare a research report.

I agree to be interviewed/take part in a focus group, and grant permission for the interviews and/or focus group session to be audio and/or video-recorded and for the researcher to take notes during the interviews. I understand that all personal information will be kept confidential and no identifying information will be used in the writing up of the research. I understand that I am free to withdraw from the study at any time should I choose to do so.

Research Participant

Name: ....

Address:.. Tel:...

Signature……………………………………Date:...............................

Letter to Provincial Authority

The Director
Free State Health Department
Dear ….

Final phase observation and focus groups in assessment of nurses' use of guidelines in primary care.

As a member of the PALSA and PALSA Plus team, I was responsible for the evaluation of the initial PALSA project, from which I have done my PhD research, entitled Nurses' experiences of using guidelines in primary care in the Free State Province. The protocol for the project was aligned with the PALSA protocol, and was submitted to the Head of Health for approval during the term of office of …..

I am writing to request your approval to visit three primary health clinics during July 2009, to follow up in the final phase of this project. My purpose for this fieldwork is:

- To spend 2-3 days [non-participant observation] in three primary care clinics to observe the use of guidelines by nurses in the management of patients [one urban and two rural].
- To conduct a focus groups with the nurses in each clinic at the end of this observation, the purpose of which is to reflect on their experiences of using guidelines as a tool for diagnosis, management and treatment of their patients.

I have been in contact with Dr…, who has offered to facilitate access to clinics so as to avoid overload due to other research projects. All cost related to my visit will be funded and I will be happy to present findings of the final study to interested persons in the Free State Department of Health.

I would be happy to provide you with any further information if required. I can be contacted on the above email or telephone.

Kind regards

Pat Mayers

APPENDIX C

DEVELOPING AND IMPLEMENTING A PRACTICAL APPROACH TO LUNG HEALTH IN SOUTH AFRICA (PALSA): QUALITATIVE EVALUATION INTERIM REPORT: EXECUTIVE SUMMARY

Introduction

Guideline design and implementation in a pragmatic randomised control trial

The global increase in lung diseases, especially tuberculosis, is a concern to the international community. Nowhere is that increase more evident and the problem more pressing than in Sub-Saharan Africa where the impact of the HIV epidemic has been greatest. Fairall et al. (2001) reported that 28% of patients presenting to primary care facilities have respiratory symptoms, which may be undifferentiable to the PHC nurse practitioner; such patients' symptoms may not be accurately diagnosed, resulting in the issuing of a sick certificate or inappropriate antibiotic prescription, failure to detect and refer emergencies, or to diagnose life threatening and infectious diseases like pneumonia and TB.

The Free State Province is the site for the PALSA [Practical Approach to Lung Health] project, for which guidelines for the management of acute and chronic priority respiratory diseases, including pneumonia, tuberculosis, asthma and chronic obstructive pulmonary disease were developed. The PALSA programme aims to change and improve the quality of respiratory care through training nurse practitioners to implement standardised algorithm treatment guidelines, based on high quality clinical evidence. It "aims to identify barriers to appropriate respiratory care in a primary care clinics in the Free State Province of South Africa, design training interventions to overcome these, deliver these interventions in a large number of ordinary clinics using existing training personnel in the health system and evaluate the effects of this intervention using a rigorous study design, the randomised controlled trial" (extract from PALSA Interim Technical report). The evaluation of a multifaceted project such as the PALSA project requires the understanding and interpretation of the quantitative data generated through the randomised control trial, which is informed and enhanced by the perceptions, experiences and value attached to these, of the participants in the study.

The PALSA study has involved: research into barriers hampering the use of guidelines, development of evidenced based guidelines, development of materials and training of nurse practitioners in the use of the guidelines. Master trainers were trained by the project team, and in turn trained the clinic nurses, using a process rather than content training approach, in which the nurse trainers use the materials to train using a personalised, rather than a traditional didactic approach. "This training strategy assumes that the clinician has little prior knowledge of the targeted diseases, and few or no diagnostic and therapeutic preferences. It assumes that any gap between ideal and actual practice is remediable by making available structured, clinical information and by providing intensive, highly supervised clinical exposure and training" (PALSA project summary, 2002).

This programme, the impact of the guidelines, training and implementation has been evaluated using quantitative and qualitative methods: a pragmatic randomised trial evaluated impact of the intervention in 40 primary health care clinics in the Free State - 20 clinics [20 intervention and 20 control clinics]. 50 patients were recruited from each clinic and interviewed at implementation and at a 3- month follow up.

In the qualitative evaluation, I conducted interviews with key stakeholders, health service managers and focus groups with participating PHC nurses. The acceptability of the intervention, its impact on the nurses who were trained in this approach, the experiences of the nurse trainers, the ability of the nurse practitioners to implement the PALSA guidelines and incorporate these into their practice, the perceived impact that this has on their practice and on their patients, and the difficulties associated with the implementation were explored.

This report described the evaluation of the PALSA programme, addressing three major questions:

1. What was the program intended to be? [evaluation of initial training of master trainers]
2. What is delivered? [implementation of the programme at clinic level – quality control and response of trainers and nurses to the programme]
3. Are there gaps between program plans and program delivery? If so, what explanations can be given for these?

The programme and its implementation has been challenged by key contextual factors external to the programme, which include: loss of key staff who have received training; the increasing burden of disease as a result of the HIV/AIDS epidemic, and the increased load on the health service; financial constraints in health services which may prevent the programme from being fully implemented; national policies which change and require that protocols are updated; numerous communication challenges and distances between clinics.

The evaluation was done in phases:

Phase 1: Evaluation of the Training Programme for the "Master trainers".

The nurses selected for the training programme are all experienced PHC nurses and TB co-coordinators in the Free State Province. They were specifically selected after consultation with the Free Sate Provincial Health Department.

The Training Programme

The approach to this programme differed from the norm, in that the plan was for the training to occur in the setting in which the nurses are practicing, to be of an interactive nature, in small groups, using the prepared materials. After initial qualitative work involving focus groups with key stakeholders, the programme was designed, using an experiential approach that would provide practitioners with the opportunity to reflect on their existing knowledge and skills, and test application of the new knowledge. The cascade training model was adopted – providing a learning experience for the nurse trainers who would then in turn train the nurse practitioners in the primary care settings.

The programme structure alternated content input with experiential work, focusing on the internal value and purpose of training for each person. Trainees were exposed to process work such as reflective writing, focussing on the inner person, appreciation of personal strengths, interactive group work.

The training materials comprised:

- Guidelines in algorithm format, evidenced based and extensively researched and undergoing validation in a separate component of the study
- A desk blotter, designed in such a way so as to be able to be used on a practitioner's desk or wall mounted, to reinforce and highlight the key messages for each of the respiratory diseases.
- A 5-page table flip chart containing posters and key messages to be used by the trainers in presenting the programme. The flipchart aimed to serve as an introductory visual teaching tool for nurse trainers during their clinic visits. It aimed to introduce clinic nurses to PALSA approach to lung health and drew their attention to the sequence of events in identifying potential respiratory patients who are severely ill and require immediate care and identify acute and chronic respiratory cases.
- Supplementary memory joggers – in the form of pens and penholder with key messages of the programme on each, e.g.
- All the materials packaged in a convenient portfolio bag

Evaluation of the training programme

Methodology

Focus groups:

Focus groups were held with the training group [master trainers] at different stages of the training and programme implementation. Prior to the commencement of training, the trainees expressed excitement, but also concern at having to fit another training programme into the already pressured schedule.

The main theme arising from the second focus at the completion of the initial training was that of a personal transformation process. Although the trainees were initially apprehensive, as the week went on they became less threatened, and were more open to the opportunities given to them to think about themselves as people and the training, which they had to do. It became evident even at this stage that some trainees were more likely to embrace the new method of training than others. Training using this type of approach is relatively "foreign" to nurse practitioners and trainers who themselves obtained their nursing training prior in a learning environment where the formal lecture – didactic method was the teaching method of choice. A constraint in this training programme was that it was fundamentally dependent on the skills of the process facilitator, with a particular style of training. The training process needs to be carefully structured and clear guidelines given for the experiential component as well as the content. The replicability therefore of such training has to be carefully examined.

Phase 2: Quality control sessions

Practitioner adherence to evidence-based guidelines depends on the degree to which practitioners are able to integrate the new learning and change their current practice behaviour. The nurse trainers had the opportunity to present a training session in a local clinic. Both the content and process facilitators evaluated these sessions, and feedback was given during the following day's training.

Two quality control sessions were held with each trainer [three trainers having been through the training process, were not able to do the required training, due to difficulties within their own districts]. Quality control of the training was done in order to observe the trainees' approach to training, monitor content input, use of training materials and the interaction with the trainees. In order to minimise any contamination of the RCT study, these sessions were arranged in clinics that were not included in the study. All sessions were videotaped.

Phase 3: Reflections of the nurse trainers on the experience of training nurse practitioners

A focus group held with the training team June 2003 [those who had originally been trained as trainers] to determine how they had experienced the PALSA training process.. The nurse trainers were asked to reflect on their own experiences of training, as well as the nurse practitioners responses to the training programme – specifically the content, use of the guidelines and the training approach. The responses were that not only had they enjoyed the training process itself, but that they had found that in changing their own training methods – they had enjoyed positive feedback and appreciation from the nurses whom they had trained. At this point some trainers had completed their training sessions, while others were still busy.

The trainers valued for themselves the positive feedback they received when they went back for subsequent sessions: "*… made me feel a little important again. Took me away from the rushing/ wors [sausage] machine …* One trainer was particularly thrilled with feedback from the clinic staff she had trained - how the nurses in one clinic had responded to a patient with severe respiratory distress– "*They were so excited – they had a severe case – they followed all the steps"*

Problems experienced by the trainers included scheduling, lack of time, staff rotations, and logistical issues. The trainers were of the opinion that the training process in itself was appropriate; but that significant adaptation was necessary in order to ensure that all nurses received the training. In some instances the trainers had doubled up on session in order to minimise interruptions to the service, while other options included an early start to the day and lunchtime training sessions.

Phase 4: Focus groups with nurses in the intervention clinics April-May 2004

Focus groups were conducted with the nurses who had been trained in all twenty implementation clinics. The timing of these sessions was planned so as not to influence the collection of patient data. Findings from the focus groups were in the main positive, however the nurse practitioners reported varied usage. Guidelines for asthma management were particularly useful. Previous training and length of experience appeared to influence the nurses' responses to the use of the PALSA materials.

The focus groups in themselves provided a much needed space for discussion and verbalising of feelings about working as nurse in primary care services. The overall impression that I gained from the nurses is that while they are committed to the care of the persons in their communities, they are frustrated by poor staff patient ratios, and often feel unsupported in the role as primary care providers.

Interviews were conducted with project team members, trainers and key persons within the Free State Department of Health. Stakeholders in the PALSA programme overall have expressed positive responses to the programme to date.

Conclusion

The PALSA training programme is innovative and challenging for the trainers and well as trainees. It encourages the learners to engage with the material, which will enable him/her to provide quality evidenced based health car for person with respiratory conditions at the primary care level, suing the minimum of technical equipment.

The intended "dosage" or training in the clinics did not occur in all intervention clinics [reported in RCT]. This has significant implications for the further roll out of this programme in the Province.

The key to changing practice is not simple – there are many factors which may affect the ability of the nurse practitioners to provide appropriate diagnosis, treatment and care. These include: organisational problems – in some clinics in the Free State nurses may be expected to see upwards of 60 patients per day; lack of resources, limited prescribing privileges at primary care level [current limitation of practice]; role and relationship rigidities in nursing culture and practice; inadequate allocation of accredited and competent clinical nurse practitioners [for instance some of these are placed in administrative roles as there is no career pathway for clinical nurse practitioners] and individual anxieties of the nurses due to lack of referral mechanisms or consultation.

Success of this programme does, however, depend a number of issues, which have to be seriously considered if such a programme is to be implemented across the Free State province. These include resources; learner preferences; shortage of personnel and large numbers of patients; ongoing support and supervision of the nurse trainers and the multiplicity of guidelines at primary care level.

Pat Mayers

2004

APPENDIX D

PUBLICATIONS FROM THE PALSA AND PALSA PLUS PROGRAMMES

Bheekie, A., Buskens, I., Allen, S., English, R., Mayers, P., Fairall, L. R., et al. (2006). The Practical Approach to Lung Health in South Africa (PALSA) intervention: respiratory guideline implementation for nurse trainers. *International Nursing Review, 53*, 261-268.

Bachmann, M., Fairall, L., Clark, A., & Mugford, M. (2007). Methods for analyzing cost effectiveness data from cluster randomized trials. *Cost Effectiveness and Resource Allocation, 5*(1), 12. Retrieved from http://www.resource-allocation.com/content/5/1/12. doi:10.1186/1478-7547-5-12

Booysen, F. L. R., Van Rensburg, H. C. J., Bachmann, M., Louwagie, G., & Fairall, L. R. (2007). The heart in HAART: quality of life of patients enrolled in the public sector antiretroviral treatment programme in the Free State province of South Africa. *Social Indicators Research, 81*, 283-329.

English, R., Fairall, L. R., & Bateman, E. (2007). Keeping allergy on the agenda: using integrated care guidelines to improve the management of allergic conditions in high infectious disease burden settings. *Allergy, 6*(3), 224-229.

English, R. G., Bateman, E. D., Zwarenstein, M. F., Fairall, L. R., Bheekie, A., Bachmann, M. O., et al. (2008). Development of a South African integrated syndromic respiratory disease guideline for primary care. *Primary Care Respiratory Journal, 17*(3), 156-163.

Fairall, L. R., Zwarenstein, M., Bateman, E. D., Bachmann, M., Lombard, C., Majara, B. P., et al. (2005). Effect of educational outreach to nurses on tuberculosis case detection and primary care of respiratory illness: pragmatic cluster randomised controlled trial. *British Medical Journal, 331*, 750-754.

Fairall, L. R., Bachmann, M. O., Louwagie, G. M. C., van Vuuren, C., Chikobvu, P., Steyn, D., et al. (2008). Effectiveness of antiretroviral treatment in the South African public-sector programme: cohort study. *Archives of Internal Medicine, 168*, 86-93.

Fairall, L.R., Bachmann, M., Zwarenstein, M., Lombard, C., Uebel, K., van Vuuren, C., et al. (2008). Streamlining tasks and roles to expand treatment and care for HIV: randomised controlled trial protocol. *Trials, 9*(1), 21. Retrieved from http://www.trialsjournal.com/content/9/1/21. doi:10.1186/1745-6215-9-21

Louwagie, G. M., Bachmann, M. O., Meyer, K., Booysen Fle, R., Fairall, L. R., & Heunis, C. (2007). Highly active antiretroviral treatment and health related quality of life in South African adults with human immunodeficiency virus infection: A cross-sectional analytical study. *BMC Public Health, 7*, 244. Retrieved from http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=17854510. doi:10.1186/1471-2458-7-244

Stein, J., Lewin, S., Fairall, L. R., Mayers, P., English, R., Bheekie, A., et al. (2008). Building capacity for antiretroviral delivery in South Africa: A qualitative evaluation of the PALSA PLUS nurse training programme *BMC Health Services Research, 8*, 240. Retrieved from http://www.biomedcentral.com/content/pdf/1472-6963-8-240.pdf. doi:10.1186/1472-6963-8-240

Stein, J., Lewin, S., & Fairall, L. R. (2007). Hope is the pillar of the universe: health-care providers' experiences of delivering anti-retroviral therapy in primary health-care clinics in the Free State province of South Africa. *Social Science & Medicine, 64*, 954–964.

GUIDELINES

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2008 Western Cape edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2008 Free State edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2007 Free State STRETCH – Streamlining Tasks and Roles to Expand Treatment and Care for HIV - edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2007 Western Cape edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2006 Free State edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2006 Western Cape edition)

PALSA PLUS: Practical Approach to Lung Health and HIV/AIDS in South Africa (2004 Free State edition)

PALSA: Practical Approach to Lung Health in South Africa (2003 Free State edition)

http://www.knowledgetranslation.uct.ac.za/publications.htm

APPENDIX E

EXAMPLE OF SUPPORT LETTER TO PALSA PLUS TRAINERS

This newsletter is distributed monthly to all trainers who have been trained as PALS PLUS trainers.

It serves as a source of information, updates on new prescribing patters, and change in protocols and there is a section for question to be answered by an expert clinician. News of training progress in the districts is included.

National PALSA PLUS newsletter

National PALSA PLUS newsletter

OCTOBER 2009

Dear PALSA PLUS Trainers

The first edition of the PALSA PLUS newsletter came out in May 2006! And to date we have 73 newsletters on our website (www.lunginstitute.co.za). It is time for 'fresh' eyes and ears behind the keyboard and from next month the newsletter is going to become part of Jonathan's monthly activities.
It is quite exciting to see your story in print, so please keep on sending stories, clinical questions and trainer/nurse of the month nominations. This is a forum to let YOUR voice be heard.

TOGETHER, LET'S MAKE PALSA PLUS A HOUSEHOLD NAME

PALSA PLUS will have 'made it' when it is on the agenda of every meeting agenda and when the talk in the tea room is PALSA PLUS!

I love the story I heard told by Benjamin Zander, a well known conductor and motivational speaker:

Zander has 30 music students at the University of Boston. He was conducting a concert where a world renowned violinist was featuring. The concert tickets were sold out as soon as the box office opened. As part of their training, there are 30 of the best seats reserved for his students.

Finally, the night of performance arrived and as Zander walked on stage there was that hush as the conductor appears before the clapping starts, the moment of no going back…

The concert was an overwhelming success, but Benjamin Zander was furious. There was a row of 30 empty seats. He phoned his wife and her response was: 'You must go and apologise to your students because *you* did not instill in them the significance of this concert.

Let us not be in the above situation. Let us speak PALSA PLUS to everyone we meet so that they too can be a change agent in this time when it is so needed…

KZN NEWS more from Esther …

Hi Guys,
Trust that you are all well. I am proud to announce that as of yesterday, 3 Sept 2009, Caneside Clinic is officially PALSA PLUS trained and will be now implementing the PALSA PLUS Guidelines.
This means that I have completed training my first facility and will be starting with my second facility as soon as possible.
The training has been an awesome experience for both me and the staff of Caneside Clinic. The buy in of the PALSA PLUS Guidelines from the staff has been unbelievable. The staff treasures their PALSA PLUS Guidelines like gold.
Every time someone new visits the clinic and gets to see the Guidelines, I have endless phone calls wanting to know more about PALSA PLUS and I'm so excited to tell them more.
Dr K Naidoo, the sessional doctor at the clinic was so impressed with PALSA PLUS and has been asked to be trained as well.
PALSA PLUS is like the new wonder discovery in my area and I'm just delighted at that.
Thanks Guys, Love, Esther

In the *October* edition, you will read about: Page

CLINICAL ISSUES THAT MATTER…

Question:

Can we give an antibiotic to a client with tonsillitis even if s/he’s already on TB treatment *and* co-trimoxazole? Can we mix co-trimoxazole with other antibiotics?

Answer:

- We give co-trimoxazole to those HIV clients with stage 2, 3 or 4 HIV or if CD4 ≤ 200 to prevent serious opportunistic infections like PCP.
- The recommended dose for this prophylaxis is 2 single-strength tablets a day (see Routine HIV Care, page 19 of the PALSA PLUS Guidelines)
- This **dose** is inadequate to **treat** a bacterial infection and we don’t want to use it for common bacterial infections (like streptococcal tonsillitis) as this will create co-trimoxazole resistance.
- Co-trimoxazole is safe to combine with any antibiotic available in the EDL.
- See page 5 of the PALSA PLUS guideline for the management of a client with a sore throat.

STI …multiple STIs? Which drugs to use?

Treating STIs syndromically can be rather complex especially when there is more than one to treat. The confusion is often around which combination of drugs to use. This is very clearly set out on pages 218 & 219 in the 2008 EDL.

TIP: Photocopy the relevant pages from the 2008 EDL and put it in your PALSA PLUS Guidelines.

…and what page would one find that in the PALSA PLUS Guidelines?

‘PALSA PLUS has made me a proud & confident facilitator especially with content; I am able to refer a person to the PALSA PLUS Guidelines page for any answer and not to answer what I know.’

Thanks MATAE from CoJ for sharing your story with us by sending us an SMS!

NURSE EDUCATORS WORKSHOPS

The sooner in our training as nurses we get exposed to PALSA PLUS the better! The educators in the Free State and the Western Cape use PALSA PLUS in their curricula. The KTU will be hosting 3 3-day nurse educators’ workshops. The educators are welcome to cross provinces. The invitations have been sent out and we will be in touch with you in your provinces for some assistance…

Province	Dates	KTU
FS/JHB held in JHB	Mon 23 to Wed 25 Nov	Gill & Bev
KZN in Durban	Mon 23 to Wed 25 Nov	Pat & Deanna
EC in East London	Wed 2 to Friday 4 December	Bev & Gill
WC/FS – refresher @ UCT LI	Wed 2 December	Pat & Deanna

OCTOBER DATES TO DIARISE

DISTRICT	Amathole	@	NMM	@	Jo’burg	@	eThekwini	@
6-week follow-up	9 Oct	?	✓ (done!)	-	9 Oct	DoH office	2 Oct	?
Next TtTtT	25 - 30	Mpekweni	✓ (done!)	-	11 - 16	Aloe Ridge	4 Oct	Chantecler
Steering committee	?	?	tba	DoH	?	?	13 Oct	DoH office
Quarterly - MTs	23 Oct	EC	23 Oct	EC	23 Oct	EC	23 Oct	EC

AMATHOLE

Monwabisi attended the TtTtT from the 6 – 11 September in Amathole and at the end of the training he asked the new PALSA PLUS trainers to contribute to the newsletter. This is what they say:

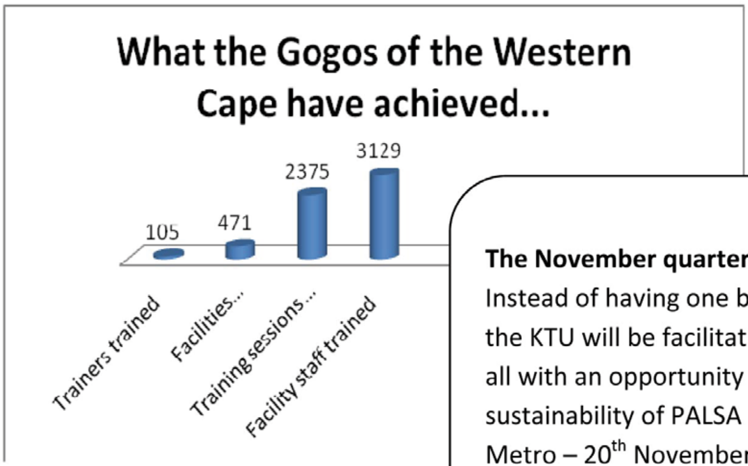
We would like to express our **appreciation** for an excellent training programme PALSA PLUS we have been exposed to. This is the first training of this kind we have received as nurses and the training is interactive and engaging.

The highlight of the training was the awarding of PALSA PLUS **certificates**. We will always remember this training as the best among the trainings we have attended.

The **training tools** were user friendly and the guideline stood out and it is very useful and also a resource that every health practitioner needs to have.

Ndileka Ntingashe from the Amathole district who was trained in last week's training has started training at Dimbaza CHC. She had 9 nurses in her first session. She is not excited, she is ecstatic and SO motivated as the whole group she trained want more and are frustrated that they have to wait a whole week to get together again.
VIVA PALSA PLUS VIVA
VIVA NDILEKA VIVA!

western cape



The November quarterly for 2009…
Instead of having one big quarterly in November as usual, Gill & Bev from the KTU will be facilitating 4 district meetings this year. This will provide us all with an opportunity to meet with you and your managers to ensure the sustainability of PALSA PLUS in your district. The confirmed dates are: Metro – 20th November & Eden/Central Karoo – 27th November.
We are still in negotiation around the dates for Boland/Overberg/Cape Winelands and a separate date for West Coast/Swartland.
We will be in touch very soon…

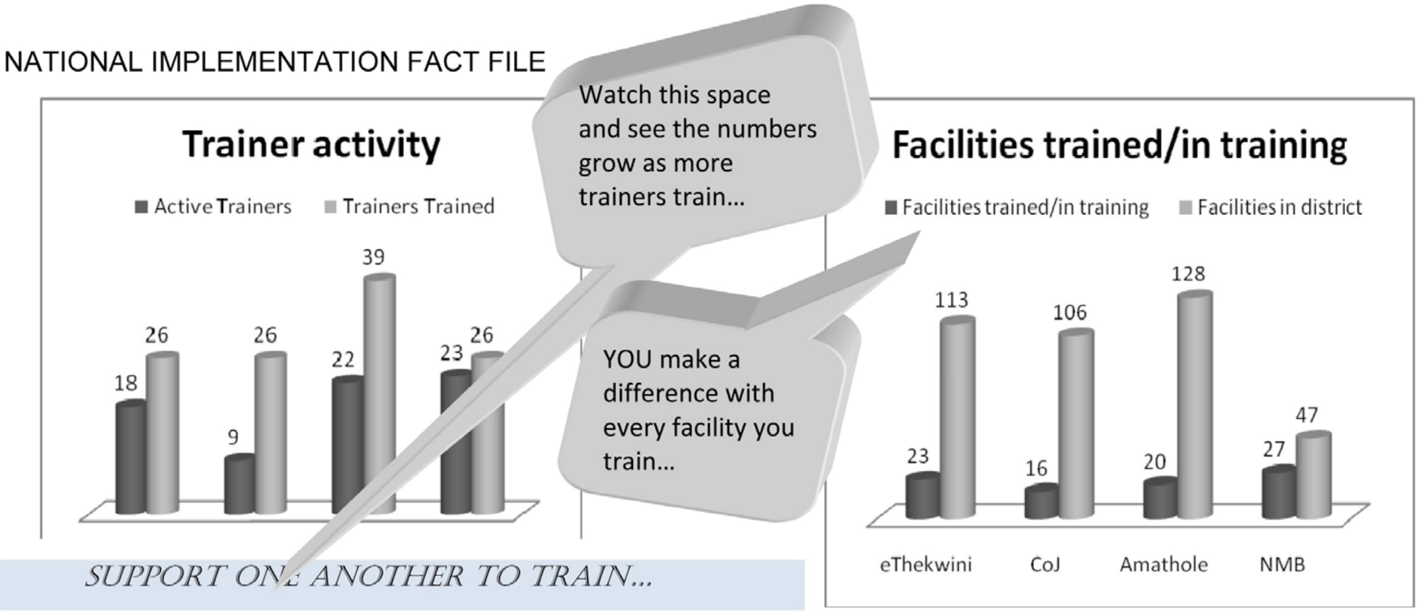
FROM OUR ADMINISTRATOR’S DESK

- MONEY MATTERS * We can only reimburse your slips if they are original, not photocopied or faxed. Please ensure that the purchase is reflected on the receipt, e.g. juice, biscuits etc. If no receipt is received within 2 months of purchase, no reimbursement will be effected. Original receipts MUST be mailed to Jani at the KTU, Lung Institute P O Box 34560 Groote Schuur 7937 with your name clearly written on the receipt. As soon as we receive your slips, it is a swift process to reimburse you!

All TRAINING RECORDS (except Free State) to be faxed to 021 406 6920 and

- **Nelson Mandela:** Ms Z Dubase 0866325150
- **Amathole:** Ms Liziwe Canzibe 043 642 1497/1408
- **Gauteng:** Ms Thandi Silwana 011 986 3448
- **KZN:** Ms.N.Nduli 031 240 5503
- **Free State:** ***ONLY*** Me Tsotsa on 051 408 1967

NATIONAL IMPLEMENTATION FACT FILE



CONTACT US ON…we love to hear from you…

‘The staff treasures their PALSA PLUS Guidelines like gold.’
Enjoy the ‘GOLD’ in your hands and make sure everyone gets a piece if it…
Your KTU team