MENTAL ILLNESS IN PRIMARY HEALTH CARE:

A study to investigate nurses' knowledge of mental illness and attitudes of nurses toward the mentally ill

NOMPUMELELO PRECIOUS DIRWAYI

A dissertation submitted in partial fulfillment of the requirements for the degree of Masters of Arts in Research Psychology

University of Cape Town

2002

DEDICATION

This thesis is dedicated to my grandparents, William Langalakhe and Irene Makhosazana Zungu.

Although you did not have the opportunity to be highly educated, you encouraged me to pursue education.

You cultivated the culture of rising above your circumstances and challenged traditional beliefs about women and access to education.

ACKNOWLEDGEMENTS

I wish to express my thanks and sincere appreciation to all the individuals who made this study possible:

To Prof. Dan J Stein, for all your rigorous supervision, guidance, and encouragement.
To Prof. Johann Louw, for your supervision, guidance, and input on this work.
To my father in heaven, who gave me the strength, fresh ideas, hope and motivation when I felt discouraged.
To my spiritual family, my homecell for believing in me and praying for me.
To my, kids Khanyi and Will Dirwayi for all the postponed birthday parties and fun activities.
To my three sisters, mother and all my true friends for always celebrating my achievements
To Monica, Virgy, and Edwards taking care of the kids when I could not.
To all my colleagues at the MRC unit and MHIC who encouraged me and gave input in different ways, Charmaine Hugo, Irene Mbanga, Wela and Lona Manona.
To Dr. Carol Nonkwelo of the MRC for all your support and encouraging words.
To the Provincial Department of Health and the Tygerberg Local Authority for granting me permission to undertake the study.
To all the nurses who agreed to participate in spite of their hectic schedules and workload.

Finally, without the support of the National Research Foundation (NRF) part-time bursary in 1998 and the Medical Research Council (MRC) Internship programme award (2000-2002) this work would not be possible. Opinions expressed and conclusions arrived at, are those of the author and should not necessarily be regarded as those of the NRF or the MRC.

ABSTRACT

Background: It has been suggested that globally, psychiatric disorders are not only highly prevalent and associated with significant morbidity, but that they are often not detected by clinicians working in primary health care. Despite this, few studies have investigated the level of mental health literacy among nurses and their attitudes to the mentally ill in South Africa.

Method: This study was conducted at 13 community clinics in the Western Cape. A sample of 87 nurses was recruited using a convenience sampling method. Nurses completed a structured questionnaire using case vignettes to assess mental health literacy and completed the Community Attitudes to the Mentally Ill (CAMI) to assess attitudes to the mentally ill.

Results: The main findings of this study were that the majority of the respondents (94%) did not diagnose the disorders presented on the vignette. Anxiety disorders vignettes were seen as stress-related and mainly caused by psychosocial problems. The recommended treatment was mostly self-help methods such as relaxation techniques, meditation, talking it over and exercise. Disorders with psychotic features were more likely to be viewed as a medical disorder caused by heredity and other psychosocial problems, and the recommended methods were mostly medication and consulting a professional. When the different treatment methods were compared, psychotherapy was more favoured than psychotropic drugs, which were seen negatively as causing dependency or irreversible damage to the brain. Nurses showed subtle negative attitudes to people with mental illnesses, insofar as they disfavoured marriage with a man that had been mentally ill or not allowing a woman who had recovered from mental illness to baby-sit.

Conclusion: Mental health literacy in nurses needs to be improved. There is a need for continued education of nurses in psychiatry and mental health issues with special emphasis on aetiology of disorders and treatment methods used in psychiatry and psychology. Continuing education programmes should aim at keeping nurses' skills and knowledge in line with the current research knowledge. Negative attitudes and ambivalence towards

people with mental illness suggest a need for programmes addressing attitudes and stigma in primary health care clinicians.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

CHAPTER 1: INTRODUCTION

The constitution of the World Health Organization (WHO) of 1978 declares that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. It defines health as a state "of complete physical, mental and social well being and not merely the absence of disease or infirmity" and prohibits discrimination in its enjoyment (WHO, 2001a, p. 5).

The increased recognition that equal access to health services is a human right has led to changes in health delivery within South Africa and worldwide (Baum & Sanders, 1995; Ben-Tovim, 1987; Freeman, 1989a, 1989b, 1998; Jenkins & Strathdee, 2000; Sartorius & Harding, 1983). The WHO has supported campaigns addressing deinstitutionalisation of psychiatric patients and a move from hospital care to primary care (Alma-Ata Declaration, 1978; Horder 1983; WHO, 1999). Primary care has been defined by the WHO as essential health care made accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and the country can afford. Therefore primary health care forms part of the country's health system, placed at the core of the health system, and of the overall social and economic development of the community (WHO, 1978). To summarize, primary care is a hub for health care, providing basic health services to all. This is a current trend worldwide with varied success from country to country (De Jong, 1996; Lamberg, 1996a; Lee & Zwi, 1997; Strathdee & Jenkins, 1996).

The history of practicing psychiatry in specially designated institutions goes back as far as 1711 in South Africa. This is the year when the first hospital with a facility for the severely mentally ill was established in the Cape (Makepeace, 1969). Over the years more isolated institutions were established ensuring that mentally ill patients were isolated from the community and directly influencing where psychiatry was predominantly practiced. This move is understood to have been a direct result of the medical philosophy that prevailed at the time (Makepeace, 1969). This led to psychiatry being practiced as a separate entity in hospitals and in specialized clinics. Thus primary health care began focusing only on the physical aspects of health, neglecting the mental aspects of the individual's health (Strathdee, Jenkins, Carr, & Rawaf, 1999).

A fragmented health service was not the only problem in South Africa. Discrimination and violation of human rights in health service delivery were among the challenges that the new democratic government had to address (Freeman, 1992, 1998; Gagiano, 1995; Vogelman, 1986). The changes in the South African health system after 1994 were therefore directly influenced by the need to redress the imbalances that were left by the legacy of apartheid and to bring about equity in health care (Freeman, 1992; McIntyre & Gilson, 2002; Petersen, 1998; Swartz, 1998). In the past there were barriers to equal access to health care and this has been a key factor in the differential health outcomes among different groups (Smeeth, 2001). Different budgets, locations and facilities segregated by race, resulted in lower quality health care and an unequal distribution of mental health services for the so called "non-Europeans/ non-whites" in South Africa (Department of Health, 1997; Freeman, Ceris, & Price, 1991; Health Policy Coordinating Unit, Department of Health, 1995; Lee & Zwi, 1997; McIntyre & Gilson, 2001). Eradicating discrimination of the past and implementing a new system led to some positive changes in the health system and these will be discussed briefly below.

The introduction of a district health system and the integration of services has been proposed as a solution to the problems of the past (African National Congress [ANC], 1994a; Department of Health, 1996; Petersen, 1999; Pillay, 1993; Zuma, in Le Roux, 1995). The implementation of the district health systems was intended to allow health services to be centralised in primary health and geared to provide basic health services for all (Gilson et al., 1996). The new vision of health care in South Africa is based on the principles of universal primary care with a special emphasis on equity and adoption of social policies related to health (e.g. access to clean water and sanitation). These policies are motivated in terms of their positive impact on health i.e. the Reconstruction and Development Program (African National Congress [ANC], 1994b). The new health system implies a comprehensive service and includes integration of mental health care into primary health care (Department of Health, 1997). Furthermore, mental health care is conceptualised much more broadly than psychiatric care to include care for non-psychiatric mental health problems as well as promotion of mental health (ANC, 1994a; ANC, 1994b).

Theoretically, integration not only changed the delivery of health, but also changed the concept of caring for patients at primary health care level (Baumman, 1998; Mekwa, 2000; Petersen, 1998, 2000a, 2000b, 2001; Petersen, Bhagwanjee, & Parekh, 2001). There has been more emphasis on the holistic view of a patient in primary health care, a view that has been supported

by researchers and clinicians (Freeman, 1998; Orley & Satorious, 1986; Swartz, 1998; Robertson et al., 1997; Zabow, 1995). The fragmented delivery of services in the past led to a fragmented view of patients. The new system emphasises the need to see the patient holistically and to involve the patients in their health care by empowering them to make informed decisions about their care (Freeman & Pillay, 1997; Martinson, 1997; Petersen, 2000a). Traditionally physical and mental health care was kept separate, psychiatric clinic and hospitals were specially designated to care for people with psychiatric disorders (Lee, Price, & Allwood, 1995). Theoretically integration would provide access for patients with psychiatric disorders, facilitate community care and also address the stigma of attending a psychiatric clinic or hospital (Department of National Health, 1996, 1997; Gagiano, 1995; Mental Health Care Bill, 2001).

Integration of services and the new emphasis on primary care have meant different things to different people and have been met with different reactions. Integration of mental health care into primary health care means that nurses working in the primary health care setting would become the frontline and gateway to the secondary or tertiary hospitals (Petersen, 1998; Swartz, 1998). However, according to Emsley (2001), psychiatric hospitals are still frequently acting as first-line facilities, particularly for disruptive patients and those with psychosis suggesting that the severely mentally ill are not presenting first at their primary care clinic.

The role of primary care nurses in the provision of mental health care after the integration of services is another issue that has been debated extensively within the health sector. There is still no consensus on the role of nurses in primary care (Pillay & Subedar, 1992). Some have suggested that the nurse's role is to identify psychiatric disorders and refer, while others have suggested that nurses should be involved in the management of psychiatric disorders as psychiatry is integrated with primary health care (Allwood & Gagiano, 1997; Pillay, 1993; Robertson, 1996; Uys, Sokhela, & Mkize, 1996). Other scholars have seen the emphasis on adding psychiatry into primary care as a 'narrow interpretation' of mental health integration that excludes mental health problems, which are very common in primary health care (Freeman & Pillay; 1997; Petersen, 1998, 2000b; Strathdee & Jenkins, 1996).

Nurses in primary care who have been affected by the integration have also had mixed reaction to the integration of mental health into primary care. Nurses have associated integration with increased workload and stress, thus viewing the process negatively (Lee et al., 1995; Lee & Zwi,

1997). This trend has also been reported internationally (Butler, 1993). Indeed, integration of services and other efforts to increase access such as removal of all fees for primary health care have increased the case load at primary care level, raising questions about the standards and quality of care (McIntrye & Gilson, 2001; Petersen, 2000a). Some specialist psychiatric nurses saw integration as a threat to the quality of existing mental health services being offered through psychiatric nurses and psychiatric clinics (Lee & Zwi, 1997). Issues of competency, training and accountability have also come to the fore during the integration process (Emsley, 2001; Lee & Zwi, 1997). In some cases integration has not benefited patients at all, but has led to cuts in services, as the district psychiatric sisters have sometimes been given an office job and stationed in one clinic. In such cases satellite clinics that would have been visited by the psychiatric nurse were left without a psychiatric service. Others have seen integration as diluting the efforts of primary care and preferred that the psychiatric nurse should still continue being the professional responsible for patients with mental health and psychiatric problems (Freeman, Lee & Vivian, 1994, 1999a; Lee, Freeman, & Vivian, 1999a).

The new health system has faced many challenges. A few of these challenges will be discussed for the purpose of creating a context for this thesis. Attempts to overcome the challenges of integration continue. There has been some progress, but a lot still needs to be done to improve the standard of public health in South Africa (Lee & Zwi, 1997; McIntyre & Gilson, 2002; Robertson & Freeman, 2001). In some instances the equity promoting policies such as non-payment of health services by the poor and high risk groups, i.e. pregnant women and children under six (McCoy, 1996), and payment for services by the non-poor have had unintended consequences. Some have raised concerns that such policies encourage a segmented health system (Gilson, 1997, 1998). The observed trend is that patients who can pay simply access private health care, which is perceived as having high standards of care. The poor and those without medical aid end up being the only ones who access public service, defeating the purpose of cross-subsidising the poor through tariffs collected from the non-poor, which may lead to second-class care for the poor (Baum & Sanders, 1995; Buch, 1985). Attempts by the government to bring about equity through policies have not always been successful. This is illustrated by a report done by a task team that investigated human rights violations and alleged malpractice in psychiatric institutions, and found that there is still no parity in the standard of care in psychiatric institutions in South Africa (Lee & Zwi, 1997). The above report illustrates

that good intentions and sound government policies do not necessarily guarantee rapid changes of the existing status quo.

In some cases the existing legislation has also impeded the progress in the provision of psychiatric care by primary care nurses (Allwood, 1997; Bierman & Muller, 1994; Geyer, 1998). For example, the Medicines and Related Drugs Control Act 101 of 1965 requires that drugs classified as schedule 5 or higher, which include antibiotics and psychotropic drugs, be prescribed by a medical doctor. Thus nurses cannot prescribe schedule 5 medications on their own. However, it is possible to gain prescription rights after meeting certain requirements, i.e. completing a special pharmacology course and being granted permission by the Director-General of Health. Once permission has been granted it is limited to two years subject to review (Ethics & Law, 1998, p. 46).

A report by Lee and Zwi (1997) evaluating the existing problems in service integration raised the following issues as impeding progress: a moratorium on filling of posts; a lack of personnel particularly at primary health care level and middle management; a lack of mental health co-ordinators at regional or district level; a lack of training in mental health; excessive workload; insufficient trainers to train nurses; and a lack of a multidisciplinary team approach. These factors were seen to be frustrating all efforts of incorporating mental health care into primary health care and contributing to the lack of progress in the integration process.

According to the nurses, the disagreement on the role of the mental health team has been another issue that has led to tensions at primary level. There is no consensus on who should provide mental health care. Generalist nurses believe care for the mentally ill should be done only by the mental health team since they have specialised knowledge (Freeman et al., 1994; Lee, Freeman, & Vivian, 1999a). The lack of specialised knowledge at this level might be a factor. However, agreeing with this view without improving knowledge encourages the vertical existence of psychiatry and undermines efforts to integrate mental health care into primary health care (Petersen et al., 2001). The lack of infrastructure, transport and poor communication have been cited as contributing factors in the poor provision of services at primary health care. Lastly, the failure to integrate the services offered by non-governmental organisation (NGO's) and lack of supervision at community level continues to compromise the vision of providing comprehensive

care for all (Lee & Zwi, 1997). Integration at primary health care level has not been as straightforward as envisaged.

It is difficult to assess whether the integration of mental health into primary health care has been successful or not. There are those who believe that it is "lagging behind" (Emsley, 2001, p. 383). Indeed there is evidence that although integrating mental health into primary health care is a national initiative, different provinces have implemented the policy according to their needs and in many instances this has been dictated by available resources. Provinces that lack resources seem to be lagging behind while those with resources seem to have made progress in the area of integration (Lee & Zwi, 1997; Petersen et al., 2001). Furthermore, there is now evidence from a review of four randomised controlled trials suggesting that integration of services is not as beneficial as previously thought. In the review, integration was associated with positive effects on outputs in only one study; in another study it had similar effects to the vertical programme delivery but greater the than control group. In the other two studies assessed, integration resulted in negative outputs in comparison with vertical programmes (Briggs, Capdegelle, & Garner, 2001).

Nevertheless, there has been progress in the transformation of health care as a whole. The recognition of risk groups such as pregnant women and children and improved access to health care by provision of a free service is to be seen as a victory for women and children. The increased recognition by the Department of Health of the needs of the mentally ill and campaigns to destigmatize mental ill illness mark an improvement for many affected (Freeman, 2001). With the current disparities in the economy of South Africa, equity in health care may not be as easy to achieve as was envisaged by the White Paper on Health (1997). Nevertheless attempts are being made to address the problems. Integrating mental health care into primary health care has brought to the fore the issue of mental illness by increasing awareness and encouraging debates about mental health and mental disorders in South Africa (Lee & Zwi, 1997). Integration of services has also managed to deal with the problem of duplication of services, a very common feature of the old health system (Freeman, 1989a; Martinson, 1997). The whole process of integration has brought challenges, changes and opportunities for growth and development in the primary care sector especially in relation to mental health care.

It is clear that much work still needs to be done in the area of integration of services. The challenges already discussed are broad and relate to the health care system as a whole. Of the challenges already delineated, three are pertinent to this thesis and to the integration of mental health into primary care. They are: (1) the knowledge and training of nurses in mental health; (2) the stigma associated with mental health and attitudes directed to people with psychiatric disorders and mental problems; (3) and the change in the focus of primary health care from physical disorders to both mental and physical disorders. The three challenges form part of the research question that this study will address and they will now be discussed in more detail, together with requirements set by the WHO for primary mental health care (WHO, 1990).

The provision of mental health care in primary health care has been recommended and is often seen as the only vehicle that will reach the majority of people without any access to mental health care (Allwood, 1997; Ignacio, 1983; WHO, 1990). The WHO (1999, p. 2) has identified four requirements for primary mental health care:

> (1) Adequately trained staff to assess, diagnose, and manage mental problems;
> (2) Availability of essential drugs for treatment of mental disorders;
> (3) Establishment of effective links with more specialist care, including well developed criteria for referrals, method of shared care, adequate information systems and community and social services; and
> (4) Creation of appropriate links with other community and social services.

All the above factors form the core for the success of any primary mental health care program. Unfortunately this has not been the case in South Africa's primary health care services. The majority of the primary health clinics, especially in rural areas, lack essential drugs and facilities needed for the treatment of mental health disorders (Freeman & Pillay, 1997; Freeman, Lee, & Vivian, 1999a, 1999b; Lee et al., 1995; van Rensburg, Viljoen, Heunis, van Rensburg, & Fourie, 2000). According to Emsley (2001), great strides have been made in the area of psychopharmacological research, with new agents for treating psychiatric disorders showing improved efficacy and/ or safety profiles. Unfortunately, the new drugs are more expensive than existing drugs and thus their availability in the public sector is very limited in South Africa. The consequence being that the latest improved drugs on the market might not be available to individuals accessing mental health care through the public service. This confirms concerns

about the ability of the public service to keep up with evidence-based medicine and the latest technological developments.

However, it might be argued that South Africa is a third world country and accessing the latest drugs is a luxury, when in remote areas even psychotropic drugs on the approved drug list of the Department of Health are not always available (Buch, 1985; Lee et al., 1999a). This might be true, but the promise of minimal side effects in the new drugs might improve compliance with medication, and go a long way in the prevention of relapse caused by premature discontinuation of medication due to side effects. The latter leads to higher treatment costs and the increased possibility of resistance to effective medication.

Another component to the successful implementation for integration is communication. Communication with specialists based in the tertiary hospital setting is not always possible. This leaves primary care clinicians on their own without much supervision and support, which can have serious consequences in some cases (Bindman et al., 1997). This is especially true in the rural areas of South Africa where community nurses often act as "mini" doctors (Lee et al., 1995; Gagiano, 1995; Lee et al., 1999). The lack of communication and support for community mental health workers was illustrated by Lee, Price and Allwood (1995) in a study that reviewed records in Mhala district, a rural area in South Africa. They found high rates of polypharmacy, with patients being put on a combination of drugs that were not considered necessary. Twelve percent of the patients were found to have a mismatched diagnosis and treatment, meaning that the treatment they were receiving was not recommended for the diagnosis given. Patients who had improved, or had become stable over 4 years, were still being treated with the same starting dose with no review of medication being done by the community psychiatric nurse at primary care level.

Another factor highlighted by the WHO in the success of integration is the relationship between primary care and other stakeholders such as other departments and non-governmental organizations. Links between primary care and other governmental departments such as social services is also not always possible, as departments often exist separately with no communication between them. Thus the existence of a multi-disciplinary team is still rare, as noted by Lee and Zwi (1997) in their review of mental health services. However, the separated

services might gradually become a problem of the past in the new community health centre that have been built since 1994 (Minister of Finance, 1998).

The newer clinics have incorporated other departments such as social work services, which fall under the Department of Social Welfare (Department of Health, 1997; McIntyre & Gilson, 2002). Unfortunately, the reality is that the majority of clinics, especially those in the rural areas, do not have access to such services (van Rensburg et al., 2000). The availability of support, not only from the tertiary level, but also from other departments and NGO's is therefore important in achieving the vision of comprehensive health care in primary health (Gask, Sibbald, & Creed, 1997). Other components of this vision such as training and creating a multidisciplinary team need attention.

The last component in the success of integration is having trained staff at primary health care. The training of nurses and doctors in medicine has traditionally focused on physical disorders. Thus it became necessary to change this focus (Engel, 1977, 1980, 1996; Golberg, 1999; Golberg & Huxley, 1992). Recently, there has been an increased awareness of the morbidity caused by psychological and psychiatric conditions (Greenberg et al., 1999; Jenkins, 1997a, 1997b; Kessler et al., 1994; Murray & Lopez, 1996a, 1996b). This recognition of psychiatry as an important component of medicine (Emsley, 2001; Zabow, 1995) and awareness of gaps in clinicians' knowledge, have led to a need for training of those already practicing medicine. (Hodges, Inch, & Silver, 2001; Ford, Middleton, Palmer, & Farrington, 1997; Mekwa, 2000).

These gaps in knowledge have been repeatedly shown by the lack of recognition and poor management of psychiatric disorders in primary health care, as reported by different studies both locally and internationally (Girón, Manjon-Arce, Puerto-Barber, Sanchez-Garcia, & Gomez-Beneyto, 1998; Goldberg, 1999; Lee et al., 1999b; O'Hara, Gorman, & Wright, 1996). It is therefore important to assess the current level of mental health knowledge of clinicians in primary health in order to make recommendations to improve knowledge and training (Parker, Mahendran, Yeo, Loh, & Jorm, 1999). The study will use the term "mental literacy" to refer to knowledge of mental disorders (Jorm, Korten, Jacomb, et al., 1997). The term mental health literacy refers to the ability to identify or diagnose; the ability to recommend treatment or manage a psychiatric disorders; and lastly, the attitudes that facilitate help-seeking behaviour. This concept will be explored further in the literature review, Chapter 2.

The training of primary health clinicians should be aimed at re-orientating the clinicians to the provision of a comprehensive service that is holistic and patient-centred (Henbest & Fehrsen, 1992). Orley and Sartorious (1986, p.197) provide the following conceptualisation of the integration process: "for every single patient under the care of a health worker, attention should be given to that patient's psychological and social well being. For whatever reason a person is brought into the health care system, he / she should be treated as a 'whole person', in a humane and caring way, taking into account the problems presented". The comprehensive approach to patient care does not come automatically; it has to be through training and reorientation of primary health clinicians (Jenkins & Üstün, 1998; Petersen et al., 2001).

Although the Department of Health has conducted training courses for nurses, there have been few studies that have documented the outcome of training (Freeman et al., 1994; Gagiano, 1989; Ignacio et al., 1983; Lee et al., 1999a; Lee et al., 1995). The primary care nurse is expected to be able to identify the illness and know the cause of the illness, and to be able to manage or refer further when necessary (Gagiano, 1995; Lee et al., 1995; Pillay & Subedar, 1992). Studies conducted in the different parts of South Africa suggest a need for further research into the area of knowledge and attitudes in primary care (Lee et al., 1999a). In view of this, the present study was undertaken to assess the level of knowledge of mental disorders and attitudes towards the mentally ill.

As a background to the present study, the next chapter reviews the prevalence of mental health disorders in the community and primary health. The problem of low detection at primary care is discussed and reasons are explored in detail. The chapter concludes by focusing on other relevant issues such as which model should be adopted to be able to deliver comprehensive care. Two dominant theoretical models are critiqued and the implications for comprehensive care highlighted.

CHAPTER 2 : LITERATURE REVIEW

2.1 INTRODUCTION

Despite the high prevalence and morbidity of psychiatric disorders in the primary health care setting, these disorders are frequently underdiagnosed and not treated. Many possible reasons for this exist, including low levels of mental health literacy. Given the increasing emphasis on integrating psychiatric services at primary health care level, it is important that primary health care givers, such as nurses, are positively inclined towards people with mental illness, and familiar with principles of psychiatric diagnosis and treatment. In this study, primary health care nurses' knowledge of psychiatric disorders and attitudes towards psychiatric patients are assessed.

Mental health is especially relevant in South Africa because of the recent political past and the present social and economic conditions. The links between apartheid and people's mental health have often been discussed (Dawes, 1985; Kaminer, Stein, Mbanga, & Zungu-Dirwayi, 2001; Vogelman, 1986), and some have suggested a link to the current psychosocial problems that manifest in violence and other forms of abuse (Kaliski, 1998). Although the relation between apartheid and psychopathology should not be oversimplified (Swartz, 1998), oppression, violence, detention without trial, forced removals and separation of families as well as other conditions under apartheid, may well have contributed to the prevalence of psychiatric disorders. Certainly, a recent study found an association between being a victim of human rights' violations and the development of mental disorders, such as posttraumatic stress disorder (PTSD), panic disorder and major depressive episode (MDE) (Kaminer et al., 2000).

While apartheid is no longer with us, there remain important stressors, such as crime and serious psychosocial problems. Crime and its effects remain a great challenge in the society. Crime has been identified as a serious stressor leading to an increased risk of developing psychiatric disorders such as PTSD and depression (Allwood, 1997; Pastore, Fisher, & Friedman, 1996; Seedat, van Nood, Vythillingum, Stein, & Kaminer, 2000). Psychosocial stressors such as high rates of unemployment, poverty (Michels, 2000) and an increase of diseases such as tuberculosis, HIV and AIDS (Abdool Karim & Abdool Karim, 1999) remain a reality for the majority of South Africans (Maj et al., 1994; WHO, 2001b). Poverty is increasingly gaining

recognition as an important contributor to the incidence of mental disorders (Kessler et al., 1994; Patel, Araya, de Lima, Lundermir, & Todd, 1999; Patel, 2001). Disasters, whether man-made, such as bombings, or natural phenomena, such as tornados and floods, have been experienced in some parts of South Africa. These incidents left devastation and led to high levels of posttraumatic stress and a few cases of PTSD (Trauma Centre for Survivors of Violence and Torture, 1999). The increased incidence of mental disorder is associated with morbidity and high costs of treatment.

This brief overview of the historical events and current problems provides a backdrop for understanding the importance of mental health in South Africa. It also contextualises the problems discussed in Chapter 1 by motivating why the country needs to adopt a comprehensive approach, which will ensure that all South Africans have access to basic mental health services. The importance of events discussed above has to be understood in the light of past and current research. It has been shown in other studies that there is usually an accumulation of life events before the onset of mental disorders or relapse of patients (Brown, Birly, & Wing, 1972; Leff et al., 1987). A causal relationship is not implied, but rather a contributing or precipitating relationship is suggested as playing a major role in the development of mental disorders.

The next section begins by outlining the epidemiology of psychiatric disorders, the relative lack of recognition of these disorders by primary health care practitioners, and possible reasons for this. It concludes by looking at the problem of adopting a medical model to extend mental health services and the implications for an integrated, comprehensive health care system.

2.2 MENTAL DISORDER PREVALANCE

Mental disorders have become common and according to the latest WHO (2001b) report, they affect more than 25% of all people world-wide. Psychiatric disorders are highly prevalent, and are accompanied by marked disability and reduced quality of life (Goldberg & Huxley, 1992; Goldberg & Lecrubier, 1995; Jenkins, 1995; Jenkins, Bebbington, Brugha, Farell, Lewis, & Meltzer, 1998; Kessler et al., 1994; Üstün & Satorious, 1995; WHO, 2001b). Psychiatric disorders have gained recognition as being among the top causes of disability. Long-term, the picture looks bleak as stressors are expected to increase rather than decrease, leading to increased incidence of psychiatric disorders world-wide (Desjarlais, Eisenberg, Good, &

Kleinman, 1995; Murray & Lopez, 1996a, 1996b, 1997a, 1997b; WHO, 2001b). It has been projected that "by 2020 the burden of these disorders will have increased to 15%" (WHO, 2001a, p. 19), making psychiatric disorders one of the areas being given priority by the WHO.

The risk of developing mental health problems increases with the high demands that face urban and rural communities (Harpham & Blue, 1995; Mumford, Minhas, Akhtar, Akhater, & Mubbasharr, 2000). It is now estimated that, given the prevalence of psychiatric disorders, at least one in four people will be affected by a psychiatric disorder in their lifetime; this being true for both industrialized and developing countries (Robertson & Freeman, 2001; WHO, 2001b). Prevention, early diagnosis or identification and provision of treatment are all vital in reducing the effects of psychiatric disorders on the quality of life of patients. In the United States of America (USA) it was estimated that 70% of mental disorders are treated solely in primary health care, which has been called by Regier et al. (1978) the de facto mental health care system (Perez-Stable, Miranda, Munoz, & Ying, 1990; Regier et al., 1978; Schulberg & Burns, 1988). Thus nurses, and general practitioners in primary health care are becoming key role players in the early recognition and treatment of psychiatric disorders (Jenkins & Strathdee, 2000).

Mental disorders are said to be "universal" affecting people of all races, ages, sexes, income groups and regions (WHO, 2001). The "universality" of mental illness remains a controversial issue within psychiatry (Patel & Winston, 1994; Swartz, 1998), and will be discussed in detail later on in this review. Research has dispelled the earlier beliefs that suggested certain population groups had low rates of mental disorders (Buchan, 1969; Desjarlais, Eisenberg, Good, & Kleinman, 1995; Mumford et al., 2000; Ngubane, 1977; Orley & Wing, 1979; Parry & Swartz, 1997; Peltzer & Ebigbo, 1989, Reeler, 1987). Even between men and women, the prevalence figure is more or less the same with the main difference in the distribution of disorders. Depression, for example, has been found to be more common in women and substance abuse more common among men (Gold, 1998; Kohn, Dohrenwend, & Mirotznik, 1998; Patel, 1999; Pearson, 1995; Shaw, Kennedy, & Joffee, 1995).

Surveys undertaken globally estimate that more than 25% of individuals will develop one or more mental or behavioural disorders during the course of their lifetime (Almeida-Filho et al., 1997; Golberg & Huxley, 1992; Kessler et al., 1994; Üstün & Sartorious, 1995; Wells, Bushnell, Hornblow, Joyce, & Oakley-Browne, 1989; Wright & Anderson, 1995). A recent analysis done

by the WHO shows that neuropsychiatric disorders have an aggregate point prevalence of about 10% for adults (Global Burden of Disease [GBD], 2000 in WHO 2001b). It is also estimated that 450 million people have a neuropsychiatric condition such as unipolar disorder, bipolar disorder, schizophrenia, epilepsy, alcohol and selected drug use disorders, Alzheimer's and other dementias, PTSD, obsessive compulsive disorder, panic disorder and primary insomnia (WHO, 2001b, p. 23). The above prevalence figures are more or less in line with community studies conducted in South Africa.

In South Africa there are fewer studies on the epidemiology of mental disorders but the available research shows that mental disorders are prevalent (Gijana & Louw, 1981; Gillis, 1973; Parry, 1996; Parry & Swartz, 1997). A review of fourteen prevalence studies in the Sub-Saharan Africa found 10% - 69% prevalence rates of depression (Patel, 1998). Studies in Mamre, Western Cape, found 27% of a sample to have a psychiatric condition such as anxiety and depression (Rumble, Swartz, Parry, & Zwarenstein, 1996). Ben-Arie, Swartz, and Dickman (1987) found a 13% prevalence of depression in a sample of 1391 elderly persons in a community near Cape Town. Gillis (1992) found the rate of depression to be as high as 40% in a sample of elderly women in an informal settlement near Cape Town. A similar study in Kwadedangendlale, Kwa-Zulu Natal, found 24% to be suffering from anxiety and depressive disorders (Bhagwanjee, Parekh, Paruk, Petersen, & Subedar, 1998). Another study in Kwa-Zulu Natal found 21% psychiatric morbidity rates in a sample of patients in medical, surgical and gynaecological wards (Nair & Pillay, 1997). The figures that are available are mostly for adults.

Globally, relatively few studies are available on the prevalence of mental disorders among children. Studies done in developed and developing countries estimate that 10%-20% of children have one or more mental or behavioural problems (Morita, Suzuki, Suzuki, & Kamoshita, 1993; Steinhausen, Winkler, Metzeke, & Kannenberg, 1998; Tadesse, Kebede, Tegegne, & Alem, 1999; Weyerer, Castello, Biener, Artner, & Dilling, 1988). Locally, there are again relatively few epidemiological studies on children (Byrne, 1987), but studies on children and exposure to trauma have found high rates of psychological distress (Ensink, Robertson, Zissis, & Leger, 1997; Robertson, 1996; Seedat, Vythillingum, & van Nood, 2000; Skinner & Swartz, 1989).

In summary, there is a high incidence of psychiatric disorders, both globally and locally. The high demand for mental health services (Pillay & Lockhat, 1997) thus, makes it necessary to

review the prevalence of mental health disorders at primary health care level and explore the problems in service provision for patients.

2.3 THE PREVALENCE OF PYCHIATRIC DISORDERS AT PRIMARY HEALTH CARE

Primary health care is often the first port of call for patients with minor psychiatric morbidity, making primary care an important point in determining the pathways to care (Karlsson, Joukamaa, & Lehtinen, 2000; Patel, 1995, 1996; Patel, Simunyu, & Gwazura, 1997; Vazquez-Barquero et al., 1993). Unfortunately, research has shown that of the patients presenting at this setting, only a few are ever diagnosed and treated for a psychiatric disorder (Abiodun, 1989; Gelenberg, 1999; Goldberg & Huxley, 1992; Harding et al., 1980; Vazquez-Barquero et al., 1997). Goldberg and Huxley (1980) provide a good model for understanding psychiatric disorders and the pathways to a specialist, (see Figure 1 below).

LEVEL 1:	**Psychiatric Morbidity in the Community**
FILTER	The Decision to Consult
LEVEL 2	**Total Primary Care Morbidity**
FILTER 2	GP Recognition
LEVEL 3	**Conspicuous Primary Care Morbidity**
FILTER 4	All Psychiatric Patients
LEVEL 4	**The Decision to Admit**
LEVEL 5	Psychiatric in-patients

Figure 1 "The pathway to psychiatric care"
(Source: Goldberg & Huxley, 1980 in Gelman, 1999, p. 3)

On this model the general practitioner (GP) is filter number two, meaning that individuals in level one, the community, will decide to seek help. After going through filter one they will move to level two where they consult a GP. This is a crucial point in determining pathways, if the psychiatric illness is recognised, the person might go through to level 3, 4 or 5 as required, or might be retained at primary care.

Movement through the different levels is a function of various factors such as knowledge and recognition of a problem. In the community, for example, some will remain in level 1 and never seek help, and others will go through filter 1 and get to level 2. At level 2 the role of recognition of a mental disorder lies with the primary care clinician. The reality is that half of those who present in primary health care settings with psychiatric disorders are not diagnosed (Goldberg & Huxley, 1992; Higgins, 1994).

Patients who are recognised as having a mental disorder are either treated at primary care or referred to a mental health specialist. There is evidence that a majority of primary health care practitioners generally, prefer to treat minor psychiatric disorders themselves, and refer only when the case becomes complicated or when there is no progress (Nady, Chalmers-Watson, Gantley, & Underwood, 2001). Keeping patients at primary care level might be an ideal situation if all primary health care clinicians had an interest in and knowledge of mental health issues and could treat mental disorders effectively. However, several studies have shown that when minor psychiatric disorders are recognized and treated at primary health care level, they are often not treated effectively (Kroenke, 2001; Roy-Byrne et al., 1999). The recommended dose of medication for treating disorders like depression and panic disorder is often not followed. The medications used are often medications that have been shown not to be effective or those whose effectiveness has not been proven (Pausnau & Bystritsky, 1990). The duration of the treatment is also not adequate. A study by Roy-Byrne et al. (1999), for example, found that panic disorder was treated for only 2 weeks with Setraline by GPs, indicating a lack of knowledge in pharmacological treatment guidelines. In view of this, primary health care practitioners might be another barrier that prevents patients from accessing effective treatment for their disorders. The prevalence of psychiatric disorders in this setting will now be reviewed.

Studies in developed and developing countries suggest high rates of psychiatric morbidity at primary health care level (Kessler, Clearly, & Burke, 1985; WHO, 2001b). To some extent, prevalence of psychiatric disorders in primary health care reflects prevalence in community studies (Breslau, Kessler, Chilcoat, & Schultz, 1998; Kessler et al., 1994). Research on primary health care and mental disorders suggests that more than one third of patients presenting in primary health care settings with somatic complaints manifest psychological distress (WHO, 1997, 1998). Furthermore, more than 20% of all people attending primary care facilities have a diagnosable psychiatric disorder, or a physical condition with psychological determinants

(Dhadphale & Ellison, 1983; Dhadphale, Ellison, & Griffin, 1982; Harding, Derango, & Balthazar, 1980; Jenkins & Üstün, 1998; Ormel, Koeter, van den Brink, & van de Willige, 1991; Sartorius et al., 1993; WHO, 2001b). Despite the high rates of mental illness and its consequent morbidity, there is still a low recognition rate by general practitioners and nurses in primary health care (Barrett, Barrett, Oxman, & Gerber 1988; Carey & Stein, 2001; De Jong, 1986; Lee et al., 1995; Lee et al., 1999a).

The under-recognition of psychiatric disorders at primary health care is not only common in adults but is also common in children (Richardson, Keller, Selby-Harrington, & Parrish, 1996). It is estimated that of the 1 in 10 young people that suffer from mental disorders, only 1 in 5 receives the necessary treatment (WHO, 2001b). Other studies have shown that paediatricians only detect around a quarter of the psychiatric problems that present to them (Costello, 1986, 1989; Costello et al., 1988a, 1998b). These low rates of detection are unacceptable and need to be prioritised in order to improve and encourage early diagnosis.

In South Africa, the picture does not appear very different. Two studies done at primary health care found high rates of mental health disorders among the attendees. Thom, Zwi and Reinach (1992) found a 14,4% incidence of psychiatric disorder in a primary health care clinic sample. Of those screened (299) only three of the patients had been diagnosed with a psychiatric disorder by the primary health care clinicians. This indicates that the primary health care clinicians missed 93% of psychiatric diagnoses. Similar results were also found in a Western Cape primary health study assessing exposure to trauma (Carey & Stein, 2001). In this study, 37% had depression, 20% had PTSD, and 18% had somatisation disorder. Nevertheless, primary care clinicians did not detect psychopathology.

In the next section, a brief overview of data on common disorders at primary health care and morbidity of mental disorders is presented. The relative under-diagnosis in the primary care setting is discussed, and possible reasons for this lack of awareness are considered.

2.4 COMMON DISORDERS, RELATED MORBIDITY AND COSTS

Among the common disorders that present in primary health care settings are depression, anxiety, substance abuse (Lecrubier & Üstün, 1998; Manning, Haykal, Connor, & Akiskai, 1997; WHO, 2001b), and adjustment and personality problems (Bebbington, Brugha et al.,

2000; Fifer et al., 1994). These disorders usually present alone, or in addition to one or more physical disorders (Kessler et al., 1994). Prevalence of depression has been estimated at 48% (Zung, Magill, Moore, & George, 1983) in primary health care, and anxiety disorders in the general population of the USA were reported to be 6.6 to 14.9 % higher than depression rates (Myers et al., cited in Fifer et al., 1994). Thus high rates of anxiety disorders at primary health care level can also be expected (Murray & Lopez, 1996a). To summarize, any psychiatric disorder can present in primary health care but some are more common and often go undetected. As previously mentioned, psychiatric disorders are associated with high morbidity and cost. Morbidity rates and costs are even higher for undetected and untreated mental disorders (Shaw & Creed, 1991; Smith, 1994).

Studies in developed countries have shown that mental illness is associated with high costs, for treatment and other related reasons (Shah & Jenkins, 2001; WHO, 2001). The costs of mental illness in the USA were estimated at 2.5% of the gross national product (Rice, Kelman, Miller, & Dummeyer, 1990). A study in the USA, specifically on anxiety disorders, estimates that the annual cost of anxiety disorders was approximately $42.3 billion in 1990 (Greenberg et al., 1999). In the UK, 22% of the health expenditure was spent on mental illness and this was an estimate for in-patients only (Patel & Knapp, 1998). In 1990, it was estimated that it would cost $ 1. 5 billion annually, to treat children and adolescents with mental disorders (National Advisory Mental Health Council, 1990, cited in Richardson et al., 1996). Untreated mental disorders are costly to health system (Blue & Harpham, 1994; WHO, 1990). The high cost of treating mental disorders is associated with long-term care that becomes necessary when problems were not identified early on and therefore, no longer respond to short-term interventions (Llody, Jenkins, & Mann, 1996; Simon, Ormel, VonKorff, & Barlow, 1995). Indirect costs of untreated mental disorders include repeat visits for somatic complaints (Lechnyr, 1993; Mehl-Medrona, 1998), loss of productivity (Jenkins, 1985), and resulting disability (Chisholm et al., 2001).

Undetected mental illness costs the health system in repeated visits. Undiagnosed patients attend clinics more frequently when compared to other patients without a mental disorder (Fifer et al., 1994; Howe, 1998; Marais, de Villiers, Möller, & Stein, 1998; Mezey, King, & MacClintock, 1998; Nady et al., 2001; Richardson, Feder, Eldridge, Chung, Coid, & Moorey, 2001). Expensive diagnostic tests are often recommended by doctors to try and determine the causes of

symptoms which in turn, contributes to high health costs (DeGruy, 2000; Dowrick, 1992; Simon, VonKorf, & Durham, 1994; Wright & Anderson, 1995; Zaubler & Katon, 1996).

Until recently there was no evidence to show that increased diagnosis of mental illness reduces health costs and expenditure (Smoyak, 2000; Valenstein, Vijan, Zeber, Boehm, & Buttar, 2001). A study by Campbell et al. (2000), however, showed that increased recognition and diagnosis reduces health care costs. The reduction of costs has been attributed to reduced inpatient diagnostic testing. Increased mental health diagnosis results were associated with less medical visits of unexplained medical symptoms and led to efficient treatment of mental problems.

Low rates of recognition and treatment have been associated with increased health costs and poor health outcomes (Gelenberg, 1999; Murray & Lopez, 1997a; Simon, VonKorf, & Durham, 1994). Patients with mental disorders have an increased chance of having another physical medical conditions, especially in the elderly population (Geerlings, Beekman, Deeg, & Tilburg, 2001; Kessler et al., 1994). It is also common for mental disorders to occur together. For example, one person might present with PTSD and depression or panic disorder (Brady, 1997; Kessler, Stang, Wittchen, Üstün, & Walters, 1998; Kessler, Stang, Wittchen, Stein, & Walters, 1999; Zimmerman, McDermut, & Mattia, 2000). Comorbidity rates have been shown to be high in the population with mental disorders. Kessler et al. (1994) found a 79% rate of comorbidity in a representative sample in the USA. People with a mental disorder have an increased risk of being addicted to other medications, such as sleeping tablets, and other substances of abuse, such as alcohol (Rashliesel, Scott, & Dickson, 1999). This often leads to a dual diagnosis, for example, alcohol dependency and depression or PTSD (Gossop, Kent, Sullivan, & Coplan, 1998). The substance of abuse is often used in an attempt to find relief from symptoms associated with the disorder (Brady, 1997). Early recognition of mental disorders will hopefully prevent the negative outcomes highlighted above.

South African studies have also shown the association between undetected mental disorders and the increased utilization of the health care resources. Marais et al. (1999), in their study with GPs, noted that women who had been exposed to trauma utilized the service more, when compared to controls. Increased somatic symptoms have also been reported in patients with psychiatric and psychological disorders, resulting in high costs and repeated visits. Patients also get frustrated and dissatisfied with the health system (Badger, Ackerson, Buttel, & Rand, 1997;

WHO, 1990), changing doctors or clinics in their search of an intervention that will cure their problem (Petersen, 2000b). Locally, there are fewer studies on morbidity and costs of mental disorders (Ensink, Leger, & Robertson, 1997a, 1997b; Lund, Flisher, Robertson, Lee, & Porteus, 2001). However, there is no reason to suggest that locally these disorders are not characterised by significant morbidity and costs (Shah & Jenkins, 2000).

It is not only the costs that are of concern; quality of life is impaired and this impacts on others in a variety of ways (Freeman, Lee, & Vivian, 1999a, 1999b; Kessler, Walter, & Forthofer, 1998; Richardson et al., 1996). Untreated disorders do not only affect the individual, but also the family and the economy in terms of lost productivity (Kessler, 2000; Kessler, Sonnega, Bromment, High, & Nelson, 1995). The consequences of untreated mental disorders, such as major depression, include suicide (Goodwin & Jamison, 1990), homicide, and social dysfunction (U S Department of Health and Human Services, 1993; Murray & Lopez, 1996a; Wohlfarth, van den Brink, Ormel, Koeter, & Oldenhinkel, 1993).

Poor quality of life has been observed in adults with mental disorders in South Africa (Mogotsi, Kaminer, & Stein, 2000). Globally, there has been an increased interest in the area of impact on the quality of life as a result of living with a mental disorder (Lamberg, 1996b). The assessment tools used in this area assess the subjective rating of patients' perceptions of how the disorder has impacted their quality of life (Lehman, Steinwachs, & Co-investigators of the PORT Project, 1998; Orley, Saxen, & Herrman, 1998). Studies in other countries such as the UK have shown serious impact on the quality of life, with the impact often sustained even when the illness has remitted (UK 700 Group, 1999). These findings are not only limited to individuals with severe disorders but extend to people with anxiety disorders, (Mendlowicz & Stein 2000; Orley & Kuyken, 1994; Perkonigg, Kessler, Storz & Wittchen, 2000). Anxiety disorders in particular can have a limiting effect for sufferers (Bebbington, Meltzer, et al., 2000; Westernberg, 1998). Social phobia disorder, for example, has its onset around adolescence; an important stage in the socialisation of a young adult (Beidel, 1998). Individuals may find themselves lonely because of the anxiety associated with going out and meeting new people. Career decisions can also be affected as sufferers avoid new situations or any job involving meeting and mixing with people (Lamberg, 1998).

The quality of life needs to be emphasized more than the cost. There is a growing feeling that motivating for early recognition and treatment of mental disorders by looking at the cost of not treating is "discriminatory and outdated" (Kroenke, 2001, p. 418; DeGruy, Vijan, Zeber, Boehm, & Buttar, 2001), and contributes to the stigma of mental illness. It is suggested that when other conditions such as heart disease or cancer are dealt with, money is not the first priority; saving, extending or improving the quality of the patient's life is. Mental health should also gain the same status. Campaigns for increased recognition of psychiatric disorders and psychological problem should be motivated by the needs to improve and extend lives of patients rather than saving costs.

2.5 RECOGNITION OF MENTAL DISORDERS AT PRIMARY HEALTH CARE LEVEL IN SOUTH AFRICA

There are indications that the problem of poor recognition at primary health care exists in South Africa. A few studies have documented the problem of poor recognition in the Southern African context (Parry & Swartz, 1997; Reeler, 1987). A primary health care study conducted in Soweto found the prevalence of psychiatric disorders to be 14.38%. Of these patients, only three had been found to have a psychiatric disorder by the clinic staff, implying that 93% of the patients with a psychiatric disorder had not been diagnosed by the clinic staff (Thom, Zwi, & Reinach, 1993). Another South African study investigated psychiatric morbidity in a sample of survivors of human rights' violations and found that of the 63% with a current psychiatric diagnosis only 3 survivors had been diagnosed and treated for a psychiatric disorder. The rest had attended their primary health care clinics regularly for different somatic complaints without the psychiatric conditions being detected (Kaminer et al., 2001; Zungu-Dirwayi, Kaminer, Mbanga, & Stein, 2000). High rates of undiagnosed PTSD, MDE and somatisation and low recognition rates were also observed by Carey et al. (2001) in a study conducted at a Western Cape primary health clinic. Other researchers in other countries have reported on the lack of recognition of psychiatric disorders in primary health care settings. These findings are summarised in Table 2.1.

Table 2.1: Psychiatric Disorders at Primary Care

Study	Location of Study	Detection Rates of Primary Health Care Clinicians	Found by Researchers
Hall & Williams, (1987)	Zimbabwe	4.25%	
Abiodun, (1989)	Nigeria	14.6%	
Carey & Stein, (2001)	South Africa	-	37% had depression, 20% had PTSD 18% had somatisation disorder
Thom, Zwi, & Reinach, (1993)	South Africa	3%	93%
Ormel et al., (1990)	Netherlands	GP's missed half of the present state examination cases, those recognized were assigned non specific diagnosis	-
Ormel et al., (1991)	Netherlands	47%	
Harding et al., (1980)	4 Developing Countries	One third	
Lee et al., (1999a)	South Africa	Fewer than one third	
Mari & Williams, (1984)	Brazil	71% found & 29% not recognized	
De Jong et al., (1986)	Guinea-Bissau	Only 1 out of 3 recognized, out of every 100 non-cases, 12 misdiagnosed	

2.6 REASONS FOR POOR DETECTION OF MENTAL DISORDERS

It is important to acknowledge that the recognition of psychiatric disorder is not only dependent on the clinician. The patient also plays a role. According to Parry and Swartz (1997), the

movement of people between the different levels and filters seen in Goldberg and Huxley's (1980) model (see Figure 1 above) is dependent upon a combination of factors. These factors include symptoms, people's subjective understanding of their symptoms, and what action they decide to take to deal with them. At the end of this chain is the doctor or clinician's role in detecting the disorder, the pathways to care or referral, and available resources. All these factors come together to inform the decision to seek help. Even when the person has presented at their primary health care clinic and the disorder has been detected they might reject the diagnosis of mental illness and refuse to be treated or referred to a specialist. Therefore, the role of the patient is also acknowledged as an important factor in the recognition and treatment of mental disorders. However, the present study will focus on the clinician's role, i.e. nursesrole in poor detection rather than the patient's role.

2.6.1 Presentation of the illness as a factor in poor recognition

The presence of minor psychiatric disorders has been shown to increase the probability of seeking help from a primary health practitioner (Burvill & Knuiman, 1996). However, the presentation or the reason for the visit is often not the psychiatric problem told to the doctor. For example, a patient with depression or even posttraumatic stress disorder might present with headaches, fatigue and other somatic complaints (Breslau, Davis, Peterson, & Schultz, 1997; Lans & Strauss, 1995; Schwindack, Gagiano, & Joubert, 1995). It is then up to a good clinician to find out more about why the patient is having these symptoms. A physical examination and an evaluation of current stressors in the patient's life are good starting points. It has been suggested that when depression is suspected a single question about a depressed mood can detect 85% to 90% of patients with major depression. When a second question about anhedonia is added on, detection increased to 95% (Whooley, Anvis, Mirand, & Browner, 1997; Williams et al., 1999).

Another issue related to presentation, is that of gender differences. There is evidence to suggest that females are more likely than males to seek help for psychological problems as presenting problems (Kessler, 1981; Patel, 1998; Patel et al., 1997; Vasquez-Barquero, Wilkinson, William, Diez-Marique, & Pena, 1990). The presentation of a complaint may also differ. Females are more likely to recognize psychological distress and communicate it to the clinician (Byrne, 1981). Generally though, patients who do not give psychological distress as a complaint tend to present with somatic complaints (Petersen & Bhagwanjee, 1996). The differences in gender suggest that males might need to be directly asked about psychosocial stressors and be screened

for symptoms that might be manifesting somatically or that might be underlying the somatic complaint.

It has been hypothesised that the difference in presentation of the disorder determines the detection of the disorder (Lee et al., 1995). Disorders with symptoms that are shown outwardly as signs of mental illness stand a better chance of being diagnosed, while those with inward symptoms will often not be easily detected and diagnosed. Two studies assessed knowledge of psychiatric disorders among a nursing sample, in two different locations in South Africa, and found low rates of diagnosed mood and anxiety disorders (Lee et al., 1995; Lee et al., 1999a). In both studies, psychotic disorders were diagnosed more frequently. Epidemiological studies in Africa have shown that the rates of depression and anxiety are comparable to those found in the West (Orley & Wing, 1995). Therefore, the most feasible explanation for the low rates of these diagnoses in the previously mentioned studies can be attributed to lack of recognition with patients being treated for other illnesses, and somatic complaints.

Somatisation may be frequently misunderstood and inappropriately dealt with in primary health care settings (Fink, Sørensen, Engberg, Holm, & Mukn-Jørgenson, 1999; Gujere, Simon, Üstün, & Goldberg, 1997). The topic of somatisation, especially among African patients, has been debated a lot in the South African literature (Button, 1988; Helman, 1994; Kleinman, 1986; Swartz, 1989, 1998). It will not be dealt with extensively in the present study, but relevant data supporting the case for recognition and better treatment of such cases in primary care will be reviewed. Somatisation was once seen as a feature only of 'unsophisticated' people (Swartz, 1998) and often associated with the African patient in South Africa. Understanding of somatisation seems to have changed from the days it was seen as abnormal and is now seen as a normal method of communicating distress (Kleinman, 1987, 1995), removing the stigma associated with somatising in the medical field (Miller & Swartz, 1990). Today, somatisation is seen as a means of expression and a way of engaging with the world (Kleinman, 1987; Lewis-Fernandez & Kleinman, 1995).

Somatisation has been commonly reported in primary care and community studies. Studies in South Africa have reported high rates of somatising presenters among primary health care patients (Carey & Stein, 2001; Peltzer, 1995; Petersen & Parekh, 1996; Thom et. al., 1993). There is an indication that the presentation of physical symptoms without obvious diagnosable

physical cause is dismissed without further investigations in the primary health care setting (Goldberg, Novack, & Gask, 1992; Petersen, 2000). Patients are often told that nothing is wrong. This increases patients' distress as they start to believe they are suffering from a disorder that is eluding the doctors. The label of somatisation should therefore be used with caution as it maybe contributing to poor detection and is loaded with negative connotations and stigma associated with malingering. When evidence for the cause is not found, it might be beneficial to seek other causes, whether psychosocial or psychological, rather than sending a patient home having not helped them (Tiemens, Ormel, & Simon, 1996).

2.6.2 Lack of resources as a factor in poor recognition

The availability of mental health resources is another factor that might influence the recognition of mental disorders. For example, in an area where there is no place to refer cases of mental disorder, there is a likelihood that the clinicians will avoid diagnosing mental health problems as they will have to treat them on their own (Reynolds, 1993). This might be motivated by clinicians' feelings of inadequacy in their own skills. It might also be a form of self-preservation, motivated by clinicians trying to protect themselves from the stress of working with mental disorders and illness on top of a normal caseload. According to Swartz (1998), for example, the unavailability of support, such as other mental health workers, might result in the doctor ignoring mental disorders or psychological distress, because of beliefs that medication alone is inadequate.

It is said that the majority of mental health problems encountered at primary health care settings are psychological in nature and thus do not need medication, but would benefit from other interventions (Clark, Hook, & Stein, 1997; Ellsberg, Pena, Herrera, Winkvist, & Kullengren, 1999). The minor psychiatric problems presenting at this setting may benefit from medication together with psychological support in the form of therapy or counselling. It is impossible for a clinician who is isolated and without other resources to find time to fulfill the role of doctor and counsellor or therapist. This is supported by responses from primary care practitioners in a study that investigated the determinant of referral for minor mental illnesses:

> "GP A. ' I realised that counselling is a great skill .... and I realised that actually I don't think I'm the world's best at it....'
> GP 1 ' a bit of a bloody relief' [in reply to: 'What do you expect from a referral ?']

GP 6 'I don't think that I would personally cope with it....I'd just be too worn out [if not able to refer some patients]" (Nady et al., 2001, p. 463-464).

The above responses clearly demonstrate the strain that is associated with caring for patients with mental health problems and disorders, and the need to have resources available to refer to. Thus it might be possible that undiagnosed mental illnesses in the primary health care population is also a reflection of scarce mental health resources.

Another area that needs consideration is the physical set up of the public primary health care clinics. Lack of resources and poor planning might be influencing the level of recognition especially in the public health primary clinics. The set up of the public clinics in South Africa is such that the screening rooms are open areas, compromising patients' privacy during screening. A screening room is an area where patients are assessed, by means of questions about general health and habits such as drinking, smoking, allergies and so forth. Patients are also asked about the presenting problem and duration. Other important information is collected, such as weight, temperature, and blood pressure. Urine tests are also done at this point and any abnormalities are recorded on the folder.

The room is often a small area and patients are often called in as groups of 20 or more, depending on how busy the clinic is. This means that while one patient is being screened the rest are either queuing or sitting close by, violating the privacy of patients. Those working in this room are mostly junior staff such as enrolled assistant nurses, enrolled nurses, volunteers and even non-clinical staff such as security guards (Martinson, 1997). Two problems would need to be addressed if this area is to be in line with the vision of comprehensive health. Firstly, it is unacceptable and unethical to allow untrained personnel to screen patients no matter how short-staffed the clinic is. Secondly, the location of a screening room within the clinic needs to be private enough to allow a one-on-one interview with the patient. These two problems need to be researched further in order to ascertain the role of a screening room in the detection of mental illnesses.

From the screening room patients are then allocated to a doctor or a nurse, based on the information gathered in the screening phase. Consulting with a nurse or doctor should be the next filter for detecting mental illness if this was missed at point A, the screening room.

Unfortunately, the consulting areas have problems that also need to be addressed. Most of the public clinics have one big consultation room, partitioned off with curtains, and up to four clinicians working in one room. This means a conversation between doctor A and patient is heard by doctor B, or nurse C, and their patient, through the curtain. As a result, patients might not be free to talk about psychological or psychiatric problems. The doctor or nurse might also not feel free to ask about psychological problems, being aware of the lack of privacy in the room, which could result in non-detection of the mental problems.

2.6.3 Culture and language as a factor in poor recognition

Another factor that may contribute to lack of recognition is cultural and language differences within the primary health care setting. It is known that psychological distress is common to all cultures; it is the expression and understanding of symptoms that may differ raising the question of universality of mental disorders (Gagiano, 1995; Kleinman, 1978; 1987; Littlewood, 1996; Mkhize, 1998a, 1998b). Some have argued the need for clinicians to start recognizing the subjectiveness of illness (Helman & Kirmayer, 1988). They have highlighted that psychiatry has to move away from the notion that psychiatric symptoms are universal with differences in presentation just a variation of the same illness (Kleinman, 1987, 1995; Patel & Winston, 1994; Swartz, 1998). This criticism is acknowledged and will be reviewed briefly under the psychiatric model below. Adopting a patient-centered subjective model for explaining symptoms to accommodate different cultures might also raise it own challenges. For example, a patient presenting at primary health or general health with auditory and visual hallucinations is likely to be diagnosed with a psychosis and treated with anti-psychotic medication. This might be done even if the patient believes this to be a normal process to a calling to be spiritual healer (Mills, 1985). If the patient's explanation for the behaviour is accepted then the doctor or clinician may need to respect the process and not intervene with universalist methods, even when they have been proven to be effective (Mbanga et al., 2002).

The different presentation and explanations in other cultures might make it difficult for the clinician coming from a different culture to determine what is normal and what is not normal in the patient's culture (Bibeau, 1997; Eisenberg, 1988; Ensink & Robertson, 1996; Lewis-Fernández & Kleinman, 1996). Although this is true, it should not mean that the African culture can never be understood (Swartz, 1998). The difficulty for clinicians working outside their culture is often experienced when there is a cultural explanation for a problem. Africans working

in the field of psychiatry are sometimes asked if certain behaviours are normal or not in their cultures, especially around issues of witchcraft (Drennan, 1998). In such cases depression might be missed in an African Xhosa males purely because of cultural beliefs presented to clinicians. Males who have undergone initiation rituals sometimes present with a depressed mood after the initiation ceremonies. Cultural explanations focus on the initiation as having gone wrong or certain rituals that might not have been followed. When presented with such cases a clinician who does not understand the culture is often unsure about what is culturally appropriate in this context. Therefore, cultural differences might lead to poor recognition if poorly understood.

In South Africa, there are eleven official languages. However, Afrikaans and English continue to dominate. Efforts to translate important documents have not been successful and provision of important services in all eleven languages is still a goal that has not been put into practice. Certain languages are still marginalised and their speakers are disadvantaged whenever they seek services at public institutions. This is also true for the health sector where the majority of doctors do not speak any of the African languages (Drennan, 1996, 1998; Drennan & Swartz, 2002; Swartz, 1989). The language problem might be a possible factor that contributes to poor detection (Drennan, 1998). Although the majority of personnel in primary health care are nurses, doctors still play an important role in treatment. Any mental health problem detected within the primary health clinic is referred to the doctor for further assessment and management. Doctors at these settings are dependent on interpreters, usually nurses, to communicate with the patients (Drennan & Swartz, 2002).

Several solutions have been proposed for the language problem. These include: introducing a basic vernacular language for health workers and increasing the number of African students being trained in health disciplines such as medicine, psychiatry, and psychology (Swartz, 1996a, 1996b). At the University of Cape Town the Psychology Department introduced a language policy that made it a prerequisite that applicants to the postgraduate course in clinical psychology be able to speak one other language besides English and Afrikaans (Swartz, 1996b). The 1990's saw an increased intake of African applicants in psychology at postgraduate level in most "historically white universities" (Mokutu, 1999). Some might call this a victory for the transformation forces. Unfortunately, it has not translated into much (Drennan, 1999). South Africa continues to have few African psychologists, and policies around language have not

shown any benefit beyond learning basic Xhosa that does not go beyond 'Molo, unjani , ndiphillile enkosi" ["hello, how are you, I am fine thank you"].

Another solution that has been suggested for dealing with the language problem is the training and use of interpreters in hospitals (Drennan, 1996; Swartz, 1996b). This suggestion is in response to the problem observed at two Western Cape psychiatric hospitals where doctors, in the absence of a nurse who could interpret for a Xhosa patient, would use whoever was available. Interpreters could be anyone from a patient's family member to a cleaner. The cleaner and family member might have a limited understanding of English to be able to interpret everything as it has been said between the two people (Swartz, 1989, 1998).

In the clinic, the situation is a bit different, with a doctor being allocated an auxiliary nurse who works with them and helps to interpret. This might sound ideal but in reality it is not. The presence of the third person may also prevent any meaningful exchange between the doctor and the patient during consultation (Swartz, 1998). The mere presence of a third person in a consultation complicates things. The interpreter, because of their expert knowledge of the culture and the language, may censor the information from the patient, deciding what is important for the doctor to know and thereby distorting the picture. Using untrained interpreters, or trained interpreters with their own agendas, is not ideal. Missing one important symptom or information around onset, which might have pointed to a correct diagnosis, can result in serious consequences for the patient and doctor (Swartz, 1998; Mkize, 1998a, 1998b). Therefore, a clinician who can speak the patient's language has an advantage over the one who cannot in the detection of psychological problems.

Finally, the use of interpreters has been shown to compromise privacy and confidentiality. It also affects the image of the primary health care clinic as a safe place to bring mental health problems or psychosocial problems. Often the interpreter or nurse lives in the same community as the patient. If the content of the consultation is not protected by confidentiality, there is a chance that boundaries will be crossed and the information might be discussed outside the clinic. A study done with survivors of human rights' violations in the Western Cape found that respondents who were prominent members of the community were reluctant to discuss their psychiatric problems at the local primary health care clinic. Reasons cited included feared lack of privacy and lack of confidentiality in the clinic. Respondents in this study regarded nurses

who were members of the same community as carriers of information to the community at large (Zungu-Dirwayi et al., 2000). Therefore, poor detection might be a function of lack of privacy, and lack of emphasis on confidentiality in primary health care. This indicates a need to re-orientate and train nurses on this subject.

2.6.4 Lack of time as a factor in poor detection

Although most primary health clinicians would agree that mental illness is an important area that needs more attention, the reality is, that balancing the demands of a busy clinic and the needs of a patient with a mental disorder is not always possible. Lack of time in the primary health care clinics is a major obstacle in the efforts to educate and raise awareness about mental disorders. Clinicians in these settings usually have little time to spend with one patient (Glied, 1998). Consequently, consultations become even shorter, with an average consultation in a general practice being about ten to fifteen minutes. In public clinics this time is even more limited due to increased caseloads that are often a result of absenteeism or staff on leave (Petersen, 2001a). Time is an important issue in accurate detection and treatment of mental illness, as the next excerpt illustrates:

> "GP E: When I started in practice I would occasionally see people outside surgery hours, give them an hour, but that sort of time that people need I can't do that and therefore I now find it better to refer them on to some-one else who can be seeing them for an hour a week on a regular basis. I can't give that sort of time to people" (Nady et al., 2001, p. 462)

2.6.5 Training as a factor in poor detection

The training of medical clinicians has focused on physical disorders at the expense of mental disorders (Goldberg & Huxley, 1992; Petersen, 1998). As the psychiatric component gains more recognition and time in the training of nurses, it is important that there is also a shift towards a comprehensive approach to health care (Petersen, 1998; Swartz, 1998). This approach to care proposes that mental illness occurs as a result of the interaction of biological, cultural, psychological, and social factors (WHO, 1978). The comprehensive model has not been the model used in the training of clinicians. Thus, there is a need to review the training in the field of primary health care nursing (Gwele, 1996; Hannaford, Thompson, & Simpson, 1996). Without transformation, the vision of extending mental health care for all is not possible.

Ignorance about psychiatric disorders especially minor psychiatric disorders may reflect the way in which psychiatry was taught. It has been suggested that medical training tends to focus more on the biomedical causes of medical problems, ignoring the psychological and socioeconomic contributions to illness (Ford et al., 1997; Jenkins & Strathdee, 2000). Doctors and nurses are taught to exclude the physical conditions first, before investigating psychological problems, causing a rather unholistic exploration of a patient's problem. This may result in comorbid disorders not being detected as was the case in the studies by Kaminer et al. (2001), and Zungu-Dirwayi et al. (2000). They found that respondents diagnosed with psychiatric disorders by the researchers, had attended their primary health clinics frequently for somatic complaints and the psychiatric disorders were not detected or diagnosed. This indicates a lack of understanding of psychiatric disorders and suggests that patients with somatic complaints, and no organic cause, may not be treated further. They will probably be sent home with the message that "there is nothing wrong with them". In these studies, patients who had a diagnosis reported being diagnosed with "high blood pressure, stress or nerves" and other medical conditions such as asthma and sugar diabetes. Those without a diagnosis report not having been told what is wrong with them. They were just given medication or told that the doctor could not detect what was wrong with them (Zungu-Dirwayi et al., 2000). The use of terms, such as stress or nerves, as an umbrella for psychological distress, or any other complaint that has no organic determinants should be avoided by primary health care clinicians (Reynolds, 1990).

2.6.6 Training sites as a factors in poor detection

Another problem associated with training is that of practical experience gained during training (Eldestein, 1996; Ford et al., 1997). In South Africa, nurses and doctors are usually trained in psychiatric wards rather than in community clinics. Familiarity with disorders characterised by behavioural disruption is ensured, but there may be less awareness of conditions with mood and anxiety symptoms (Binedell, 1991). These latter conditions are particularly important in the primary health care setting.

This is confirmed by Littlewood and Lipsedge (1997, p. 68) who argue that only people with "socially disruptive behaviour are likely to come to the attention of mental health services". People who display such behaviour may come to the attention of the law, while people who are depressed might not be noticed as they do not bother anyone. The same conclusion can be drawn

from another study where researchers had diagnosed 40% of the patient sample as having depression (Gillis, 1992). However community workers working in the same area had claimed that depression was not a problem in their area. They felt that the most common mental illnesses were the socially disruptive conditions (Binedell, 1991). There is a need to train health workers about mental disorders and illness, especially the minor psychiatric disorders. Training should also focus on the presentation of the disorders.

2.6.7 Comorbidity as a factor in poor detection

Comorbidity of mental disorders is often not understood by primary health practitioners (Brady, 1997; Kessler et al., 1994). There can be comorbidity between physical and mental disorders (Brugha, Wing, & Smith, 1989). Thus, the orientation towards physical disorders leads to mental disorders being missed in primary health care. Comorbidity can work against recognising the underlying disorder, but when severe it might promote recognition. People with comorbid disorders may have more severe symptoms overall and hence be easier to recognise (Kessler et al., 1994). On the other hand, in the presence of multiple disorders like PTSD plus MDE, certain disorders may be harder to recognize. PTSD typically requires careful evaluation for a history of trauma (Brady, 1997; Kessler, Sonnega, Hughes, & Nelson, 1995). Thus, adopting clear screening methods, which allow for the practitioner to evaluate both physical and mental causes of illness, is the ideal situation.

2.6.8 Social distance, avoidance, coercion and advice giving

Primary health care nurses, unlike most doctors, are not only workers at the clinic but often form part of the community. The different roles might sometimes merge when boundaries are not drawn and maintained. The danger of not having boundaries is that it can result in burnout (Swartz, 1998). Nurses living in the community are sometimes too aware of the problems facing their clients and are looked upon as having solutions, putting pressure on them to solve the problems and leading to a feeling of being overwhelmed. Some have suggested that primary health care workers, working and living in the community, might find it useful to avoid any exploration of psychological distress by distancing themselves from the patients (Petersen, 2000). Although this distancing has a positive function for the clinician, it leads to avoidance of psychosocial problems and encourages the clinician to focus on the physical complaints of the patient (Petersen, 1999, 2000).

A study done in the primary health care setting highlights this difficulty. Nurses were trained in comprehensive care, but even after the training, they still used a significant amount of strategies such as: avoidance, coercion, ignoring the patient, advice giving, and shifting focus to physical illness in order to avoid exploring psychological distress. It can be argued that these factors partly explain poor detection rates of mental illness in primary health care clinics. To illustrate the point:

> "Nurse: unfortunately we do not have cough mixture today I have run short. I think it is because everybody has come up with flu because of the weather. Patient: I can not sleep at night. Nurse: so your worms did not come out at all. Nurse: You said you can not sleep at night. Is there anything bothering you perhaps? Patient: I think too much. Nurse: Thinking too much can cause lack of sleep, high blood pressure can cause that as well. I do not mean that you have high blood pressure, but I would like to check you anyway. No your blood pressure is fine. I do not think that it is that causes (sic) you lack of sleep. I will give you pills for your feet and something for itchy face. Keep your medication away from children" (Petersen, 2001, p. 4-5)

The nurse had a good opportunity to ask about why the patient is thinking too much and what is worrying the patient. However, the nurse immediately shifted back to the biomedical model and looked for organic causes for insomnia. When those were not found, the patient was given medication. The explanation outside of the psychological realm is favoured even when problems indicate psychological distress. It might be argued that a biomedical model is not flawed, it might be the clinician's skills that are questionable. Indeed this model includes the phenomena of psychological distress and psychiatric disorders. However there is evidence to suggest that clinicians trained in this model tend to overemphasise the physical aspects and ignore the influence of aspects that cannot be observed or directly measured, such as psychosocial factors (De Jong, 1986, 1996; Engel, 1977; Miller & Swartz, 1990, 1991, 1992). Even psychiatrists have been shown to ignore psychosocial problems, or when recognised they refer patients to supporting professionals such as psychologists or social workers, leading to further marginalisation of psychosocial problems (Kleinman, 1987). The limitations of the model are widely recognised. Thus the training of family practitioners has shifted from a purely biomedical model to a psychobiomedical model in an attempt to re-orientate doctors for comprehensive

health care (Bartz, 1999; Brody, 1999; Duncan, 2000; Engel, 1977, 1998; Garfinkel & Dorian, 2000; Nederbragt, 2000; Pasnau, 1990; Zabow, 1995).

Despite advances in psychiatry, even the most sophisticated explanations can point only to an interaction of biological and psychosocial risk factors as being important in the aetiology of psychiatric disorders (Collins et al., 1996; Cooper, 2001; Desjarlais, Eisenberg, Good, & Kleinman, 1995; Leff et al., 1987). Training nurses to recognise all the factors that might contribute to the illness is important in order to be able to detect and advise on treatment or pathways to care. The current approach as illustrated by Petersen (2000), points out that training in biomedicine needs to be further explored and contextualised within the primary health care setting.

Knowledge of mental disorders, the ability to detect them, and the attitudes that encourage diagnosis and treatment are just a few components of mental literacy. These three components will now be discussed in more detail.

2.7 MENTAL HEALTH LITERACY

As was mentioned in Chapter 1, Jorm and colleagues coined the term "mental health literacy" from the phrase "health literacy" (1997, p.182). The term refers to knowledge and beliefs about mental disorders that aid their recognition, management or prevention. This term includes the ability to recognise or detect specific disorders, knowing how to seek mental health information, knowledge of risk factors and causes, knowledge of self-treatments, and of professional help available, and attitudes that promote recognition and appropriate help-seeking (Jorm, Korten, Jacomb et al., 1997; Mubbashar & Farooq, 2001).

2.7.1 Beliefs Systems Component

Different belief systems may impact on mental health literacy. Individuals tend to explain illness, or causes of illness according to their cultural beliefs. In the African culture, terms such as "bewitched", "wrath of the ancestors", "spells", "demon possession", "unperformed ceremonies" and "dissatisfied ancestors" are used as explanations for various symptoms (Edwards et al., 1983; Eguchi, 1991; Mkize, 1998a, 1998b; Shezi & Uys, 1997; Swartz, 1998). When patients know the cause, they are likely to seek treatment based on their belief system (Boonzaier & Sharp, 1985). A person who believes that they have been bewitched will go to a

traditional healer rather than their primary health care clinic (Buhrmann, 1977, 1982; Edwards, 1983; Freeman & Mostei, 1990). A person who believes that they are demon possessed may seek help in a religious setting where the exorcism of demons is practiced (Edwards, 1983; Peltzer, 1995). It is questionable whether holding traditional beliefs about the causes of mental disorder indicates lower mental health literacy. It can be argued that patients, or professionals, whose traditional beliefs discourage the use of effective methods, or encourage non-compliance with effective methods, have lower mental health literacy. On the other hand, traditional beliefs can be highly consistent with neurobiological explanations of psychiatric disorders.

All patients have ways of explaining illness and these are referred to as folk models of illness (Chipfakacha, 1994; Eguchi, 1990; Mkize, 1998a). The understanding of the patients and that of the clinicians will sometimes differ, leading to conflict between belief systems, for example Western and African beliefs. Patients may ignore significant aspects of a disorder if symptoms are not seen as part of the folk model (Chipfakacha, 1994; Patel, 1995a, 1995b, 1998; Swartz, 1998). These folk models also influence treatment or intervention as they prescribe the cure, or intervention, to be followed by those afflicted (Mkhize, 1998a). In South Africa not much is known about folk models but concept like "nerves", stress, high blood pressure and sugar levels have complicated explanations that differ from the medical model (Rumble et al., 1996). Some conditions seem to be culture specific and these will be discussed below.

2.7.1.1 Culture bound syndromes in South Africa

It is said that the greatest achievement for European and American psychiatry has been the development of classification systems aimed at classifying disorders and syndromes universally (Swartz, 1998; Petersen, 1999). As mentioned previously, the assumption that mental disorders are universal has been described as problematic and has been challenged by different scholars (Fabrega, 2001; Patel & Winston, 1994; Swartz, 1985, 1986, 1987, 1995). Therefore there are opposing schools; those who believe that mental disorders are universal and those who argue against this view (Kleinman, 1995, 1996). Thus, the DSM IV allows for variation in presentation and symptoms by including a section for culturally bound syndromes (CBS). CBS's can be defined as clusters of symptoms that are generally limited to specific societies or cultural areas (American Psychiatric Association, 1994; Helman, 1987; Kleinman, 1987). In South Africa, illnesses classified under this cluster include ukufa kwabantu, specifically seen in the Zulu speaking groups, while other African groups such as Sotho and Venda use different terms

(Edwards, Cheetam, Majozi, & Lasich, 1982; Mkhize, 1998b; Ngubane, 1977). Some writers have claimed that CBS's include conditions such as amafufunyane, and ukuthwasa (Robertson, 1996; Swartz, 1986; Wessels, 1985). However Mkize (1998a) argues that ukufa kwabantu (disease of the people) is not a CBS but actually a cultural health belief about certain illnesses.

In traditional medicine, illnesses are classified according to the perceived causes. Illnesses can occur as a result of spirits, God, ancestor, witchcraft or pollution (Bührmann, 1977; 1982; Hewson, 1998; Ingstad, 1989; Kleinman, 1978; Steen & Mazonde, 1999). The previously mentioned illnesses can be explained within a cultural context. For example, a person with amafufunyana (plural) or ifufunyana (singular) can be said to have been bewitched with ifufunyana that possess him or her. The features of amafufunayane are said to be similar to schizophrenia, hence the common belief that this illness is actually schizophrenia (Mbanga, Niehaus, Emsley, & Oosthuizen, 2001, 2002). However, Mkize (1998a) believes that amafufunyane is not a single disorder, or CBS. He suggests that it must be understood as a single term that describes a number of mental disorders, such as temporal lobe epilepsy, anxiety (panic disorder), mood disorder, schizophrenia and dissociation (Mkize, 1998b), and proposes a review of the use of CBS to include cultural health beliefs.

Some illnesses such as ukuphaphazela (panic), which is characterised by umbilini (anxiety), are common illnesses explained according to culture (Robertson & Kottler, 1993). The cultural beliefs include beliefs that umbilini (anxiety) might be a message from the ancestors or a warning to the person about impending danger. Others see it as a sign of bewitchment, with the person feeling anxious for no reason. Other conditions such as ukuphambana (madness) can be explained as having been caused by failure to perform certain rituals, or as result of spirit possession, or even witchcraft. In this model, the traditional healer is often seen as the practitioner who is able to heal the person and solve their problems. This is done through performance of certain rituals and administering of medicines. Understanding the beliefs and how they translate into action is important in primary health care. Insight gained will help identify issues within the community that might be contributing to delays in diagnosis and treatment.

2.7.1.2 Primary health care and traditional healing

However, seeking to identify areas where there is a gap in knowledge and identifying factors contributing to this, is not suggested as an attempt to elevate western medicine, but rather suggests a need to seek partnerships with traditional healers when cultural beliefs are raised by patients (Korber, 1990). Visiting traditional healers by those who believe in them is sometimes reported to relieve psychological distress in the same way as psychotherapy or counselling does (Hewson, 1998; Steen & Mazonde, 1999). When the person feels they have dealt with the cause and have restored equilibrium with the ancestors, they show positive improvement. Primary health care practitioners have to accept that patients might use both Western and African systems of healing, and they need to understand how these complement each other (Abiodun, 1995; Freeman & Motsei, 1990; Korber, 1990; Maclachlan, Nyirenda, & Nyando, 1995; Petersen, 1999). This does not apply to traditional healing only, but to all beliefs that have an impact on how illness is conceptualized, whether religious or traditional. Linked to these cultural beliefs is the concept of normal and abnormal. What is normal in one society might not be normal in another.

The tendency to focus on what is normal and abnormal in psychiatry assumes that the context will not influence perceptions. Concepts such as ukuthwasa (a calling to be a healer), might be viewed as abnormal based on psychiatric categories, but within its cultural context this phenomenon is seen as a normal process (Bührmann, 1983; Ensink & Robertson, 1996; Mkhize, 1999; Ngubane, 1977). Ukuthwasa is commonly believed to be a calling by the ancestors to become a healer (Bührmann, 1982, 1983) and is not a form of "psychosis" (Kruger, 1978). Behaviours of people going through ukuthwasa include a state of emotional turmoil (Swartz, 1998), vivid dreams, antisocial behaviour, fear of madness, tearfulness, social withdrawal and anxiety symptoms. Using the psychiatry model and diagnostic tools, the person experiencing ukuthwasa might be diagnosed as neurotic or psychotic ((Mbanga, Niehaus, Emsley, & Oosthuizen, 2001; Shezi & Uys, 1997). In the Nguni cultural group, ukuthwasa is viewed as a normal phenomenon and the person is taken to a traditional healer, Nyanga or Sangoma to commence with apprenticeship as a healer, Sangoma or Nyanga in the same way as a Western doctor would be trained (Mkize, 1998b; Swartz, 1998). While psychiatric training courses might deal with the influence of culture and prepare clinicians with necessary skills, primary health care clinicians might need to be introduced to these important issues in practice.

2.7.2 Knowledge of treatment methods component

Linked to the beliefs component of mental literacy is knowledge about treatment and management methods. This component is influenced by theories of etiology that the clinician holds, or evidence, as related by others, whether scientific or not. In the field of mental health, there are different treatment options depending on the disorder being treated. The treatment options are mostly influenced by available evidence on the effectiveness of the method and are also linked to what is believed to be the cause of the problem. Other methods of treatment, such as traditional healing, are influenced by traditions and cultural beliefs, and sometimes undocumented evidence of success explaining why users continue employing the method (Bhat & Jacobs, 1995; Bodibe & Sodi, 1997; Freeman & Motsei, 1990; Motlana, cited in Freeman, 1990). Detection on its own is not useful if is does not lead to accessing the best treatment for the condition (Girón, Manjon-Arce, Puerto-barber, Sanchez-Garcia, & Gomez-Beneyto, 1998). It is therefore important to know whether nurses working in the primary health care setting know which methods are effective for different disorders, and which methods are most favoured.

2.7.3 Knowledge and attitudes component

Knowledge and attitudes to treatment are important in primary care (Fischer, George, Zbinden, & Guimón, 1999). The ability of the clinician to advise on the best evidence-based treatment is desirable. Studies done with the public in Australia and Germany have generally found negative attitudes to psychotropic drugs. Even amongst nurses, there is evidence that negative attitudes to psychotropic drugs exist (Jorm, Korten, Jacomb, Rodgers et al., 1997; Walburn, Gray, Gournay, Quraishi, & David, 2001). Negative opinions towards medications may have a negative impact on treatment compliance, and may influence views on the prognosis of patients (Abiodun, 1998; Gillis, Trollip, Jakoert, & Holden, 1987; Jorm, Angermeyer, & Katsching, 2000).

A review of published research in South Africa indicates that not many studies about primary health workers' knowledge and attitudes towards mental illness and treatment have been done (Ignacio et al., 1983; Lee et al., 1999a; Mavundla & Uys, 1997; WHO, 1990). Nevertheless, this type of research has been undertaken in other countries.

Most of the available research has been conducted by WHO collaborative groups, in Nigeria and Nicaragua. These studies and others found a lack of basic mental health training (Abiodun, 1991; Byrne, 1993; Lee, 1999a; WHO, 1990), associated with failure to recognise mental illness

and psychological distress (Freeman, 1998; Ignacio, 1998; Petersen, 1998), and restricted knowledge of psychotropic drug therapy (Abiodun, 1991; Ignacio, 1983). Other studies have also found similar results, (Angermeyer, Däumer, & Matschinger, 1993; Angermeyer & Matschinger, 1996a, 1996b; Byrne, 1987; Jorm, 2000; Jorm, Angermeyer, Jacomb, Christensen, & Henderson, 1999).

The WHO study also found lack of knowledge and negative attitudes toward mentally ill patients (Ignacio et al., 1983). In a follow-up study, however, the WHO collaborative group found that when primary health care personnel were assessed 18 months after they had been trained in mental health care, there was a significant improvement in their knowledge and attitudes towards mental health problems and management. However, two other studies assessing the training of nurses in the management of common mental disorders found that there was still no improvement in the identification and treatment of these disorders after the training (Ben-Tovim, 1987; De Jong, 1986,1996; Plummer, Ritter, Leach, Mann, & Gournay, 1997). It is significant to note that the result of the WHO showed that in baseline studies, the health workers believed that mental health was a specialised area, but after training the health workers saw mental health and its treatment as an integral part of their work (Ignacio et al., 1983; Freeman et al., 1994). This suggests that training might lead to positive changes in attitudes.

Research done in South Africa and Nigeria associates mental illness with stigma (Abiodun, 1991; Mavundla & Uys, 1997). Both studies report negative attitudes to people with mental disorder. Low rates of mental health literacy have also been reported (Ignacio et al., 1983; Lee et al., 1999). Two South African studies have been conducted with the lay public (Mbanga, 1998, 2002; Wessels, 1998, in press) and both showed negative attitudes to people with mental disorders, and lack of knowledge about mental disorders among the general public. This evidence is in line with findings from European countries (Penayo, Jacobson, Caldera, & Bermann, 1988; Sellick & Goodear, 1985; Wolff, Pathare, Craig, & Leff, 1996a, 1996b). These findings suggest that negative attitudes are held by various societies, and since professionals are members of the society, they would be expected to hold some of those beliefs (Ayuso Gutierrez & Saiz Ruiz, 1980).

South African studies assessing knowledge and attitudes have mostly used indirect methods to assess nurses' knowledge of mental health. The methods usually involved reviewing charts or

patient files (Carey & Stein, 2001; Freeman et al., 1994; Ignacio et al., 1993; Lee et al., 1992; Lee et al., 1999a) to assess if there is a correlation between diagnosis and medication prescribed, and how the cases are managed. Other studies, such as Freeman's, have used interviews to gather information about the mental health training for nurses and report on how the nurses perceive their skills after receiving training in mental health.

The search for studies on attitudes of nurses yielded only one study that used questionnaires and a scale to assess attitudes towards the mentally ill (Mavundla & Uys, 1997). Although this study focused on general nurses working in hospitals, it is still relevant to this study as the basic nursing training is the same. Changes in the training were introduced recently, allowing nurses to specialise in primary health and community health. Mavundla and Uys (1997) have argued that attitudes are influenced by education or knowledge. They suggested that since the comprehensive basic nursing programme was only introduced in 1986, nurses trained before 1986 would hold more negative attitudes than nurses trained after 1986. Their study showed a relationship between low rates of education and negative attitudes.

There is evidence that exposure to people with mental disorders can also lead to changes in attitude (De Mochy, 1990). However, education does not always lead to positive attitudes as shown by Jorm et al. (1999) and other studies (Angermeyer & Matschinger, 1996d; Callaghan, Shan, Suk, Ching, & Kwan, 1997; Sellick & Goodear, 1985; Slimmer, Wendt, & Martinkus, 1990). Exposure to people with mental disorders and greater public education may not necessarily lead to positive attitudes; sometimes the opposite happens (Sellick & Goodear, 1985; Taylor & Dear, 1981). Therefore any program on destigmatisation needs to take this into account.

Mavundla and Uys (1997) found few nurses with positive attitudes and most had negative attitudes to the care of the mentally ill. They found no association between negative attitudes and demographic variables. However, there were differences that were thought to have been influenced by the level of education of the respondents. The present study differs somewhat from the study conducted by Mavundla and Uys, in that they focused on the attitudes to caring, rather than attitudes towards people with mental disorders. They did not assess knowledge about mental disorder but based their evaluation only on the education or qualification attained by the nurse. This study will assess both knowledge and attitudes of the respondents. The collection of

data on education and present knowledge will allow the analysis to differentiate between education and current knowledge. Having a degree in nursing, for example, might not mean the nurse has more knowledge or positive attitudes to psychiatric disorders, while this might be true for those without a degree. The latter has been demonstrated in self-help groups, where a patient starts researching and becoming knowledgeable about the subject without formal psychiatric education.

It can be argued that education alone is not a measure of knowledge about mental disorders. Specific measures are important to determine this. A study in Nigeria also reported that nurses without previous exposure to mental health training were more likely to hold negative attitudes and traditional views on the etiology of mental disorders (Abiodun, 1991). This might be true, but it might also be that nurses who have more education give socially desirable answers compared to those without education. Thus, any conclusion drawn and based on educational qualifications alone should be interpreted with caution.

In another study comparing professionals and the lay public in Australia, Jorm et al. (1999) found that health professionals had a more negative attitude to people with mental illness, rated long-term outcomes more negatively and saw discrimination as more likely for people with mental illness. Indeed, such attitudes may be influenced by exposure of professionals to the mentally ill, and realistic understanding of the outcome compared to the general public. Transmitting this message to patients and care-givers may affect the outlook of the patients. A more optimistic view of the illness gives hope to the family, and the person who is affected by the illness. Thus the need to investigate the attitudes of nurses working in the primary health care and address the stigma that is associated with mental disorders.

It is of concern that even today, among professionals working in mental health settings, there is still a stigma attached to mental disorders. Professionals who have found themselves needing psychological or psychiatric treatment have sometimes found themselves being victims of this stigma, with other professionals questioning their ability to treat patients even when they were fully recovered (Francell, 1996; Swan, 1999). Professionals working within the field of mental health are also sometimes subjected to the stigma of mental illness through various comments such as "you are the only sane psychiatrist I know" (MacDonald, 1988, cited in Mavundla & Uys, 1997, p. 3).

With an increasing number of educational and anti-stigma campaigns, there has been a change in public attitude to people with mental illness (Madionos, Economou, Hatjiandreous, Papagerorgiou, & Rogakou, 1999; Robertson & Freeman, 2001). Campaigns such as "Ringing the bells of hope for the mentally ill" and "Dare to care" and the World Heal Day 2001 have highlighted the need to challenge negative attitudes towards mental illness in South Africa (Freeman, 2001; Jenkins, 2001; Nursing Update, 2001). In the past, there was total separation and exclusion from society of those afflicted by mental illness (Haghighat, 2001; Michels, 2000). Change has been gradual and there is already a different picture emerging as society becomes more tolerable and there are reports of successful integration of the mentally ill, worldwide (Madionos et al., 1999; Wolff et al., 1996a, 1996b). Although there seem to be changes in the community attitudes, it would be interesting to find out if these changes can be observed at primary health care level.

The continued negative evaluation that people with mental health disorder have to endure has contributed to the need for patients to refuse to acknowledge their sickness. Brady (1997) suggests patient resistance to diagnosis and treatments, as well as inadequate insurance reimbursement for psychological care, are also reasons contributing to poor detection. Medical aid schemes do not adequately cover psychiatric disorders and may even penalise people with psychiatric disorders by refusing them membership when psychiatric disorders are disclosed on application (Hanson, 1998; Mickus, Colenda, & Hogan, 2000; Nursing Update, 2001).

To summarise, the studies presented above suggest a problem of poor detection at primary health care and possible factors were presented and explored. Based on this review, the following conclusion can be drawn: detection of mental illness in primary health care settings is a problem and there is a need for further research to investigate possible contributing factors within the South African context. Resources for the treatment of mental health problems are limited and need to be extended to facilitate access for patients. The next section will explore ways in which mental health services can be extended and conclude by highlighting the two dominant theoretical models in medicine and how both of these will have implications for comprehensive health care.

2.8 MOTIVATION FOR INTERGRATION OF PSYCHIATRY AT PRIMARY HEALTH CARE

The motivation for the study lies in the integration of psychiatry into primary health care. Thus the thesis will conclude by looking at why psychiatry has to be integrated into primary care and how psychiatry can be integrated without excluding other aspects of mental health and comprehensive health care. The presence of mental health disorders in primary care means that psychiatry cannot be left out of primary, thus any opposition to its integration and viewing this process as a burden is a mistake. According to the WHO (1990), "It is not a matter of adding a mental health component: there is overwhelming evidence that mental health problems are already present among general health problems, but they are unnoticed or ignored. Responsibility for mental health is not an extra load for primary health care services: on the contrary, it increases their effectiveness" (p.11-12).

Although both psychiatric and psychological problems are located within the realm of the mind, they are different in their impact and cause. There is still a debate as to what constitutes mental health and well-being across cultures (Westaway & Wolmarans, 1995). For the purposes of the present study, the WHO definition has been used. Mental health is defined as encompassing the notion of the optimal development and functioning of the individual, allowing the realisation of aspirations and satisfaction of needs, as well as the ability to cope with the environment within the context of family, social, cultural and community parameters (WHO, 1987). Based on this definition, mental health is not only the absence of a disorder, but is the actual psychological well-being of the individual.

Defining mental health in these terms provides a guideline for the role of primary health care practitioners. Based on this definition, the role of primary health practitioners is not only that of identifying and treating but also extends to the promotion of healthy lifestyles (Freeman & Pillay, 1997), and the empowerment of individuals and communities to gain control over, and improve their health (Orley & Satorius, 1986). The concept of mental health problems is often used and understood incorrectly to include psychiatric disorders. There are differences between the two. Mental health problems cause much distress and impair functioning but can be considered to lie within the normal range of human experience (Kaliski, 1998). They are also qualitatively different from psychiatric disorders which have formal categories defined by internationally accepted and validated diagnostic criteria (Gagiano, 1995; Swartz, 1989).

Understanding these differences is important as they have implications on the mental health care model adopted at primary health care level.

The extension of services to primary health care level should address both psychiatric problems and psychological problems (Sokhela, 1999). It is estimated that between 25-75% of patients presenting at primary care have a psychosocial rather than a biomedical reason for the visit (Perez-Stable et al., 1990). It has been suggested that training primary health clinicians in psychiatry will increase the quality of care for the mentally ill (Gagiano, 1995). A counter argument is that the introduction of psychiatry in primary care will only serve psychiatric patients and not patients with mental health problems who represent the majority in primary health settings (Freeman, Ceris, & Price, 1991; Freeman & Pillay, 1997; Peterson, 1996). In light of this, the vision for comprehensive health might not be realised. The adoption of psychiatry should not lead to the exclusion of mental health in primary care. There are other alternatives that can be explored such as incorporating lay counsellors within primary care or other mental health workers (Jackson et al., 1993). Specialists such as psychologists and psychiatrists can also be incorporated into primary health care clinics. However, this is a distant goal because of the shortage of resources in all areas of mental health care service provision leading to serious psychiatric disorders receiving more attention when compared to minor psychiatric disorders and psychological distress (Jenkins et al., 1998).

There is now more pressure than ever to provide mental health services for all in the community, but how possible such a vision is, still needs to be demonstrated (Controneo, Outlaw, King, & Brice, 1997; Controneo, Hopkins, Outlaw, King, & Brice, 1997). The ideal would be to have enough resources to provide sufficient specialist care but this is currently not possible (Flisher, Riccitelli, Jhetam, & Robertson, 1997). In developed countries the ratio is one psychiatrist per 50,000 population in the United Kingdom and one per 20,000 in Eastern European countries (Jenkins & Strathdee, 2000). South Africa has approximately one psychiatrist per 110 000 population. These figures are comparable to other developing countries. For example, Egypt has one psychiatrist per 300 000 population and India has one per 420 000, while Brazil and Columbia have ratios of approximately one per 25 000 (Freeman, 1998).

Compared to other developing nations, the numbers suggest that South Africa has adequate resources. However, the reality is that access to specialists is limited, or unavailable, in some

care workers as it is being done in India (Baumman, 1998; Rajkumar, 1991) and in South Africa (Lee, & Zwi, 1997).

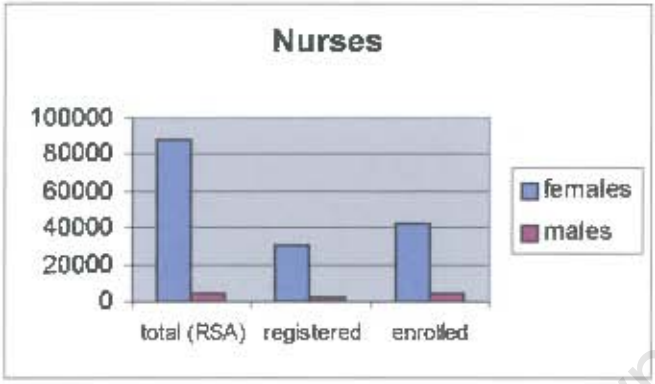

Figure 3: Total Number of Nurses Registered in S. A. in 2002

To summarise, it is impossible to provide specialist care for all people with mental disorders.One solution is to integrate mental health into primary health care, thereby facilitating access for all and making best use of available human resources. Although integration of mental health has been seen as a positive step in some circles, there are those who have questioned the integration and specifically, the training of nurses in psychiatry, and the adoption of the medical model of care (Petersen, 1996; Freeman et al., 1991). The biomedical model is criticized for ignoring psychosocial problems, or for dealing with these problems by referring or dismissing them (Miller & Swartz, 1990). Therefore, it is felt that adopting only a medical model for mental health service provision excludes the majority who do not have a psychiatric problem. This needs to be reviewed.

Medicine as a practice is based on a biomedical model and according to this model, symptoms signal underlying disturbance of structure and function (Holden, 1990; Swartz, 1998). By treating the underlying cause of the illness, the illness is cured. While this is a sound model, it excludes other relevant factors such as the social context and psychosocial factors in explaining illness (Bignnami, 1982; Engel, 1977; Fabrega, 1978; Hepburn, 1988; Kleinman, 1978). Another limitation of this model is that not all illnesses, whether physical or psychological in nature, have a known cause. Most of the time several causes are implicated.

communities. There are provinces that have one full-time state psychiatrist or none at all. In such instances it has been estimated that about 5.6 million people have no access to a full-time state psychiatrist within their province (Freeman, 1998). In addition, the availability of African specialists who speak the languages of the majority of South African is a massive problem throughout the health system.

The available psychiatrists are mostly working in private practice and are concentrated in urban areas (Ensink, Leger, & Robertson, 1997). A comparison of different provinces further highlights the existing discrepancies. The Western Cape and Gauteng are well supplied, while Mpumalanga and the Northern Cape have relatively fewer psychiatrists. Thus any attempt to provide mental health care has to be done through nurses working in primary care who form the majority in the health care system in South Africa (see Figure 2 & 3).

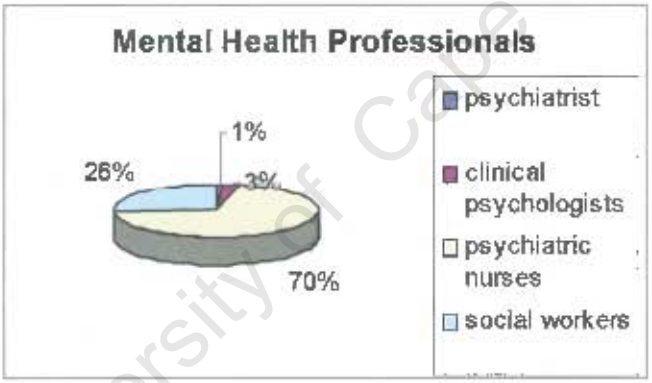

Figure 2: Mental Health Professionals in South Africa (Source: Lee & Zwi, 1997)

The figures above clearly illustrate why the capacity of mental health workers needs to extended through generalist nurses (see also Figure 3 below). The Nursing Council of South Africa could not give a breakdown of how many of the nurses are psychiatric nurses. However the Provincial Administration employs 150 psychiatric nurses in Western Cape community clinics and these nurses form a small fraction of the nurses registered. This number, I was informed, may be even be more considering that the newly qualified nurses have completed a comprehensive course with a psychiatry component. Therefore nurses in primary care are better placed to provide mental health care by working together with other professionals to provide the best care for patients (Petersen, 2000). The key role players in the prevention, early recognition and treatment of psychiatric disorders are the primary health practitioners not the specialists. Mental health care can be provided and can reach the rural areas when it is being provided by primary health

The biomedical model was developed in the mid-nineteenth century as part of the rise of scientific culture (Garfinkel & Dorian, 2000; Nederbragt, 2000). This model is very useful in the understanding of etiology and treatment but may over emphasise the biological nature of disease and de-emphasise the role of cultural and social factors. When this model is used in psychiatry, the field of psychiatry is criticized for its attempt to be regarded as a scientific discipline (Kleinman, 1987) and for ignoring biosocial origins of mental illness, even when evidence supporting the latter exists (Eisenberg, 1995; Jablensky et al., 1992). The role of cultural and psychosocial factors has been highlighted in recent research with schizophrenia (Sartorious, 1992), proving that there are different factors that can be attributed to the cause of any illness. There is biological evidence that suggests that schizophrenia is inherited and while this is not minimized, there is increasing knowledge that factors such as culture and place of residence have a role to play in the course of the illness. Emphasising biology (nature) above environment (nurture), fails to account for influences of the latter (Cooper, 2000; Sabbelli & Carlson-Sabelli, 1989). Studies cited in Swartz (1998) have shown a better outcome for the course of schizophrenia in centres representing the developing world. Culture and the supportive role of the family have been suggested as important factors in the positive outcome for the disorder.

The over-emphasis on the exclusion of any organic cause is another problem of the biomedical model. Somatisation highlights this type of problem. The diagnosis of a somatisation disorder is often based on not finding any organic cause for the symptoms. There is evidence that somatisation in itself is an expression of various disorders. Somatisation has been shown to be highly comorbid with other mental disorders such as depression (Posse & Hällström, 1998). Failure to recognise that somatisation needs to be treated may lead to delayed treatment of psychiatric or psychological problems.

The implication of using this model in primary health care might be that when the cause does not match the symptoms, it will not be adequately treated and the distress and the disability will persist (Miller & Swartz, 1996; Petersen, 2001). Secondly, the search for organic cause frequently results in costly investigations (WHO, 1990). Thirdly, the model fails to differentiate between the disease, which is the biological component and illness, which is the subjective experience of discomfort as a result of psychosocial problems in the environment (Barondess, 1979; Kleinman, 1986, 1987; Spiro, 1991). Focusing on the disease only ignores the subjectiveness of the patient's illness. According to Sullivan (1986), pathology may exist

without any corresponding subjective experience, as seen in Miller and Swartz (1990). This is also true the other way around: the individual can experience illness without any organic pathology.

To try and deal with these deficits in the biomedical model, a biopsychosocial model was introduced and has been widely used (Engel, 1977). This model still maintains the scientific nature of the biomedical model but adds a psychosocial dimension to the model. This model acknowledges the "complex connections" that link the social determinants of illness such as poverty and violence, with patterns of symptomatology, including mental and physical components (Garfinkel & Dorian, 2000, p. 42). The biopsychosocial model seems to be more comprehensive and might be more suitable for application in primary health care. Although more comprehensive, it has been criticised for merely placing psychosocial issues on the agenda without dealing with them or delegating these issues to professionals outside medicine, such as psychologists and social workers (Amstrong, 1987; Miller & Swartz, 1990, 1991). Psychiatry, as a discipline within medicine, is also influenced by biomedical and biopsychosocial models with the emphasis being on the latter in current training (Zabow, 1995).

The recognition of culture in the etiology of mental illness has been acknowledged even by the authors of the DSM-IV, reflected by the inclusion of axis IV and V into the multiaxial diagnostic system (APA, 1997). The DSM-IV inclusion of a biosocial model, on which the multiaxial diagnostic system is based, may create an awareness of psychosocial problems, but it does not ensure that their role in etiology is considered nor addressed as part of a treatment plan. This is illustrated by a few studies (Petersen, 2000; Miller & Swartz, 1990). An analysis of psychiatric services found that psychiatrists, in general, tend to perceive psychosocial problems as being an "epiphenomenon" (Peterson, 1998, p. 197; Miller & Swartz, 1990) of the underlying disease process as well as the responsibility of "allied" mental health workers such as social workers and psychologists (Kleinman, 1987). Therefore, whilst the biopsychosocial model may create an awareness of psychosocial issues, it does not ensure a total shift from the predominant biomedical approach that characterises psychiatry (Petersen, 1998). The criticism of the model seems to be located in the clinicians rather than the model. Therefore, there needs to be a shift in how clinicians practice and more emphasis placed on psychosocial factors within medicine (Stabb, Evans, & Meltzer, 2001).

In conclusion, it is important to acknowledge that adding only psychiatric services at primary health care level might solve part of the problem but does not necessarily exclude the provision of care for patients with mental health problems. The increased knowledge of mental health disorders might serve to alert nurses to screen for mental health problems. Hopefully there will be an increase in recognition of mental health problems and disorders and more people treated at primary care.

Psychiatry, like other disciplines, is not without limitations and many theoretical criticisms can be found and used to motivate why psychiatry should not be added into primary health care services. The biopsychosocial model seems more comprehensive and might provide a better outcome at primary health care if emphasized more in the training of nurses. Biological aspects of disorders are still important and should be assessed in case of comorbidity with psychological problems. Psychiatry as a discipline has gained recognition and plays an important role in medicine. The recent advances, especially in the biology of psychiatric disorders, have positive implications for the treatment and prognosis for patients.

As psychiatry is integrated into primary health care, it might be important to highlight some of the criticism and areas of contention between disciplines such as psychology and psychiatry. These need to be acknowledged and dealt with objectively. There is also a need to move away from elevation of one discipline above others, and instead move towards collaboration, recognising that all members of the team are important role players. The criticism of psychiatry should be addressed through constructive debates, which can propose ways of modifying universal systems of classification, allowing them to fit the context without compromising standardisation. Cultural differences and respect for patients' cultural beliefs should be emphasised. Subjective experiences of illness embedded within cultural systems, and use of traditional methods of healing should also be respected. Primary health care providers should seek to involve all role players in health care services. The model adopted at primary health care level should be an inclusive model that does not only look at psychiatric disorders but also deals with preventative measures and encourages healthy lifestyles within the community.

There is a need for further exploration of the use of the proposed biopsychosocial model in primary health care settings. This present study focuses on psychiatric disorders but many

aspects of psychological distress will fall outside of this definition. The scope of this thesis cannot hope to address methods of caring for people with psychological distress.

2.9 SUMMARY OF THE MAIN POINTS OF THE REVIEW

From the literature review it was found that there are high rates of psychiatric disorders and low rates of detection or diagnosis of mental disorders especially in primary care. It was established that different factors may contribute to the problem of poor recognition. These include low levels of mental health literacy, inadequate training, and practice models adopted at primary health level. It was also shown that nursing professionals, in general, hold negative attitudes to people who are mentally ill and that mental illness still carries a stigma within the nursing profession. The review concluded by looking at medical theories which underpin the practice of psychiatry and by suggesting that there is place for psychiatry at primary health care level but that there are also limitations and thus other role players should be included in caring for the mentally ill.

In view of the high prevalence of underdiagnosed psychiatric disorders in primary health care and the possibility that this reflects lack of knowledge and stigmatisation in clinicians, this study was conducted with primary health care nurses to investigate their knowledge of mental illness and their attitudes to the mentally ill.

Given this review of literature the objectives of this study are summarised below.

2.10 RESEARCH OBJECTIVES

This study has the following aims:

1. To investigate the mental health literacy of nurses, in particular their ability to
   * diagnose or identify different types of mental conditions or disorders
   * understand the cause/s of the condition
   * treat and manage the condition appropriately
   * assess the recommended health seeking pathways
2. To determine the attitudes of nurses to the mentally ill.

CHAPTER 3 METHOD

3.1 SAMPLING

A sample of nurses (N = 87), working in thirteen community primary care clinics in the Cape Town Metropole of the Western Cape, participated in the study. All the participants were working at a community health clinic in either a suburb or township. All primary health care nurses with different specialty areas included in the study. Psychiatric nurses were excluded from the study since they were deemed to have special knowledge in the area, and there were too few of them to use as a comparison group. General practitioners working at the community primary health clinics were also excluded from the study for the same reason.

The sample included nurses with various qualifications and ranks including enrolled nurses, assistant enrolled nurses, professional nurses, senior professional nurses, and chief professional nurses, nursing service managers and deputy directors. An assistant enrolled nurse is someone in a certificate programme leading to a qualification as an enrolled nurse. An enrolled nurse has completed a two-year certificate leading to a qualification as an enrolled nurse. A professional nurse has completed a three year course in general nursing or a four year diploma or degree qualification in general, psychiatric and community health nursing and midwifery. A senior professional nurse is a registered nurse with clinical experience who has been promoted to a higher position. A chief professional nurse is a senior professional nurse who has met the above requirement and is promoted to a higher position. A nursing service manager is a chief professional nurse who has met the above requirements, and in some cases has a nursing administration diploma. A deputy director is a nursing service manager who has met the above requirements and is promoted to the position of senior manager.

3.1.1 Sample

The number of nurses that were targeted for the study was 200. Of the 200 nurses targeted for the study only 87 finally returned usable questionnaires. The targeted sample was decided in accordance with the population of nurses in the Cape Town Metropole. According to the South African Nursing Council (SANC), there are 4047 (3882 females and 165 males) registered professional nurses in the Western Cape. The rest of the nurses are concentrated in the lower

ranks; auxiliary nurses 12 835 and enrolled nurses 7949, totaling 24 831 nurses as illustrated in Figure 4 below.

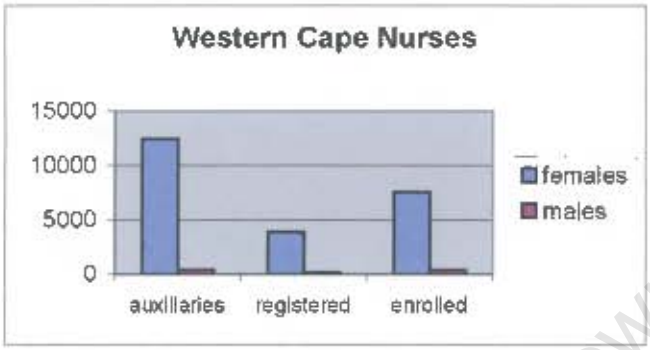

Figure 4 Nurses Registered in the Western Cape

The figures obtained from the SANC (Figure 4) are for all the nurses registered in the Western Cape. The SANC was not able to provide statistics for nurses working only in community primary health care clinics. It is also not known how many of these nurses registered in the Western Cape have retired, immigrated, or are working in other settings, whether public or private. The Provincial Administration of the Department of Health, which is responsible for the administration of the community clinics, was able to provide some figures on which to base the sample on. This department did not have complete figures but was able to inform the researcher that they employ 616 professional nurses in the community health clinics. They were unable to provide a breakdown according to nurse's specialization are e.g.psychiatry or community health. However, they were able to confirm that as a department they employ 150 psychiatric nurses. The figures above were considered together with an estimation for auxiliary nurses and enrolled nurses. Based on the figures registered with the SANC, it was estimated that the numbers of lower rank nurses would be higher at the clinics than in other settings. Therefore the population of nurses working at primary health care clinics was estimated to be plus or minus 2000 in the Western Cape. A targeted sample of 200 nurses was decided as an appropriate number for a sample. The sample would represent roughly 10% or more of the population being studied (Bless-Hidgson-Smith, 2000; Huysamen, 1994).

3.1.2 Geographic Location of the Study

The study was undertaken at thirteen community clinics in the Western Cape. The clinics were selected from areas representing three main population groups in the Western Cape; i.e. Xhosa, "Coloured", and "White" people. In South Africa, classification of institutions by race ceased in 1989 (May, 1995). The community clinics are now open to people of all races, even when located in a predominately "White" or "Black" area. Care was taken to ensure that the selected clinics were representative of the townships and suburbs in the Western Cape. Although the clinics were located in different areas they had one common feature in that they all serve the lower income groups of the population. The community health clinics that were included in the study were: Langa, Nyanga, Gugulethu, Scottsdene, Ruyterwacht, Parow, Morning Star, Browns Farm, Kensington, Crossroads, Khayelitsha, Goodhope and Goodwood. Table 3.1 provides a breakdown of the areas in which each clinic is situated.

Table 3.1: Classification by Area

Population / Community	Clinic
Predominantly African area	Langa (Vanguard), Nyanga, Gugulethu, Crossroads, Khayelitsha, eKuphumuleni
Predominantly "Coloured" area	Scottsdene, Ruyterwacht, Kensington
Predominantly "White" area	Parow, Morning Star (Durbanville), Goodwood, Goodhope

3.1.3 Description of the Clinics Sampled

The clinics varied in terms of size and services offered. The sampled clinics included former Day Hospitals now known as Community Health Centers and Local Health Authority Clinics. The Day Hospitals are under the administration of the Provincial Department of Health while the Local Authority Clinics are under the administration of the Tygerberg Local Authority. During the integration of services, some of these clinics were integrated into one clinic. The integrated clinics are based under the same roof and share facilities, but division in management still exists. This was the case in Scottsdene and Durbanville Community Health Care Clinics. In these clinics, some of the nurses are employed by the Tygerberg Local Authority, while others are employed by the Provincial Department of Health.

The Community Health Centres tend to have more facilities and offer a more comprehensive service for example, a psychiatry clinic with a psychiatric nurse, an emergency unit, TB clinic, dental clinic, as well as family planning, counselling, physiotherapy, maternity, antenatal and X-ray services. Not all the day hospitals have all of these facilities.

The Local Authority Clinics are often smaller is size with only basic facilities and services, such as family planning, curative and immunization, being offered. Other services are offered on a rotational basis, for instance a psychiatric nurse visits once a week. Examples of this type are the Phillipi, eKuphumuleni and Parow clinics. Each of these had a staff complement of less than fifteen, at the time of the study. The two smallest clinics in the sample had very basic facilities. For example, the eKuphumeleni clinic did not have a separate screening area for patients with screening procedures taking place in the waiting room.

3.1.4 Sampling Technique

For sampling, a combination of techniques was employed. Both the convenience and snowball methods were utilis-ed. Two hundred nurses were approached through a contact person at the clinic. After selecting the clinics to be included in the study, a contact person was identified who in most of the clinics was the sister in-charge or another sister recommended by the sister in-charge.

This approach was chosen because it allowed for greater opportunity to follow up on the questionnaires, thereby reducing the risk of losing questionnaires. Surveys with health practitioners have repeatedly shown poor response rates (Kaner, Haighton, & Mcavoy; 1998; McDonald, 1993; Sibbald, Addington-Hall, Brenneman, & Freeling, 1994). Another advantage of having a contact person was that they were the only link to the participants. Thus, in each clinic there was one source of information about the participants. They were able to comment on the questionnaire and the study in general (participants comments will be discussed briefly in Chapter 5).

3.1.5 Description of a sample

From the initial targeted sample of 200, a total of 87 questionnaires were completed and returned (discussed further in Chapter 5). Thus the final sample numbered 87. Each participant completed one of the four case studies, which means that the sample was further divided into

four groups. The contents of case studies are discussed further in this Chapter (3.5. 2. Knowledge Section) and a break down of the sample by case study is presented on the tables below (Table 3.3-3.10). Analysis of the sample showed that 26 were enrolled nurses and 60 were professional nurses. Of the 60 professional nurses, 21 were in a senior rank. One nurse in the sample was deputy director (see Table 3.2 below). Therefore the majority of nurses in this sample was qualified nurses. The sample had an average of 12.1 years in practice (see Table 3.3 below).

Table 3.2 Occupational Ranks

CATEGORY	N	%
Enrolled nurse assistant	16	18,4
Enrolled nurse	10	11,5
Professional nurse	29	33,3
Senior professional nurse	11	12,6
Chief professional nurse	20	23,0
Nursing service management	0	0,0
Deputy director	1	1,1
TOTAL	**87**	**100,0**

Table 3.3 Occupation and Case Studies

	Enrolled		Professional		Deputy		TOTAL	
CATEGORY	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Case 1	7	41,2	9	52,9	1	5,9	17	100,0
Case 2	7	24,1	22	75,9	0	0,0	29	100,0
Case 3	9	40,9	13	59,1	0	0,0	22	100,0
Case 4	3	15,8	16	84,2	0	0,0	19	100,0
TOTAL	**26**	**29,9**	**60**	**69,0**	**1**	**1,1**	**87**	**100,0**

Table 3.4: Years in Practice

CATEGORY	Mean	N
Case 1	11,6	17
Case 2	11,0	29
Case 3	11,3	22
Case 4	15,0	19
TOTAL	**12,1**	**87**

The majority of the nurses was between the ages of 31-50 years of age (see Table 3.5 below for the total group). The age grouping in the four vignettes was not the same. The respondents who completed vignette 1 and 4 were mostly in the 41 to 50 category, compared to the other two vignettes.

Table 3.5: Age

CATEGORY	N	%
20 – 30	10	11,5
31 – 40	35	40,2
41 – 50	33	37,9
51 – 60	9	10,3
60 and older	0	0,0
TOTAL	**87**	**100,0**

Table 3.6 Age according to Case Study

	Case 1		Case 2		Case 3		Case 4	
CATEGORY	N	%	N	%	N	%	N	%
20 – 30	4	23,5	4	13,8	1	4,5	1	5,3
31 – 40	5	29,4	12	41,4	7	31,8	11	57,9
41 – 50	7	41,2	10	34,5	9	40,9	7	36,8
51 – 60	1	5,9	3	10,3	5	22,7	0	0,0
Over 60	0	0,0	0	0,0	0	0,0	0	0,0
TOTAL	**17**	**100,0**	**29**	**100,0**	**22**	**100,0**	**19**	**100,0**

The analysis of gender showed that nine respondents were male nurses while 78 were female, which is a normal representation of the ratio of the nursing staff. Table 3.7 below displays the representation of males and females per case study.

Table 3.7 Gender

	Male		Female		TOTAL	
CATEGORY	N	%	N	%	N	%
Case 1	4	23,5	13	76,5	17	100,0
Case 2	2	6,9	27	93,1	29	100,0
Case 3	2	9,1	20	90,9	22	100,0
Case 4	1	5,3	18	94,7	19	100,0
TOTAL	**9**	**10,3**	**78**	**89,7**	**87**	**100,0**

The majority of the respondents was Xhosa speaking (n=51), followed by Afrikaans speakers who numbered 23, and lastly English speakers who numbered 13. Table 3.8 below illustrates the representation of language per case study.

Table 3.8 Home Language by Case Study

	Afrikaans		English		Xhosa		TOTAL	
CATEGORY	N	%	N	%	N	%	N	%
Case 1	3	17,6	3	17,6	11	64,7	17	100,0
Case 2	11	37,9	4	13,8	14	48,3	29	100,0
Case 3	1	4,5	3	13,6	18	81,8	22	100,0
Case 4	8	42,1	3	15,8	8	42,1	19	100,0
TOTAL	**23**	**26,4**	**13**	**14,9**	**51**	**58,6**	**87**	**100,0**

The majority of the respondents in this sample (n=56) hold a nursing diploma and only 3 respondents hold a nursing degree. The remainder of the nurses has completed standard 8 and some high school but have no tertiary qualifications (see Table 3.9). Almost a quarter of the respondents (25) has completed a postgraduate course. The majority had specialised in community and primary health care nursing (see Table 3.10). There were 4 nurses who had specialised in psychiatry although they were not currently practicing as psychiatric nurses.

Table 3.9 Highest Qualification

CATEGORY	N	%
Standard 8	15	17,2
Standard 10	13	14,9
Nursing diploma	56	64,4
Nursing degree	3	3,4
TOTAL	87	100,0

Table 3.10 Area of Specialisation

	Primary health		Psychiatry		Community health		TOTAL	
CATEGORY	N	%	N	%	N	%	N	%
Case 1	6	35,3	2	11,8	9	52,9	17	100,0
Case 2	17	58,6	1	3,4	11	37,9	29	100,0
Case 3	11	50,0	0	0,0	11	50,0	22	100,0
Case 4	7	36,8	1	5,3	11	57,9	42	100,0
TOTAL	41	47,1	4	4,6	42	48,3	87	100,0

3.2 PROCEDURE

Once the clinics had been identified, preliminary visits took place and contact persons were identified. After receiving verbal consent to conduct the study from the authorities at the clinics, written permission was obtained from the Provincial Department of Health. Permission was also obtained from the Tygerberg Local Health Authority because despite integration of services, the nurses were still reporting to different managers and departments. The study commenced in November 2000 at the Provincial Department clinics, and the Tygerberg Local Authority clinics joined the study in February 2001.

The initial sample of 200 participants was divided into four groups of fifty. Each sub-group received 1 of 4 possible vignettes (see detailed information below). The only requirement was that clinics in the township areas received the same number of questionnaires as the clinics in

the suburban areas. This was done to allow for a comparison to be made between the two groups.

3.3 RESEARCH DESIGN

The present study used a cross-sectional survey design meaning that a section of the nursing population was examined and the phenomena, i.e. knowledge and attitudes were studied at the same time by means of a self-report questionnaire (Babbie, 1992). The data was collected within a specified time, from November 2000, with a break in December and January to accommodate the holidays and high absenteeism during this time. The study commenced again in February 2001 and continued until April 2001. The participants were assessed once and no follow-up interviews were held. Given that this was an exploratory study, a control group was not utilised. A cross sectional survey design was chosen for being able to produce results within a short space of time and allow a comparison of cross sectional variables (Mouton, 2001).

The cross-sectional method, using questionnaires, was selected because of the relative advantages of this method and the special circumstances of the nursing population. High caseloads meant that administering an instrument during office hours was impractical. Secondly, questions dealing with knowledge and attitudes are sensitive in nature. Therefore, participants were only willing to subject themselves to an assessment if they were guaranteed anonymity. Thirdly, the process of transformation and other problems within the nursing field have created a sense of apathy within the service. This is confirmed by the literature (May, 1996). Furthermore it was established from nurses in-charge that the majority of nurses would not be prepared to do anything more than the minimum of what was required. Thus alternative methods, for example, focus groups after hours, would not be attended unless participation was made compulsory by the Department of Health or some other incentive was offered. Lastly, the Department of Health requires that research projects do not interrupt clinical time, nor make use of the clinic's resources, such as access to rooms or transport. Thus a self-administered questionnaire was deemed to be the most suitable option as it could be completed at the respondents' convenience. It allowed for the anonymity of respondents and the questionnaire-format avoided the problem of respondents giving desirable answers in the presence of a researcher- a potential pitfall when an interview-format is used.

3.4 ETHICAL CONSIDERATIONS

An introductory letter formed the first page of each questionnaire with information about the researcher and the study (Appendix 1). The study was introduced as a primary health care study. Mental health and psychiatric disorders were not mentioned. Participants were informed about their right to refuse to participate. A returned completed questionnaire was regarded as consent to participate.

To increase privacy and protect anonymity, the participants were provided with an envelope that could be sealed and used for the purpose of returning completed questionnaires. This was done to protect participants from having their manager or colleague reading through the questionnaire and monitoring their answers.

3.5 INSTRUMENTS USED

A self-report technique, including a structured questionnaire, a vignette or case study, and a scale was utilised (see appendix A). The "knowledge" section of the questionnaire was adapted for use with the South African population. It was based, in part, on studies by Angermeyer, Däumer, and Matschinger (1993) and Jorm et al. (1997). The Community Attitudes Toward the Mentally Ill (CAMI) scale was used to assess attitudes (Taylor & Dear, 1981). Excluding the introductory letter the entire questionnaire consisted of three distinct sections.

3.5.1 Demographic Section

Section one of the questionnaire inquired about socio-demographic data, such as the qualifications of the respondent, years in practice, area of specialisation and geographic location of the clinic.

After completing section one, respondents were given instructions to read the case study, or vignette, and answer the questions that followed, based on the case study.

3.5.2 Knowledge Section

Four vignettes (see Appendix B) dealing with different psychiatric disorders, were designed. The disorders were based on DSM-IV criteria (APA, 1994). The nurses were each given a vignette consisting of information about a presenting problem, a number of symptoms and an

exclusion line to help the nurses in excluding physical illness. Participants were then required to answer questions based on the case study.

The vignettes were four different cases: two of the cases were anxiety disorders, namely posttraumatic stress disorder (PTSD) and panic disorder. The other two vignettes were disorders with psychotic features, namely schizophrenia and bipolar disorder. Each participant answered only one vignette. One of the aims of the present study was to assess the variables that might influence recognition of psychiatric disorders, such as presentation of psychiatric disorders. Thus, anxiety disorders, and disorders with psychotic features were chosen because they present with different clinical pictures.

Section 2 formed the knowledge component of the questionnaire. All questions were aimed at assessing different aspects of mental literacy. Each participant's ability to diagnose was assessed by means of a question requiring the respondent to name the disorder described in the vignette. The question on diagnosis was structured in a non-threatening manner: "from the information given on the case study, what, if anything, is wrong with this person?" Although useful, an accurate diagnosis was not the ultimate goal. The aim was to assess whether the nurse was able to identify it as a psychiatric condition, information that is necessary for the appropriate referral of patients.

Respondents were also required to indicate whether the behaviour described in the vignette was normal or not, and then demonstrate an understanding of the cause by indicating where problem is located, e.g. emotional or spiritual. Eighteen possible causes were provided. These included: biological causes, such as heredity; psychological causes, such as unconscious conflict; psychosocial reasons; environmental issues, such as stressful life events; nurturing causes, such as over-protective parents, and supernatural natural causes, such as the will of God, witchcraft and so forth. Respondents were required to rate their responses on a five point response scale, i.e. definitely yes, probably yes, unsure, probably no and definitely no.

This section was followed by several questions assessing knowledge on management and different treatment methods. Respondents were required to indicate which method they favoured, or which method would be effective in the management of the condition presented in the vignette. Respondents were also required to indicate the possible risks and benefits of each

method. These questions were adapted from a study by Angermeyer et al. (1993), which assessed knowledge of psychotropic drugs. Questions were adapted and expanded in order to assess the perceived risks and benefits of psychotherapy, traditional or alternative healing, and medication.

3.5.3 Attitudes Section

The last section consisted of an attitudes scale, called the Community Attitudes Towards the Mentally Ill (CAMI) inventory. The CAMI has 40 questions and has been used worldwide and in South Africa (Tylor & Dear, 1981; Wessels et al., 1998, in press; Wolff et al., 1996a, 1996b). The scale has several dimensions: authoritarianism, benevolence, social destructiveness, and community mental health ideology. The scale is useful as it outlines explanatory and predictive variables for studying the community's response to the mentally ill and to mental health facilities (Taylor & Dear, 1981).

3.6 VALIDITY OF THE INSTRUMENTS

All the instruments were based on standardised questionnaires. Most of the scales have been standardized on the European or American population and thus have to be adapted for use in South Africa (Mouton, 2001). Specific items on the knowledge section only were adapted for the South African population (Wessels et al., 1998, in press). For example, a question that used the term 'weak constitution' was changed to 'weak body'. Questions about traditional healing were included with questions on alternative healing methods. As already mentioned, the knowledge section was based on published studies conducted in Europe (Angermeyer et al., 1993; Jorm et al., 1997) and one South African study (Wessels et al., 1998, in press). However, because of the necessary adaptations, the questionnaires that were finally used in this study are not standardised questionnaires.

The CAMI was found to be a valid and reliable scale and was not changed, as it would affect the validity of the scale. Taylor and Dear (1981) analysed the external validity of the CAMI in a Toronto sample. During the pre-testing phase of the scale, items that were weak were replaced. The final scale showed high levels of internal validity, based on the item scale correlation, alpha coefficients, and factor analysis. External validity was also examined within the theoretical framework of the Toronto study. Construct validity was assessed on this study by analysing relationships between the attitude scales and a range of personal characteristics. Predictive

validity was tested by analysing relationships between the scales and various measures of response to mental health facilities. In both cases, direction and consistency of relationship was shown, providing strong support for external validity for the CAMI (Tyler & Dear, 1981, p. 238). Other studies have also reported on the validity of the scale (Wolff et al., 1996a, 1996b).

CHAPTER 4: RESULTS

The data was analysed following the general outline of the research instrument. The presentation of the analysis follows the same pattern. This chapter will present the results only and discussions and interpretations will be presented in Chapter 5 except for the CAMI. The theme analysis of the CAMI will be presented together with the discussion.

The analysis has been organized along the lines listed below:

* analysis of Vignette 1 on schizophrenia
* analysis of Vignette 2 on bipolar disorder
* analysis of Vignette 3 on panic disorder
* analysis of Vignette 4 on posttraumatic stress disorder
* analysis of CAMI scale.

In each of the vignettes the analysis will present the nurses' responses to questions on diagnosis of the disorder, the causes of the disorder, management of the disorder and lastly the recommended method of treatment for the condition. The last section will analyze the CAMI for attitudes displayed by the whole group of respondents.

All the respondents received 67 questions assessing knowledge and the questions were asked under the next 7 headings (see Appendix A):

(1) One open-ended diagnostic question.
(2) Multiple-choice diagnostic questions (Item 1 to 5).
(3) The causes of mental illness (Item 6 – 23).
(4) Methods of management (Item 24 – 36).
(5) Medication (psychotropic) treatment (Item 37 – 47).
(6) The use of psychotherapy (Item 48 – 57).
(7) Traditional/alternative healing methods (Item 58 – 67).

The respondents had to give their responses using a five point Likert scale that gave the following options: "definitely no", "probably no", "definitely yes" and "probably yes". A "not sure" category was given for neutral. For the purpose of the analysis "definitely no" and "probably no" categories were grouped together to form one category "no", the same was done for the positive answers. The reduction of the five-point scale into a three-point scale is in line

with similar previous studies (Jorm et al., 1997; Wessels, 1998, in press). Because this was a small sample a three-point scale analysis represented the results in a more meaningful way.

The data was analysed using different methods. Demographic characteristics of the sample, the knowledge section and the attitudes scale were analysed by means of descriptive statistics. Chi square tests were not performed for the knowledge section of the questionnaires as the groups were not similar and the case studies were not same. It was therefore not necessary to perform a test of difference, as the aim of the study was to report on the level of knowledge rather than examine differences between the groups. This section will therefore report the frequencies for each vignette.

The last section of the questionnaire assessed attitudes using the CAMI, an instruments that assess attitudes toward the mentally ill. The CAMI is made up of 40 questions. It was analysed using two methods, i.e., a descriptive analysis and a factor analysis. The descriptive analysis involved calculating the frequencies and analysing the themes presented by the respondents. The factor analysis was performed using a statistical programme called the SAS version 8.2. The 40 variables of the CAMI were loaded to perform a factor analysis for the 87 respondents. The statistical package added all the values and presented a score. The package was then instructed to extract 4 factors per variable using the respondents' added scores. The scores were then rotated using the maximum likelihood variance. The package presented the results of the rotation illustrated in the example below. The presentation gave me four factor scores corresponding to 40 variables.

Example of a rotated factor loading performed using SAS

Variables	Factor 1	Factor 2	Factor 3	Factor 4
Q3.1	-0.13	0.12	0.15	-0.14
Q3.2	-0.24	0.10	0.02	0.05
Q3.3	0.06	-0.02	0.03	0.20

To determine which item belonged where, I used the loadings (see figures on Factors columns) to group the variables under each factor. For factor one for an example I looked at all the factor scores and pulled out only the variables with a loading of above 40 (more information presented in 4.5 Results of the CAMI p.90). Variables with a score of less than 40 were excluded from any further analysis. After grouping all the variables for each factor a theme analysis of all the itemwas performed. The theme analysis was used to determine the name of each factor and also

to determine if respondents who scored high on a particular factor had a positive or negative attitude. This was done by performing further analysis of the data i.e. a multiple regression and an ANOVA tests'. The factors found were then correlated with demographic variables. Multiple regression tests and ANOVA tests were performed to determine if there were any significant relationships between the independent variable and the dependent variables. More information can be found in 4.5.3 Correlation of demographic variables with factors p.101

To assess knowledge four vignettes were designed and presented to respondents. The respondents were randomly assigned one out of the four vignettes. See Table 4.1 for the number of respondents who responded per vignette.

Table 4.1 Respondents per Case Study

CATEGORY	N	%
Case 1: **Schizophrenia**	17	19,5
Case 2: **Bipolar**	29	33,3
Case 3: **Panic disorder**	22	25,3
Case 4: **PTSD**	19	21,8
TOTAL	**87**	**100,0**

Each vignette or case study will now be presented separately for all 7 sections.

4.1 RESULTS FOR VIGNETTE 1: SCHIZOPHRENIA

4.1.1 Diagnosis Question

The first vignette described a patient with schizophrenia (Appendix B). The open-ended question on diagnosis required the nurse to diagnose the disorders presented. Of the 17 respondents who participated, only one respondent answered this question. The answer given was that it is a psychiatric disorder and the rest of the respondents did not label the disorder. The question on diagnosis was followed by a few questions also assessing the ability to recognise the disorders presented. These questions required the respondent to indicate if the behaviour was normal and then locate the source of the problem from the different options given (Appendix A). Analysis of these questions indicated that most of the participants recognised the presence of some sort of mental disorder (see Table 4.2 below). Fourteen respondents answered in the negative to a question inquiring if the behaviour in Vignette 1 was a normal response. Fourteen nurses attributed the behaviour to a medical disorder.

Table 4.2 Diagnostic Questions: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
1. Was this a normal response?	2	11,8	1	5,9	14	82,4
2. Is this a weak character?	0	0,0	2	11,8	15	88,2
3. Is this an emotional problem?	3	17,6	4	23,5	10	58,8
4. Is this a spiritual problem?	3	17,6	1	5,9	13	76,5
5. Is this a medical disorder	14	82,4	0	0,0	3	17,6

4.1.2 Causes of mental illness

Knowledge of the etiology of the disorder was also assessed. Respondents were required to indicate the possible causes of the behaviour described on the vignette. For this vignette there was no commonly endorsed cause for the condition (see Table 4.3 below). The least endorsed causes were supernatural causes such as the will of God (n=10 "no"), evil spirits or witchcraft (n=14 "no") signs of zodiac (n=13 "no"). Psychosocial (n=11 "no") and environmental factors were also least endorsed (n=11 "no"). Subjects were evenly divided about biological causes (heredity) of the condition described (n=7 "yes" and n=7 "no").

Table 4.3 Causes of Mental Illness: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
6. Difficulties in partner or family relationships	4	23,5	2	11,8	11	64,7
7. Work difficulties	5	29,4	1	5,9	11	64,7
8. Stressful life event	5	29,4	5	29,4	7	41,2
9. Brain disease	6	35,3	2	11,8	9	52,9
10. Heredity	7	41,2	3	17,6	7	41,2
11. Constitutional (bodily) weakness	0	0,0	2	11,8	15	88,2
12. Lack of will power	1	5,9	1	5,9	15	88,2
13. Expecting too much of oneself	2	11,8	3	17,6	12	70,6
14. Unconscious conflict	4	23,5	5	29,4	8	47,1
15. Growing up in a broken home	3	17,6	9	52,9	5	29,4
16. Lack of parental affection	4	23,5	7	41,2	6	35,3
17. Overprotective parents	3	17,6	8	47,1	6	35,3
18. Loss of traditional values	2	11,8	6	35,3	9	52,9
19. Decay of natural ways of life due to modern society	0	0,0	6	35,3	11	64,7
20. Exploitation brought about by current society	2	11,8	9	52,9	6	35,3
21. Will of God	2	11,8	5	29,4	10	58,8
22. Witchcraft, possession by evil spirits	0	0,0	3	17,6	14	82,4
23. Signs of Zodiac or other	1	5,9	3	17,6	13	76,5

4.1.3 Management methods (24 – 36)

Knowledge and ability to manage the condition described on the vignette was assessed by several questions listing different methods such as psychotropic drugs, traditional healing, psychotherapy etc. Among the different methods given there was no commonly endorsed method for the management of this condition (see Table 4.4). Subjects were almost evenly divided in their endorsement and opposition to the use of psychotherapy (n=7 "yes" & n=8 "no"). A similar trend was observed between those for and against the use of psychotropic drugs for this case (n=7 "no" & n=6 "yes"). On the question of pathways to help the commonly advised referral routes were the hospital (n=15), the GP (n=15) and referring to a psychologist or psychiatrist (n=14).

Table 4.4 Management Methods: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
24. Relaxation techniques	6	35,3	1	5,9	10	58,8
25. Pull oneself together	2	11,8	4	23,5	11	64,7
26. Talk it over	0	0,0	6	35,3	1	5,9
27. Exercise	5	29,4	2	11,8	10	58,8
28. Natural cures	2	11,8	5	29,4	10	58,8
29. Meditation/ Yoga	5	29,4	2	11,8	10	58,8
30. Psychotherapy	7	41,2	2	11,8	8	47,1
31. Psychotropic drugs	6	35,3	4	23,5	7	41,2
32. Pray for him/ her	5	29,4	2	11,8	10	58,8
33. Take him or her to a traditional/ alternative healer	1	5,9	3	17,6	13	76,5
34 Advise the person to consult a GP	15	88,2	1	5,9	1	5,9
35. Advise the person to go to a hospital/ clinic	15	88,2	1	5,9	1	5,9
36. Advise the person to see a psychiatrist/ psychologist	14	82,4	2	11,8	1	5,9

Knowledge of treatment methods, and attitudes to the methods were assessed by requesting the respondent to rate the different methods individually. The respondents were given three possible treatment methods: the conventional method (i.e. psychotropic drugs) and those that are not (i.e. psychotherapy and traditional healing).

4.1.3.1 Psychotropic treatment (37 – 47)

It is interesting to note that although psychotropic drugs were not highly rated as a management method as assessed by item 31 (see previous section), they were highly rated as a treatment method for the condition described in Vignette 1. The commonly endorsed method was psychotropic drugs (n=12) see Table 4.5 below. However 12 nurses did not endorse this method as an effective means of dealing with the cause of the illness. Nevertheless it was rated favorably for its sedative effects (n=12) and fast acting ability. Subjects were evenly divided on their assessment of the risk of dependency associated with this method (n=6 "yes" & n=6 "no").

Table 4. 5 Psychotropic Treatment: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
37. Drug treatment is the best way of treating this person	12	70,6	3	17,6	2	11,8
38. Drug treatment is the most reliable way of preventing relapse	12	70,6	3	17,6	2	11,8
39. Drug treatment is mostly likely to bring about rapid improvement	13	76,5	2	11,8	2	11,8
40. In a more severe case, drug treatment would be the only proper treatment	16	94,1	1	5,9	0	0,0
41. The benefit brought about by drug treatment far outweighs the risk associated with it	12	70,6	5	29,4	0	0,0
42. The cause of this condition cannot be dealt with by drug treatment	2	11,8	3	17,6	12	70,6
43. Drug treatment can only calm patients down	12	70,6	4	23,5	1	5,9
44. Taking drugs helps one to see everything through rose-tinted spectacles, leaving basic problems unchanged	3	17,6	12	70,6	2	11,8
45. Psychotropic drugs carry high risk of dependency	6	35,3	5	29,4	6	35,3
46. If taken for long, these drugs can cause irreversible brain damage	2	11,8	7	41,2	8	47,1
47. In the end psychotropic drugs make one even more ill than one was before	2	11,8	5	29,4	10	58,8

4.1.3.2 Psychotherapy treatment (48 – 57)

Out of the three treatment methods rated i.e. psychotropic drugs (n=12), psychotherapy (n=5) and traditional healing (n=1), traditional or alternative healing and psychotherapy were the least favoured methods of treatment of this condition. The only benefit associated with psychotherapy was its ability to change the problem rather than masking it. This method was also not associated with risks such as dependency on the clinician as seen in Table 4.6 below.

Table 4.6: Psychotherapy Treatment: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
48. Psychotherapy (talk therapy) is the best way of treating this person	5	29,4	2	11,8	10	58,8
49. Psychotherapy is the most reliable way of preventing relapse	4	23,5	1	5,9	12	70,6
50. Psychotherapy is most likely to bring about rapid improvement	6	35.3	2	11,8	9	52,9
51. In a more severe presentation of mental illness, psychotherapy would be the only proper treatment	1	5,9	1	5,9	15	88,2
52. The benefit brought about by the psychotherapy far outweighs the risk associated with it	3	17,6	3	17,6	11	64,7
53. The cause of this condition cannot be dealt with by psychotherapy	4	23,5	4	23,5	9	52,9
54. Psychotherapy can only calm patients down	4	23,5	3	17,6	10	58,8
55. Psychotherapy helps one see everything through rose tinted spectacles, leaving basic problem unchanged	1	5,9	7	41,2	9	52,9
56. Psychotherapy has a high risk of patients becoming dependent on the therapist	2	11,8	9	52,9	6	35,3
57. In the end psychotherapy makes one even more ill than one was before	0	0,0	7	41,2	10	58,8

4.1.3.3 Traditional/alternative healing methods (58 – 67)

Traditional healing or alternative healing was the lowest rated method among the three methods presented (n=1 "yes" & n=11 "no" and n=5 "not sure") see Table 4.7. No benefits were attributed to the use of this method in so far as its ability to prevent relapse (n=12 "no") and bring rapid improvement, (n=13). The only positive aspect of the methods is that it was not associated with any risk of dependency. However 2 nurses believed this method can make one more ill than they were before.

Table 4.7 Traditional / Alternative Healing Methods: Schizophrenia

	Yes		Not sure		No	
	N	%	N	%	N	%
58. Traditional / alternative healing is the best way of treating this person	1	5.9	5	29,4	11	64,7
59. Traditional / alternative healing is the most reliable way of preventing relapse	1	5,9	4	23,5	12	70,6
60. Traditional/ alternative healing is most likely to bring about rapid improvement	1	5,9	3	17,6	13	76,5
61. In a more severe presentation of mental illness, traditional/ alternative healing would be the only proper treatment	2	11,8	2	11,8	13	76,5
62. The benefit brought about by traditional/ alternative healing far outweighs the risks associated with it	2	11,8	5	29,4	10	58,8
63. The cause of this condition cannot be dealt with by traditional/ alternative healing	3	17,6	6	35,3	8	47,1
64 Traditional/ alternative healing can only calm patients down	2	11,8	6	35,3	9	52,9
65. Traditional / alternative healing helps one to see everything through rose tinted spectacles, leaving basic problems unchanged	4	23,5	3	17,6	10	58,8
66. Traditional/ alternative healing has a high risk of patients becoming dependent on the healer	2	11,8	6	35,3	9	52,9
67. In the end traditional/ alternative healing makes one even more ill than one was before	4	23,5	3	17,6	10	58,8

4.2 RESULTS FOR VIGNETTE 2: BIPOLAR DISORDER

4.2.1 Diagnosis Question

The second vignette (Appendix B) that was presented to some of the respondents described bipolar disorder. Of the twenty-nine respondents who completed this vignette only two labelled the condition described. One of the respondents labelled the disorder correctly as "bipolar" and the second respondent labelled it incorrectly as "hormonal problems". The respondents had to indicate if the behaviour was normal and then locate the source of the problem from the different options given (see Appendix A). Analysis of these questions indicated that most of the participants recognised the presence of some sort of mental disorder. Twenty participants responded in the negative to a question inquiring if the behaviour on Vignette 2 was a normal response. Similarly twenty nurses attributed the behaviour to a medical disorder and nineteen indicated that the behaviour is the result of an emotional problem (see Table 4.8 below).

Table 4.8 Diagnostic Questions: Bipolar Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
1. Was this a normal response?	5	17,2	4	13,8	20	69,0
2. Is this a weak character?	1	3,4	7	24,1	21	72,4
3. Is this an emotional problem?	19	65,5	5	17,2	5	17,2
4. Is this a spiritual problem?	3	10,3	13	44,8	13	44,8
5. Is this a medical disorder?	20	69,0	9	31,0	0	0,0

4.2.2 Causes of mental illness

Several factors were indicated as causing the behaviour described in Vignette 2. The commonly endorsed causes for the described condition were psychosocial causes such as work (n=20), family (n=19) and stressful life events (n=17), see Table 4. 9 below. The least endorsed causes were biological factors (i.e. heredity n=8, weak body n=0) and supernatural factors (will of God n=1, evil spirits or witchcraft n=0, and signs of zodiac n=0).

Table 4.9 Causes of Mental Illness: Bipolar Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
6. Difficulties in partner or family relationships	19	65,5	3	10,3	7	24,1
7. Work difficulties	20	69,0	3	10,3	6	20,7
8. Stressful life event	17	58,6	4	13,8	8	27,6
9. Brain disease	12	41,4	6	20,7	11	37,9
10. Heredity	8	27,6	6	20,7	15	51,7
11. Constitutional (bodily) weakness	0	0,0	5	17,2	24	82,8
12. Lack of will power	3	10,3	8	27,6	18	62,1
13. Expecting too much of oneself	13	44,8	3	10,3	13	44,8
14. Unconscious conflict	9	31,0	9	31,0	11	37,9
15. Growing up in a broken home	4	13,8	13	44,8	12	41,4
16. Lack of parental affection	7	24,1	9	31,0	13	44,8
17. Overprotective parents	6	20,7	10	34,5	13	44,8
18. Loss of traditional values	5	17,2	13	44,8	11	37,9
19. Decay of natural ways of life due to modern society	5	17,2	20	69,0	4	13,8
20. Exploitation brought by current society	6	20,7	13	44,8	10	34,5
21. Will of God	1	3,4	5	17,2	23	79,3
22. Witchcraft, possession by evil spirits	0	0,0	5	17,2	24	82,8
23. Signs of Zodiac or other	0	0,0	6	20,7	23	79,3

4.2.3 Management methods (24 – 36)

For the management of this condition nurses commonly recommended self-help methods such as relaxation techniques (n=19), talking it over (n=17), and praying for the person (n=17). Psychotropic drugs were endorsed by 15 nurses and psychotherapy was endorsed by 11 respondents. The least favoured method was traditional or alternative healing (n=1). In terms of pathways to care, psychologists were highly recommended (n=23), followed by referral to the hospital (n=22), and general practitioners (n=20).

Table 4.10 Management Methods: Bipolar Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
24. Relaxation techniques	19	65,5	6	20,7	4	13,8
25. Pull oneself together	11	37,9	7	24,1	11	37,9
26. Talk it over	17	58,6	3	10,3	9	31,0
27. Exercise	16	55,2	3	10,3	10	34,5
28. Natural cures	5	17,2	12	41,4	12	41,4
29. Meditation/ Yoga	7	24,1	6	20,7	16	55,2
30. Psychotherapy	11	37,9	2	6,9	16	55,2
31. Psychotropic drugs	15	51,7	6	20,7	8	27,6
32. Pray for him/ her	17	58,6	7	24,1	5	17,2
33. Take him or her to a traditional/ alternative healer	1	3,4	6	20,7	22	75,9
34. Advise the person to consult a GP	20	69,0	3	10,3	6	20,7
35. Advise the person to go to a hospital/ clinic	22	75,9	1	3,4	6	20,7
36. Advise the person to see a psychiatrist/ psychologist	23	79,3	0	0,0	6	20,7

4.2.3.1 Psychotropic treatment (37 – 47)

The subjects were divided on their endorsement of medication as treatment for this condition (n=13 "yes" and n=14 "no"). Medication was perceived as effective for treating this case especially its ability to bring about rapid improvement (n=14 "yes" & n=11 "no") and sedating effects (n=14 "yes" & n=10 "no"). However in relation to dealing with the cause of the illness participants were evenly divided (n=14 "not sure" & n=14 "no"). The majority of the subjects (n=17) associated this method with the risk of dependency.

Table 4.11 Psychotropic Treatment: Bipolar Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
37. Drug treatment is the best way of treating this person	13	44,8	2	6,9	14	48,3
38. Drug treatment is the most reliable way of preventing relapse	12	41,4	1	3,4	16	55,2
39. Drug treatment is mostly likely to bring about rapid improvement	14	48,3	4	13,8	11	37,9
40. In a more severe case, drug treatment would be the only proper treatment	15	51,7	1	3,4	13	44,8
41. The benefit brought about by drug treatment far outweighs the risk associated with it	10	34,5	5	17,2	14	48,3
42. The cause of this condition cannot be dealt with by drug treatment	1	3,4	14	48,3	14	48,3
43. Drug treatment can only calm patients down	14	48,3	5	17,2	10	34,5
44. Taking drugs helps one to see everything through rose-tinted spectacles, leaving basic problems unchanged	7	24,1	10	34,5	12	41,4
45. Psychotropic drugs carry high risk of dependency	17	58,6	7	24,1	5	17,2
46. If taken for long, these drugs can cause irreversible brain damage	6	20,7	18	62,1	5	17,2
47. In the end psychotropic drugs make one even more ill than one was before	4	13,8	8	27,6	17	58,6

4.2.3.2 Psychotherapy treatment (48 – 57)

Psychotherapy was endorsed by 14 nurses for the treatment of the condition described. However it was not very highly rated as the rest of the respondents were either unsure or did not endorse the method (see Table 4.12). This method was seen as reliable for preventing relapse (n=18) but it was not rated high for being effective in a severe presentation (n=18). Respondents were divided in their assessment of the ability of psychotherapy to deal with the cause of the condition (n=10 "yes" and n=11 "no"). Nonetheless it was still recommended for having a low risk of dependency (n=15).

Table 4.12 **Psychotherapy Treatment: Bipolar Disorder**

	Yes		Not sure		No	
	N	%	N	%	N	%
48. Psychotherapy (talk therapy) is the best way of treating this person	14	48,2	6	20,7	9	31,0
49. Psychotherapy is the most reliable way of preventing relapse	18	62,1	7	24,1	4	13,8
50. Psychotherapy is most likely to bring about rapid improvement	12	41,4	13	44,8	4	13,8
51. In a more severe presentation of mental illness, psychotherapy would be the only proper treatment	7	24,1	7	24,1	15	51,7
52. The benefit brought about by the psychotherapy far outweighs the risk associated with it	10	34,5	18	62,1	1	3,4
53. The cause of this condition cannot be dealt with by psychotherapy	10	34,5	8	27,6	11	37,9
54. Psychotherapy can only calm patients down	11	37,9	6	20,7	12	41,4
55. Psychotherapy helps one see everything through rose tinted spectacles, leaving basic problem unchanged	7	24,1	6	20,7	16	55,2
56. Psychotherapy has a high risk of patients becoming dependent on the therapist	6	20,7	8	27,6	15	51,7
57. In the end psychotherapy makes one even more ill than one was before	4	13,8	2	6,9	23	79,3

4.2.3.3 Traditional/alternative healing methods (58 - 67)

Traditional or alternative healing was the least recommended method among the three methods presented (n=23 "no"). No benefits were attributed to this method in terms of its ability to prevent relapse (n=22 "no") and bring about rapid improvement (n=23 "no"). This method was not associated with a risk of dependency. The nurses were evenly divided on the question of traditional or alternative healing making one more ill than before (n=12 "yes" & n=12 "no").

Table 4.13 Traditional / Alternative Healing Methods: Bipolar Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
58. Traditional / alternative healing is the best way of treating this person	2	6,9	4	13,8	23	79,3
59. Traditional / alternative healing is the most reliable way of preventing relapse	2	6,9	5	17,2	22	75,9
60. Traditional/ alternative healing is most likely to bring about rapid improvement	3	10,3	3	10,3	23	79,3
61. In a more severe presentation of mental illness, traditional/ alternative healing would be the only proper treatment	2	6,9	2	6,9	25	86,2
62. The benefits brought about by Traditional/ alternative healing far outweighs the risks associated with it	2	6,9	10	34,5	17	58,6
63. The cause of this condition cannot be dealt with by traditional/ alternative healing	5	17,2	6	20,7	18	62,1
64 Traditional/ alternative healing can only calm patients down	6	20,7	9	31,0	14	48,3
65. Traditional / alternative healing helps one to see everything through rose tinted spectacles, leaving basic problems unchanged	8	27,6	12	41,4	9	31,0
66. Traditional/ alternative healing has a high risk of patients becoming dependent on the healer	7	24,1	9	31,0	13	44,8
67. In the end traditional/ alternative healing makes one even more ill than one was before	12	41,4	5	17,2	12	41,4

4.3 RESULTS FOR VIGNETTE 3: PANIC DISORDER

4.3.1 Diagnosis Question

The third vignette that was presented to the respondents described panic disorder (Appendix B). Of the twenty-two nurses who completed this vignette none labelled the condition described. On the questions that followed the diagnosis question it became clear that the respondents on this vignette could not identify the behaviour as a psychiatric disorder (Table 4.14). Thirteen nurses could not identify that the case was that of panic disorder; they described the behaviour on the case study as normal. Only nine nurses identified the disorder as not normal. Six respondents identified the problem as an emotional problem, while fifteen said it was not an emotional

problem. The majority of the nurses (n=15) who answered this vignette failed to identify this problem as a medical disorder and only five nurses identified it as a medical disorder.

Table 4.14 Diagnostic Questions: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
1. Was this a normal response?	13	59,1	0	0,0	9	40,9
2. Is this a weak character?	1	4,5	6	27,3	15	68,2
3. Is this an emotional problem?	6	27,3	1	4,5	15	68,2
4. Is this a spiritual problem?	1	4,5	1	4,5	20	90,9
5. Is this a medical disorder	5	22,7	2	9,1	15	68,2

4.3.2 Causes of mental illness

Several factors were indicated as causes of this disorder or behaviour. The commonly endorsed causes were some of the psychosocial problems such as work difficulties (n=14), and stressful life events (n=16). The least endorsed causes were nurturing factors and environmental factors such as growing up in a broken home, over protective parents, lack of affection, loss of values, and exploitation by current society (see Table 4.15 below). Biological and supernatural causes were the least endorsed. Only three nurses thought that the condition was the will of God, and none indicated causes like witchcraft, signs of the Zodiac and heredity. For this vignette the majority of nurses tended to endorse psychosocial factors such as stress and work difficulties as the cause for the condition described.

Table 4.15 Causes of Mental Illness: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
6. Difficulties in partner or family relationships	8	36,4	4	18,2	10	45,5
7. Work difficulties	14	63,6	3	13,6	5	22,7
8. Stressful life event	16	72,7	1	4,5	5	22,7
9. Brain disease	0	0,0	3	13,6	19	86,4
10. Heredity	0	0,0	2	9,1	20	90,9
11. Constitutional (bodily) weakness	0	0,0	8	36,4	14	63,6
12. Lack of will power	2	9,1	7	31,8	13	59,1
13. Expecting too much of oneself	2	9,1	3	13,6	17	77,3
14. Unconscious conflict	10	45,5	2	9,1	10	45,5
15. Growing up in a broken home	1	4,5	1	4,5	20	90,9
16. Lack of parental affection	0	0,0	2	9,1	20	90,9
17. Overprotective parents	0	0,0	2	9,1	20	90,9
18. Loss of traditional values	0	0,0	5	22,7	17	77,3
19. Decay of natural ways of life due to modern society	2	9,1	13	59,1	7	31,8
20. Exploitation brought about by current society	4	18,2	8	36,4	10	45,5
21. Will of God	3	13,6	0	0,0	19	86,4
22. Witchcraft, possession by evil spirits	0	0,0	0	0,0	22	100,0
23. Signs of Zodiac or other	0	0,0	0	0,0	22	100,0

4.3.3 Management methods (24 – 36)

For the management of the condition presented on Vignette 3, respondents endorsed self-help methods more than the other methods of treatment (see Table 4.16). Twenty nurses recommended relaxation techniques, nineteen advised exercising and seventeen advised meditation and yoga. Eleven nurses believed that the person should be advised to pull him or herself together. Nurses were unsure if talking about the problem was effective as a management method (n=19). They were also not sure about the use of natural cures for this condition (n=16). The least favoured management method was traditional or alternative healing (n=19 "no"). The conventional mental heath management techniques did not rate very high. Only five nurses would advise psychotherapy. None of the nurses endorsed psychotropic drugs for this condition.

On the question of referral pathways nurses were evenly divided, ten nurses would refer the case to a GP and another ten would not. The majority (n=11) would refer the person to the hospital. The rest were split between "unsure" (n=3) and "no" (n=8). Lastly only five nurses would refer the person to a psychiatrist or psychologist, eight would not and nine nurses were not sure.

Table 4.16 Management Methods: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
24. Relaxation techniques	20	90,9	1	4,5	1	4,5
25. Pull oneself together	11	50,0	8	36,4	3	13,6
26. Talk it over	0	0,0	19	86,4	3	13,6
27. Exercise	19	86,4	3	13,6	0	0,0
28. Natural cures	5	22,7	16	72,7	1	4,5
29. Meditation/ Yoga	17	77,3	4	18,2	1	4,5
30. Psychotherapy	5	22,7	11	50,0	6	27,3
31. Psychotropic drugs	0	0,0	10	45,5	12	54,5
32. Pray for him/ her	5	22,7	9	40,9	8	36,4
33. Take him or her to a traditional/ alternative healer	0	0,0	3	13,6	19	86,4
34 Advise the person to consult a GP	10	45,5	2	9,1	10	45,5
35. Advise the person to go to a hospital/ clinic	11	50,0	3	13,6	8	36,4
36. Advise the person to see a psychiatrist/ psychologist	5	22,7	9	40,9	8	36.4

4.3.3.1. Psychotropic treatment (37 – 47)

As previously mentioned psychotropic drugs were not endorsed for the management of this condition. Only one nurse said they would use medication for this condition (see Table 4.17 below). Twelve nurses endorsed the drugs for the ability to calm the patient. On the question of damage and risks associated with use of psychotropic drugs, ten were not sure about the risk of irreversible brain damage. Three nurses associated this method with risk for damage and nine nurses did not. Psychotropic drugs were rated negatively for the treatment of this condition.

Table 4.17 Psychotropic Treatment: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
37. Drug treatment is the best way of treating this person	1	4,5	11	50,0	10	45,5
38. Drug treatment is the most reliable way of preventing relapse	1	4.5	10	45,5	11	50,0
39. Drug treatment is mostly likely to bring about rapid improvement	2	9,1	3	13,6	17	77,3
40. In a more severe case, drug treatment would be the only proper treatment	10	45,5	3	13,6	9	40,9
41. The benefit brought about by drug treatment far outweighs the risk associated with it	8	36,4	5	22.7	9	40.9
42. The cause of this condition cannot be dealt with by drug treatment	1	4,5	4	18,2	17	77,3
43. Drug treatment can only calm patients down	12	54,5	2	9.1	8	36,4
44. Taking drugs helps one to see everything through rose-tinted spectacles, leaving basic problems unchanged	3	13.6	8	36,4	11	50,0
45. Psychotropic drugs carry high risk of dependency	7	31,8	1	4,5	14	63,6
46. If taken for long, these drugs can cause irreversible brain damage	3	13.6	10	45.5	9	40,9
47. In the end psychotropic drugs make one even more ill than one was before	3	13,6	3	13,6	16	72,7

4.3.3.2 Psychotherapy Treatment (48 – 57)

Psychotherapy was commonly endorsed as a treatment method for this condition (n=19). Twelve nurses believed this method was capable of bringing about rapid improvement (see Table 4.18 below). Fifteen nurses believed that this method was able to deal with the basic problem and not just mask it. This method was not associated with risks such as dependency (n=9 "no") although ten respondents were unsure about the risk of dependency.

Table 4.18 Psychotherapy Treatment: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
48. Psychotherapy (talk therapy) is the best way of treating this person	19	86,4	3	13,6	0	0,0
49. Psychotherapy is the most reliable way of preventing relapse	9	40,9	13	59,1	0	0,0
50. Psychotherapy is most likely to bring about rapid improvement	12	54,5	10	45,5	0	0,0
51. In a more severe presentation of mental illness, psychotherapy would be the only proper treatment	5	22,7	9	40,9	8	36,4
52. The benefit brought about by the psychotherapy far outweighs the risk associated with it	13	59,1	9	40,9	0	0,0
53. The cause of this condition cannot be dealt with by psychotherapy	0	0,0	4	18.2	18	81.8
54. Psychotherapy can only calm patients down	5	22,7	9	40,9	8	36,4
55. Psychotherapy helps one see everything through rose tinted spectacles, leaving basic problem unchanged	0	0,0	7	31,8	15	68.2
56. Psychotherapy has a high risk of patients becoming dependent on the therapist	3	13,6	10	45,5	9	40.9
57. In the end psychotherapy makes one even more ill than one was before	2	9,1	2	9.1	18	81,8

4.3.3.3 Traditional / Alternative healing methods

Among the three methods traditional or alternative healing was the least recommended method (Table 4.19). It was not associated with any benefits. Nineteen nurses did not believe this method would be able to prevent relapse. It was also not associated with a risk of dependency (n=18 "no"). However two respondents thought this method could make one more ill than they were before.

Table 4.19 Traditional / Alternative Healing Methods: Panic Disorder

	Yes		Not sure		No	
	N	%	N	%	N	%
58. Traditional / alternative healing is the best way of treating this person	1	4,5	9	40,9	12	54,5
59. Traditional / alternative healing is the most reliable way of preventing relapse	1	4,5	2	9,1	19	86,4
60. Traditional/ alternative healing is most likely to bring about rapid improvement	0	0,0	5	22,7	17	77,3
61. In a more severe presentation of mental illness, traditional/ alternative healing would be the only proper treatment	0	0,0	2	9,1	20	90,9
62. The benefit brought about by the traditional/ alternative healing far outweighs the risks associated with it	0	0,0	9	40,9	13	59,1
63. The cause of this condition cannot be dealt with by traditional/ alternative healing	1	4,5	10	45,5	11	50,0
64 Traditional/ alternative healing can only calm patients down	2	9,1	9	40,9	11	50,0
65. Traditional / alternative healing helps one to see everything through rose tinted spectacles, leaving basic problems unchanged	1	4,5	4	18,2	17	77,3
66. Traditional/ alternative healing has a high risk of patients becoming dependent on the healer	0	0,0	4	18,2	18	81,8
67. In the end traditional/ alternative healing makes one even more ill than one was before	2	9,1	9	40,9	11	50,0

4.4 RESULTS FOR VIGNETTE 4: PTSD

4.4.1 Diagnosis Question

The disorder that was presented as Vignette 4 was posttraumatic stress disorders. Of the nineteen respondents on this vignette only three labelled the condition. All the answers were correct, either PTSD or PTSD and depression. Fifteen nurses responded that this was a normal response. This answer needs to be interpreted cautiously as the question might not have been properly understood. Posttraumatic stress symptoms have been described as a normal response to an abnormal situation. Only three nurses correctly identified this as an abnormal response. The

condition was not attributed to weakness of the person; thirteen respondents believed this was an emotional problem and there was an equal split between those who believed that this is a medical condition and those who did not (n=8 "yes" & n=8 "no").

Table 4.20 Diagnostic Questions: PTSD

	Yes		Not sure		No	
	N	%	N	%	N	%
1. Was this a normal response?	15	78,9	1	5,3	3	15,8
2. Is this a weak character?	2	10,5	4	21,1	13	68,4
3. Is this an emotional problem?	11	57,9	3	15,8	5	26,3
4. Is this a spiritual problem?	2	10,5	3	15,8	14	73,7
5. Is this a medical disorder?	8	42,1	3	15,8	8	42,1

4.4.2 Causes of mental illness

For this disorder the cause was in line with the understanding of PTSD to have a precipitating traumatic event. Seventeen nurses believed that a stressful life event caused the behaviour described on the vignette (see Table 4.21). The least endorsed causes were biological factors (heredity n=15 "no"), and all the respondents (n=19) said "no" to body weakness. Supernatural factors such as the will God (n=15 "no") and evil spirits or witchcraft (n=17 "no") signs of zodiac (n=17 "no") were also not endorsed by the majority of the respondents.

Table 4.21 Cause of Mental Illness: PTSD

	Agree		Not sure		Disagree	
	N	%	N	%	N	%
6. Difficulties in partner or family relationships	9	47,4	2	10,5	8	42,1
7. Work difficulties	4	21,1	1	5,3	14	73,7
8. Stressful life event	17	89,5	2	10,5	0	0,0
9. Brain disease	3	15,8	1	5,3	15	78,9
10. Heredity	3	15,8	1	5,3	15	78,9
11 Constitutional (bodily) weakness	0	0,0	0	0,0	19	100,0
12. Lack of will power	2	10,5	2	10,5	15	78,9
13. Expecting too much of oneself	3	15,8	3	15.8	13	68,4
14. Unconscious conflict	6	31,6	2	10,5	11	57,9
15. Growing up in a broken home	5	26,3	3	15.8	11	57,9
16. Lack of parental affection	7	36,8	3	15.8	9	47,4
17. Overprotective parents	5	26,3	3	15,8	11	57,9
18. Loss of traditional values	4	21,1	4	21,1	11	57,9
19. Decay of natural ways of life due to modern society	6	31,6	5	26,3	8	42,1
20. Exploitation brought by current society	9	47,4	3	15,8	7	36,8
21. Will of God	2	10,5	2	10,5	15	78,9
22. Witchcraft, possession by evil spirits	1	5,3	1	5,3	17	89,5
23. Signs of Zodiac or other	0	0,0	3	15,8	16	84,2

4.4.3 Management methods (24 – 36)

For the management of PTSD, nurses commonly endorsed self-help methods like relaxation techniques (n=12) and talking it over (n=15) (see Table 4.22 below). Nine nurses advised pulling oneself together and 12 nurses advised prayer. Psychotherapy (n=14 "yes") was more favoured when compared with psychotropic drugs (n=10 "yes"). The least favoured methods were alternative or traditional healing methods (n=15 "no"). When pathways were analysed psychologists or psychiatrists were highly rated for Vignette 3 (n=17). Fifteen nurses would refer this person to a hospital and 12 nurses would refer to a general practitioner.

Table 4.22 Management Methods: PTSD

	Yes		Not sure		No	
	N	%	N	%	N	%
24. Relaxation techniques	12	63,2	3	15,8	4	21,1
25. Pull oneself together	9	47,4	3	15,8	7	36,8
26. Talk it over	15	78,9	1	5,3	3	15,8
27. Exercise	9	47,4	2	10,5	8	42,1
28. Natural cures	5	26,3	3	15,8	11	57,9
29. Meditation/ Yoga	7	36,8	2	10,5	10	52,6
30. Psychotherapy	14	73,7	2	10,5	3	15,8
31. Psychotropic drugs	10	52,6	6	31,6	3	15,8
32. Pray for him/ her	12	63,2	4	21,1	3	15,8
33. Take him or her to a traditional/ alternative healer	2	10,5	2	10,5	15	78,9
34. Advise the person to consult a GP	12	63,2	3	15,8	4	21,1
35. Advise the person to go to a hospital/ clinic	15	78,9	1	5,3	3	15,8
36. Advise the person to see a psychiatrist/ psychologist	17	89,5	0	0,0	2	10,5

4.4.3.1 Psychotropic treatment (37 – 47)

Psychotropic drugs were not endorsed for use in this case (n=12 "no") (see Table 4.23 below). Ten nurses believed medication is not the only proper treatment in severe presentation of the condition described (PTSD). Thirteen nurses believed that this method was only good for calming down the patients. This method was associated with a risk of dependency (n=12). Four nurses believed that this method could make patients even more ill than they were before, suggesting negative attitudes to the methods.

Table 4.23 Psychotropic Treatment: PTSD

	Yes		Not sure		No	
	N	%	N	%	N	%
37. Drug treatment is the best way of treating this person	4	21,1	3	15,8	12	63,2
38. Drug treatment is the most reliable way of preventing relapse	6	31,6	2	10,5	11	57,9
39. Drug treatment is mostly likely to bring about rapid improvement	6	31,6	4	21,1	9	47,4
40. In a more severe case, drug treatment would be the only proper treatment	7	36,8	2	10,5	10	52,6
41. The benefit brought about by drug treatment far outweighs the risk associated with it	4	21,1	7	36,8	8	42,1
42. The cause of this condition cannot be dealt with by drug treatment	7	36,8	4	21,1	8	42,1
43. Drug treatment can only calm patients down	13	68,4	0	0,0	6	31,6
44. Taking drugs helps one to see everything through rose-tinted spectacles, leaving basic problems unchanged	9	47,4	3	15,8	7	36,8
45. Psychotropic drugs carry high risk of dependency	12	63,2	3	15,8	4	21,1
46. If taken for long, these drugs can cause irreversible brain damage	4	21,1	5	26,3	10	52,6
47. In the end psychotropic drugs make one even more ill than one was before	4	21,1	1	5,3	14	73,7

4.4.3.2 Psychotherapy treatment (48 57)

Psychotherapy was more commonly endorsed as a treatment method for PTSD. Thirteen nurses rated psychotherapy as the best method to treat the condition described on Vignette 4. Fifteen nurses believed that psychotherapy was the most reliable method for preventing relapse. However psychotherapy was not endorsed for severe presentation (n=10 "no", n=1 "yes" and n=5 "not sure") (see Table 4.24 below). Fifteen nurses believed psychotherapy has the ability to change the basic problem and not mask it. On the question of risks some respondents (n=9) believed it might lead to dependency on the clinician. On the question of only calming patients down, the respondents were evenly divided. Eight believed this method is only good for calming the patient and eight believed it was not.

Table 4.24 Psychotherapy Treatment: PTSD

	Yes		Not Sure		No	
	N	%	N	%	N	%
48. Psychotherapy (talk therapy) is the best way of treating this person	13	68,4	3	15,8	3	15,8
49. Psychotherapy is the most reliable way of preventing relapse	15	78,9	2	10,5	2	10,5
50. Psychotherapy is most likely to bring about rapid improvement	11	57,9	4	21,1	4	21,1
51. In a more severe presentation of mental illness, psychotherapy would be the only proper treatment	4	21,1	5	26,3	10	52,6
52. The benefit brought about by the psychotherapy far outweighs the risk associated with it	9	47,4	5	26,3	5	26,3
53. The cause of this condition cannot be dealt with by psychotherapy	3	15,8	3	15,8	13	68,4
54. Psychotherapy can only calm patients down	8	42,1	3	15,8	8	42,1
55. Psychotherapy helps one see everything through rose tinted spectacles, leaving basic problem unchanged	0	0,0	4	21,1	15	78,9
56. Psychotherapy has a high risk of patients becoming dependent on the therapist	9	47,4	3	15,8	7	36,8
57. In the end psychotherapy makes one even more ill than one was before	2	10,5	2	10,5	15	78,9

4.4.3.3 Traditional/alternative healing methods (58 – 67)

Fourteen nurses did not consider traditional healing as the best form of treatment, making this the least popular of treatment methods. This method was not associated with any benefits for the condition presented (see Table 4.25). Seven nurses associated the method with a risk of dependency. The rest of the nurses were not sure or did not agree with the statement. However eleven nurses believed that this method is capable of making one more ill than they were before, suggesting negative attitudes to these methods.

Table 4.25 Traditional /Alternative Healing Treatment: PTSD

	Yes		Not sure		No	
	N	%	N	%	N	%
58. Traditional / alternative healing is the best way of treating this person	1	5,3	4	21,1	14	73,7
59. Traditional / alternative healing is the most reliable way of preventing relapse	2	10,5	1	5,3	16	84,2
60. Traditional/ alternative healing is most likely to bring about rapid improvement	2	10,5	4	21,1	13	68,4
61. In a more severe presentation of mental illness, traditional/ alternative healing would be the only proper treatment	2	10,5	3	15,8	14	73,7
62. The benefit brought about by the traditional/ alternative healing far outweighs the risks associated with it	2	10,5	8	42,1	9	47,4
63. The cause of this condition cannot be dealt with by traditional/ alternative healing	7	36,8	5	26,3	7	36,8
64 Traditional/ alternative healing can only calm patients down	6	31,6	2	10,5	11	57,9
65. Traditional / alternative healing helps one to see everything through rose tinted spectacles, leaving basic problems unchanged	6	31,6	7	36,8	6	31,6
66. Traditional/ alternative healing has a high risk of patients becoming dependent on the healer	7	36,8	6	31,6	6	31,6
67. In the end traditional/ alternative healing makes one even more ill than one was before	11	57,9	2	10,5	6	31,6

4. 5. RESULTS OF THE CAMI

Section 3 of the questionnaire was comprised of a scale with 40 questions that assessed attitudes of respondents toward the mentally ill (see Appendix 1). The scale was originally designed by Taylor and Dear (1981, p. 28-39) and the scale has been widely used by other researchers (Brockington, Hall, Levings, & Murphy, 1993; Hall, Brockington, Levings, & Murphy, 1993; Wolff et al., 1996). The respondents had to answer the questions on a five- point scale, and the answers were condensed into three main categories during analysis. The CAMI has 4 factors namely:

1. Authoritarianism (item 1-10)
2. Benevolence (item 10-20)
3. Social restrictive (item 21-30)
4. Community mental health ideology (item 31-40).

4.5.1 CAMI Factor Analysis

Factor analysis was carried out on the CAMI and the analysis of variance revealed that the data could be presented by extraction of four factors. The 4 factors that were extracted accounted for (39%) of the variance. Factor 1 accounted for (11%), factor 2 (13%) and factor 3 (8%) and factor 4 (7%) of the total variance. The variance accounted by the 4 factors is keeping with Taylor and Dear findings that only 42% of the variance could be accounted for in their data by the 4 factors. Table 4.26 reports the main components of the four factors.

The second stage of the factor analysis looked at the themes that underlay the different factors. This was done by identifying items that loaded high on the different factors. A high loading was regarded as a factor loading of above 40; this is a level that was use by Taylor and Dear (1981). All the items with a high loading were then inspected, grouped together per factor and themes were analysed (see Table 4.27). The analysis of factor 1 showed that the underlying theme between the items had to do with inclusion and acceptance of mentally ill in the residential neighbourhoods or community. This factor loaded high on items such as item 22 "The mentally ill should be isolated from the rest of the community" (-0.75); item 36 "Mental health facilities should be kept out of residential neighbourhoods" (-0.62); item 32 "The best therapy for the mentally ill is to be part of a normal society" (0.69). Only one

respondent "agreed" with item 22; n=16 were "not sure" and n=70 "disagreed" with the statement. The results for all the items are presented in Table 5.2. This factor because of the dominance of the theme of inclusion and acceptance can be called inclusion and acceptance or community ideology according to Taylor and Dear (1981).

In factor 2 the main theme underlying the items was to do with social control and fear or social restriction and fear of the mentally ill. This factor loaded highly on items such as item 38 "Having mental patients living within the residential neighborhood might be good therapy but the risks to the residents are too great" (0.87); item 5 "The mentally ill need the same kind of control and discipline as a young child" (0.42); item 25 "Anyone with a history of mental illness should be excluded from holding public office" (0.65). It is interesting to note that 28 respondents on this study "agreed" with the statement on item 38 and 36 respondents were "not sure" and n= 23 "disagreed" (see Table 4.27). For item 5, which has control as the theme, 21 respondents "agreed", n= 46 were "not sure" and n= 20 "disagreed". This factor can therefore be labelled social control/ social restrictiveness. A more positive value indicates greater social control.

In factor 3 the main theme was benevolence toward the mentally ill. This factor also had items that belonged to the social restrictiveness factor. These items had a theme of social control i.e. item 25 "everyone with a history of mental problems should be excluded from public office" (0.42) and item 21 "The mentally ill should not be given any responsibility" (0.72). Factor 3 loaded high on items such as item 11 " The mentally ill have long been the subject of ridicule" (-0.46); item 20 "It is best to avoid someone who has mental problems" (0.55), and item 19 "There are sufficient existing services for the mentally ill" (-0.51). On item 11, 45 respondents "agreed" with the statements and 42 respondents were "not sure" (see Table 4.27). This factor can therefore be labelled benevolence.

In factor 4 the main themes of the underlying items had to do with goodwill (3 items) social restrictiveness (1 item) and authoritarianism (2 items). It is questionable if this factor measures a different factor as the majority of items found on this scale belong to factor 3, which is benevolence. The difference is that the items on factor 4 are phrased in the positive, which might suggest that this factor is a different factor. However, the other 3 items from the other factors makes this assumption questionable. This assumption is based on the fact that

the majority of items found on this scale are from the benevolence scale. Nonetheless, it has 3 items that belong to other factors such as authoritarianism and social restrictiveness. Therefore although the results of the factor analysis suggest a 4-factor model, the theme analysis does not support a 4-factor model proposed by Taylor and Dear (1981).

Table 4.26 CAMI Factor Analysis

Factor 1: Inclusion & acceptance

Statement	Factor 1	Factor 2	Factor 3	Factor 4
The mentally ill should be isolated from the rest of the community (22)	*-0.75941	0.09772	0.29605	0.1772
Mental health facilities should be kept out of residential neighbourhoods (36)	*-0.62169	0.27599	0.00244	0.05228
We need to adopt a far more tolerant attitude toward the mentally ill in our society. (13)	* 0.46297	0.07806	-0.14051	0.16396
Mental illness is an illness like any other (6)	* 0.54149	0.24769	-0.08048	0.34219
Mental patients should be encouraged to assume responsibilities. (27)	* 0.6803	-0.08195	0.12689	0.21335
No one has the right to exclude the mentally ill from their neighborhood. (28)	* 0.50217	-0.09459	0.10157	0.16749
Resident should accept the location of mental health facilities in their neighborhood to serve. (31)	* 0.56517	-0.31294	0.01263	0.04238
The best therapy for many mental patients is to be part of normal community. (32)	* 0.69204	-0.11281	-0.07446	0.0461
As far as possible, mental health services should be provided through community based facilities. (33)	* 0.71618	-0.03137	0.00548	0.26687
Locating mental health services in residential neighborhoods does not endanger local residents (34)	* 0.51979	0.18184	-0.03417	0.22939
Residents have nothing to fear from people coming into their neighborhood to obtain mental health services (35)	* 0.43564	0.17	-0.22848	0.23267

Note: - Inverse scale / negative scores, * High loading ! . 40 ** item found across 2 factors ( ) item no.

table continues

Factor 2: Social Control / Social Restrictiveness

Statement	Factor 1	Factor 2	Factor 3	Factor 4
Mental patients need the same kind of control and discipline as a young child. (5)	-0.10499	* 0.42534	0.09909	-0.18662
Anyone with a history of mental problems should be excluded from taking public office.(25)	-0.09428	** 0.65027	**0.4223 4	0.25799
We have a responsibility to provide the best possible care for the mentally ill. (15)	0.31264	** 0.40339	-0.17099	**80.4919 3
Local residents have good reason to resist the location of mental health services in their neighborhood. (37)	-0.1445	* 0.7264	-0.14219	0.08549
Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great. (38)	0.07777	* 0.87902	-0.00608	-0.01941
It is frightening to think of people with mental problems living in residential neighborhoods. (39)	-0.09832	* 0.87169	-0.16804	-0.09933
Locating mental health facilities in a residential area downgrades the neighborhood. (40)	-0.30323	* 0.49683	-0.23785	0.2147

Note:- inverse scale / negative scores, * High loading ! . 40 ** item found across 2 factors ...( ) item no.

Factor 3: Benevolence

Statement	Factor 1	Factor 2	Factor 3	Factor 4
The mentally ill have long been the subject of ridicule (11)	0.29867	0.18815	**- 0.46645	**0.4371 4
As soon as a person shows signs of mental disturbance, he should be hospitalized (4)	-0.0394	0.12392	*0.42836	**- 0.61834
The mentally ill don't deserve our sympathy (16)	0.31288	-0.04838	**0.5889	**-0.5088
Increased spending on mental health services is a waste of tax payers money (18)	-0.16743	0.13267	*0.45268	0.06253
There are sufficient existing services for the mentally ill (19)	-0.15683	0.08521	*- 0.51419	0.0201
It is best to avoid someone who has mental problems (20)	-0.3782	-0.07598	*0.55735	-0.14955
The mentally ill should not be given any responsibility (21)	-0.24234	0.04067	*0.7204	-0.10434
Anyone with a history of mental problems should be excluded from taking public office (25)	-0.09428	**0.6502 7	**0.4223 4	0.25799

- inverse scale / negative scores, * High loading ! . 40 ** item found across 2 factors ( ) item no.

table continues

Factor 4 Benevolence, Social Control and Authoritarianism

Statement	Factor 1	Factor 2	Factor 3	Factor 4
Virtually anyone can become mentally ill. (10)	0.38686	0.21815	-0.20185	* 0.45383
The mentally ill have long been the subject of ridicule. (11)	0.29867	0.18815	**0.46645	**0.43714
We have a responsibility to provide the best possible care for the mentally ill. (15)	0.31264	**0.40339	-0.17099	**0.49193
The mentally ill are far less of a danger than most people suppose. (29)	0.17891	-0.01832	0.33872	**0.73196
The mentally ill don't deserve our sympathy. (16)	0.31288	-0.04838	**0.5889	**-0.5088
As soon as a person shows signs of mental disturbance, he should be hospitalized. (4)	-0.0394	0.12392	*0.42836	**-0.61834

- inverse scale / negative scores, * High loading ! . 40 ** item found across 2 factors ( ) item no.

Table 4.27 CAMI Item Analysis

	Yes		Not sure		No	
	N	%	N	%	N	%
1. One of the main causes of mental illness is lack of self-discipline and will power.	8	9.2	45	51.7	34	39.1
2. The best way to handle the mentally ill is to keep them behind locked doors.	4	4.6	15	17.2	68	78.2
3. There is something about the mentally ill that makes it easy to tell them from normal people.	29	33.3	45	51.7	13	14.9
4. As soon as a person shows signs of mental disturbance, he should be hospitalized.	36	41.4	32	36.8	19	21.8
5. Mental patients need the same kind of control and discipline as a young child.	21	24.1	46	52.9	20	23.0
6. Mentally illness is an illness like any other.	56	64.4	26	29.9	5	5.7
7. The mentally ill should not be treated as outcasts of society.	60	69.0	12	13.8	15	17.2
8. Less emphasis should be placed on protecting the public from the mentally ill.	44	50.6	39	44.8	4	4.6
9. Mental hospital are an outdated means of treating the mentally ill	22	25.3	37	42.5	28	32.2
10. Virtually anyone can become mentally ill	65	74.7	20	23.0	2	2.3
11. The mentally ill have long been the subject of ridicule	45	51.7	42	48.3	0	0.0
12. More tax money should be spent on the treatment of the mentally ill	23	26.4	60	69.0	4	4.6
13. We need to adopt a far more tolerant attitude toward the mentally ill in our society	74	85.1	12	13.8	1	1.1
14. Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	34	39.1	38	43.7	15	17.2
15 We have a responsibility to provide the best possible care for the mentally ill	74	85.1	12	13.8	1	1.1
16. The mentally ill don't deserve our sympathy	34	39.1	25	28.7	28	32.2
17. The mentally ill are a burden to society	13	14.9	39	44.8	35	40.2
18. Increased spending on mental health services is a waste of tax payers money	4	4.6	39	44.8	44	50.6
19. There are sufficient existing services for the mentally ill	12	13.8	60	69.0	15	17.2
20. It is best to avoid someone who has mental problems	1	1.1	34	39.1	52	59.8

table continues

Table 4.27 CAMI Item Analysis

	Yes		Not sure		No	
	N	%	N	%	N	%
21. The mentally ill should not be given any responsibility	3	3.4	49	56.3	35	40.2
22. The mentally ill should be isolated form the rest of the community	1	1.1	16	18.4	70	80.5
23. A women would be foolish to marry a man who suffered from mental illness, even though he seems fully recovered	10	11.5	70	80.5	7	8.0
24. I would not want to live next door to someone who has been mentally ill	5	5.7	54	62.1	28	32.2
25. Anyone with a history of mental problems should be excluded from taking public office	10	11.5	45	51.7	32	36.8
26. The mentally ill sh2ould not be denied their individual rights	53	60.9	10	11.5	24	27.6
27. Mental patients should be encouraged to assume responsibilities	80	92.0	7	8.0	0	0.0
28. No one has the right to exclude the mentally ill from their neighborhood	75	86.2	7	8.0	5	5.7
29. The mentally ill are far less of a danger than most people suppose	57	65.5	28	32.2	2	2.3
30. Most women who were once patients in a mental hospital can be trusted as baby sitters	11	12.6	69	79.3	7	8.0
31. Resident should accept the location of mental health facilities in their neighborhood to serve	71	81.6	13	14.9	3	3.4
32. The best therapy for many mental patients is to be part of normal community	79	90.8	8	9.2	0	0.0
33. As far as possible, mental health services should be provided through community based facilities	76	87.4	11	12.6	0	0.0
34. Locating mental health services in residential neighborhoods does not endanger local residents	56	64.4	26	29.9	5	5.7
35. Residents have nothing to fear from people coming into their neighborhood to obtain mental health services	56	64.4	27	31.0	4	4.6
36. Mental health facilities should be kept out of the residential neighborhoods	5	5.7	24	27.6	58	66.7
37. Local residents have good reason to resist the location of mental health services in their neighborhood	18	20.7	40	46.0	29	33.3

table continues

Table 4.27 CAMI Item Analysis

	Yes		Not sure		No	
	N	%	N	%	N	%
38 Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	28	32.2	36	41.4	23	26.4
39. It is frightening to think of people with mental problems living in residential neighborhoods	18	20.7	42	48.3	27	31.0
40. Locating mental health facilities in a residential area downgrades the neighborhood	6	6.9	26	29.9	55	63. 2

The next section will present the results of analysis of the attitudes together with the discussion as mentioned in the introduction of this chapter.

4.5.2 Nurses Attitudes to the Mentally Ill

When the CAMI was analysed I found that the majority of nurses displayed positive attitudes to people with mental illnesses with negative attitudes displayed subtly. There was also a tendency to remain neutral / choose the "not sure" option on important issues that affect the mentally ill. This suggests that the majority of nurses may have ambivalent feelings to the mentally ill. I will start by looking at the positive attitudes and then discuss the ambivalent attitudes and finally look at the negative attitudes displayed by the nurses in this study. The next section will only present the highlights of the analysis the rest of the results are presented in Table 4. 27.

The existence of all three attitudes namely negative, positive and ambivalent in one person is common. It has been suggested that the scale and the factors derived from the CAMI are imprecise and encompass broad concepts. They, however, have a good degree of stability over time and place (Wolff et al., 1993). It is important to understand that these factors are not mutually exclusive and people may hold a conflicting range of attitudes, including socially controlling, fearful and benevolent at the same time. This kind of paradox has also been reported in other studies (Wolff et al., 1996) and it is articulated even better by Maugham cited in Wolff et al. (1996, p. 188) "What has chiefly struck me in human beings is their lack of consistency. It

has amazed me that the most incongruous traits should exist in the same person and for all that yield a plausible harmony".

I found that the nurses displayed positive attitudes to the mentally ill on some items. Seventy - four respondents agreed with the statement "We have the responsibility to provide the best possible care for the mentally ill". On the question of isolating the mentally ill, 70 nurses did not "agree" with the statement, "The mentally ill should be isolated from the rest of the community". Nurses did not support traditional methods of treating and dealing with the mentally ill. This is in line with the current moves to do away with asylum institutions and to integrate the mentally ill in the community institutions. Seventy-five respondents "agreed" that "No one has the right to exclude the mentally ill from their neighbourhood". The majority of participants favoured locating mental health facilities within the community. Seventy-one nurses "agreed" with the statement "Residents should accept the location of mental health facilities in their neighbourhood".

The results showed support for community mental health with 68 respondents being against locking away of people with mental disorders. However, 36 nurses still supported hospitalisation of a "person as soon as they show signs of mental disturbance". Such methods of dealing with the mentally ill are outdated and suggest a need to work in this area. Generally the nurses showed positive attitudes but there were still subtle negative attitudes and a tendency to contradict themselves, and remain neutral on important issues affecting the mentally ill. Therefore, positive results should be interpreted with caution as they might suggest socially desirable answers instead of a true reflection on the beliefs of the respondents.

The analysis also showed that the respondents tended to select the "not sure" option choosing to be neutral instead of giving positive or negative answers. On analysing the themes of the items that had mostly neutral answers, it was found that the items mostly contained statements that measured strong attitudes, beliefs or feelings about issues affecting the mentally ill. To illustrate the ambivalent attitudes, 45 respondents were "not sure" if mental illness is caused by lack of self-discipline and willpower. On this question the majority of nurses were "not sure" compared to 34 nurses that "disagreed" and 8 nurses who "agreed" with this statement. The answer given by nurses may also illustrate the misconception that mental illness can be controlled by the person, explaining in part why mentally ill people are often expected to pull themselves together

(see Table 4.22 on Management Methods). Another item that showed ambivalent and misinformed assumptions was item 2. Here 45 nurses where "not sure" and 29 "agreed" with the statement that says "there is something about the mentally ill that makes it easy to tell them apart from normal people". This item illustrates the assumption that mental illness can be identified by observing the person. While this might be true for some disorders like schizophrenia it is not true for others. The assumption that a mentally ill person can be identified by just looking at him/ her displays prejudice to the mentally ill. Certainly, conditions that have become common in primary care such mood disorders and anxiety disorders (major depressive episodes, PTSD and panic disorder) cannot be identified by just looking at the patient. Such beliefs may explain in part why conditions such as anxiety disorders are often not detected in these settings. Arguably, nurses seem to still have a picture of a patient with a psychotic disorder when referring to patients with a mental illness.

On matters that affected them personally such as relationships and increased spending of taxpayers' money, nurses tended not to want to make a clear stand, opting to be neutral. Sixty nurses were "not sure" if more "tax money" should be spent on treatment of the mentally ill. This question is a direct contradiction to the following question that is item 12 on the CAMI (Table 5.2), "increased spending on mental health services is a waste of tax payers money". On this question 44 nurses disagreed, while 39 respondents were not sure. This illustrates again the contradictions that exist within the same group of respondents. The contradiction may also suggest that nurses surveyed may have given socially desirable answers rather than what they really believe. The CAMI, therefore, has the propensity to elicit cases of social desirable responses.

When it came to close relationships with the mentally ill, there was also a tendency to be ambivalent, and two examples will be used to illustrate. On the question of marriage, i.e. " A women would be foolish to marry a man who suffered from mental illness, even though he seems fully recovered" the majority of nurses (n=70) chose the "not sure" option and 10 nurses "agreed" with this statements and 7 nurses "disagreed". Another question is that of baby-sitting, i.e. "Most women who were once patients in a mental hospital can be trusted as baby sitters", 69 nurses were not sure. This question might suggest that while the respondents might not have a problem with the mentally ill in the community they still have a problem with relationships that have a closer proximity. The "NIMBY" (not in my backyard) phenomenon is well reported in

attitude studies and the result of the nurses' study suggests the existence of the phenomenon in this sample.

The results also suggest that the stigma associated with mental illness may remain with the individuals even after they recover as suggested by the ambivalence displayed by the nurses. Thus the stigma associated with mental illness in this case continues to live on even when people have recovered from the psychiatric disorder, it is still felt that they cannot be trusted as partners or babysitters. The issue of stigma is an important one to address as professionals are often asked by employers and other interested parties to provide a report on their patients. Therefore attitudes like those displayed by the nurses may not benefit the patient but continue to perpetuate discrimination against the mentally ill and those who have recovered from mental illness. Such beliefs also support and uphold false beliefs that people who have ever suffered from mental illness are unstable, cannot be trusted and cannot take responsibility. These are dangerous assumptions as patients often fully recover from mental illness and go on to live normal and productive lives.

The scale that measured the need of respondents to exert control over the mentally ill also elicited ambivalent responses from the respondents (factor 3). These items focused on the tendency to exclude the mentally ill and treat them like children. For an example, in response to "Anyone with a history of mental problems should be excluded from taking public office" 45 nurses were "not sure" and 32 nurses "disagreed". To the statement "Mental patients need the same kind of control and disciple as a young child", majority (n=46) was "not sure" and n= 21 "agreed" and n= 20 "disagreed". The result may also be seen in the positive light in that only a minority (n=21) agreed with this statement. Nonetheless, there is an indication for intervention with the nurses who agreed and those who were not sure. It is however arguable if subtle negative attitudes can be inferred from the ambivalent answers given by the majority of nurses.

The majority of nurses displayed positive attitudes to mentally ill, however, there was a minority who displayed negative attitudes. There were nurses who outwardly displayed negative attitudes to the mentally ill. These nurses were in a minority making less than 30 % of the sample. Nonetheless, the negative attitudes need to be addressed. For example, 21 nurses believed that the mentally ill needed the same control as children. Thirteen nurses believed that the mentally ill are a burden to society. Four nurses believed that money spent on mental illness is a waste of

taxpayer's money. In another illustration of negative attitudes twenty-four nurses believed that the mentally ill should be denied their individual rights and ten nurses believed that a woman should not marry a man who had a mental disorder even when the man has recovered. Attitudes are often acquired through different processes such as socialisation and experience, thus it is important to design programmes to deal with negative attitudes and ambivalent attitudes as both are often maintained by fear and misconceptions.

The next section of the factor analysis presents the correlation of the four factors with the demographic variables.

4. 5. 3 Correlation of Demographic Variables with the Factors

The test of relationships of attitudes to socio-demographic factors was performed using multiple regression for continuous variables such as age and years in practice. One-way ANOVA was performed for variables with more than one category.

The analysis of relationship between the demographic variables and the 4 factors showed that not all factors could be associated with the dependent variables. Multiple regression and ANOVA analysis were performed for all the factors. A multiple regression analysis did no show any significant relationship between the 4 factors and the demographic variables. An ANOVA analysis, however, was able to show some significant relationships between some demographic variables and the factors. Factor 1 showed no significant association to gender ($p = 0.11$). This factor labelled inclusion and acceptance was associated with being male. Factor 2 showed an association with language ($p = 0.02$) and the location of the clinic ($p = 0.00$). On this factor labelled social control or social restrictiveness Afrikaans speakers group got a significantly higher loading. This factor was also associated with clinics located in the suburbs, having a nursing degree and lastly to having specialised in psychiatry. Factor 3 showed an association between this factor and several demographic variables namely: gender ($p = 0.04$), and location of the clinic ($p = 0.00$), language ($p = 0.00$), area of specialisation ($p = 0.00$) and postgraduate course ($p = 0.00$), and the type of postgraduate course ($p = 0.08$). This factor labelled benevolence showed an association with being an enrolled nurse, being female, being Xhosa speaking, clinic located in the township, having completed a post graduate course and specialising in primary

specialising in primary health nursing science. This factor was also associated with the type of course completed, i.e. community nursing.

CHAPTER 5

5.1 SUMMARY OF FINDINGS

The main findings of this study were:

1. The majority of the respondents did not label the disorders presented on the vignettes.
2. Anxiety disorder vignettes were generally seen as stress-related and mostly caused by psychosocial problems with self-help methods such as relaxation techniques, meditation, talking it over, and exercise being chosen as the recommended treatment.
3. Disorders with psychotic features were mostly seen as medical disorders caused by biological factors and other psychosocial problems, and the recommended methods were medication and consulting a professional.
5. When the different treatment methods were compared, psychotherapy was favoured more than psychotropic drugs, which were associated with negative effects like dependency and causing irreversible brain damage.
6. Nurses were somewhat accepting of mentally ill people (for example, wanting them in the community), but showed subtle negative attitudes towards people with mental illnesses (for example, not marrying a man who had a mental disorder or not letting a woman who had a mental disorder baby-sit). These results will be discussed in more detail within the context of the relevant literature.

The next section will discuss the results by highlighting important themes and trends that emerged during the analysis of the data. I will also discuss the results in relation to the research questions posed.

5.2 RECOGNITION OF MENTAL DISORDERS

One of the research questions the study attempted to address was, can nurses recognise mental disorders when presented to them? The study found that 81 (94%) nurses did not label the disorder presented on the vignette and only 6 (6%) nurses labelled the disorders presented. Of the six that answered the diagnosis question, five correctly labelled the disorder and one was incorrect. The figures on this study are low compared to those found in an Australian survey with the general public (Jorm, Korten, Jacomb et al., 1997). They found that 39% of the respondents could label depression and 27% could label schizophrenia. The failure to use correct psychiatric labels is of concern in this group, as one would expect health professionals to be

more knowledgeable than the lay public.

Several speculative explanations can be offered for why the nurses did not answer this question. Firstly, they might not have answered this question because of low rates of mental health literacy in this population. Certainly, this is consistent with feedback received from the contact people, on collection of the completed questionnaires at the clinics. The majority of the nurses had complained to the different contact persons at the clinics that the questions on the questionnaire were difficult. This is despite the fact that the questionnaire was adapted from studies done in Australia, Germany and later in South Africa with the lay public (Angermeyer & Matschinger, 1993; Jorm, Korten, Jacomb et al., 1997; Mbanga et al., 2002; Wessels et al., in press) and that it had been piloted with ten nurses.

Secondly, nurses may know the diagnosis, but lack the confidence to commit themselves to a specific diagnosis. This could be a reflection of the role of nurses in the health system where they are trained to play a supportive role to doctors (Bierman & Muller, 1994; May, 1995; Petersen, 1998; Schneider, Malumane, Ngwenya, & Blackett-Sliep, 1989). In this relationship, the doctor is the one that knows all, he/she gives the diagnosis and prescription, while the nurse's role is to carry out the instructions (Bierman & Muller, 1994; Petersen, 1998). This type of role does not equip nurses with the necessary skills to work autonomously, which is necessary in primary health care settings (Mogoduso & Butchart, 1992). The ability to diagnose is even more crucial in the rural areas of South Africa where there are few doctors and the majority of people have no access to them (Thipanyana & Mavundla, 1998a, 1998b). Reorientation programmes envisaged for the nurses need to address this in order to facilitate comprehensive health care for patients. The ability to diagnose mental health disorders will ensure early treatment for patients and facilitate referrals to appropriate professionals where available.

5.3 PSYCHOTIC DISORDERS VS ANXIETY DISORDERS

The second research question that the study attempted to answer was related to the recognition of the different disorders. The question posed was: are psychotic disorders or disorders with psychotic features easy to recognise compared to anxiety disorders? To answer this question the diagnostic questions on the knowledge section of the questionnaire were analysed for all the four case studies presented to participants. The results of the analysis showed that on the case studies with psychotic features the majority of nurses identified the behaviour described as abnormal

(Tables 4.2; 4.8). However the behaviours described in the anxiety disorder case studies were described as normal (Tables 4.14; 4.20). The high recognition of psychotic disorders has also been reported in other primary health care studies. Studies that reviewed primary health care patient files have reported a high number of patients diagnosed with schizophrenia or other disorders with psychotic features compared with anxiety disorders at primary health care (Lee et al., 1999a; Lee et al., 1995). The failure to recognise anxiety disorders at primary health care is of concern as anxiety disorders are generally common at primary health care and lead to high utilisation of health care resources and morbidity in patients (Mehl-Medrona, 1998; Lechnyr, 1993).

5.4 KNOWLEDGE AND BELIEFS ABOUT CAUSES

The ability to recognise mental disorders alone is not sufficient if recognition does not lead to appropriate treatment. Recognition and help-seeking is inevitably informed by knowledge about the cause of the disorder and how to treat the disorder. On analysing the causes ascribed to the different disorders, it was shown that for some disorders the respondents had insight into the cause, while the causes of other disorders were poorly understood.

The analysis of the causes of schizophrenia (Table 4.3) showed that the nurses poorly understood this disorder. Current research knowledge attributes the development of schizophrenia to a number of variables such as heredity, early developmental factors, psychosocial factors and environmental factors (Eaton & Harrison, 2000; Eaton, Morten, & Frydenberg, 2000; Thanker & Carpenter, 2001; Malaspina, 2001). Therefore the results on the schizophrenia section might reflect the level of knowledge and the conflicting evidence available on the causes of this disorder (Leverich et al., 2001; Jurewicz, Owen, O'Donovan, & Owen, 2001; Meltzer, 2000). The analysis of the bipolar disorder section (Table 4.9) showed that this disorder is understood to have been caused by psychosocial problems such as difficult family relationships (n=19) and work difficulties (n=20). Biological factors such as heredity (n=8, "yes") were not endorsed by the majority. There were no differences between those who believed bipolar disorder to be caused by brain disease and those who did not (n=12 "yes" & n=11 "no"). While there is debate about the causes of bipolar disorder, there is much evidence suggesting that bipolar disorder is caused by certain biological factors such as genes meaning that it could be inherited (Blackwood, Visscher & Muir, 2001; Bezchilibnyk, Wang, McQueen, & Young, 2001; Preising et al., 2000; Vincent et al., 1999). There are also suggestions that

bipolar disorder could be a result of chemical imbalances in certain areas of the brain. The high endorsement of psychological distress as the cause is therefore not necessarily accurate.

The increased awareness of the role of stress on health is of interest worldwide and was supported in this study. Stressors such as work difficulties and problematic relationships were rated as high contributors to the conditions presented, especially for panic disorder, bipolar disorder, and PTSD case studies. This kind of reasoning might seem in line with the understanding of the role of recent life events in the development of psychiatric disorders (Matschinger & Angermeyer, 1996; Mckeon & Carrick, 1991). However, this reasoning may also reflect the poor level of knowledge about the causes of mental disorders. While stressors are important and do cause psychological distress, they do not cause psychiatric disorders, but are considered to be precipitators (Kaliski, 1998; Swartz, 1998). It is important for nurses to understand the difference between psychological distress and psychiatric disorders. This is important in relation to management and treatment. While stress can be managed through self-help methods such as relaxation, psychiatric disorders on the other hand are serious medical disorders that require professional help.

The analysis of the causes endorsed by the nurses for the different disorders (Tables 4.3; 4.9; 4.15; 4.21) found that nurses tended to emphasise psychosocial causes more than biological causes for certain disorders (i.e. panic disorder, PTSD and bipolar disorder). This finding is supported by other studies, that found that the public tends to see biological factors as less important than environmental ones (Jorm, Korten, Jacomb et al., 1997; Mckeon & Carrick, 1991). There have been advances in the area of biological determinants of disorders and it is important for nurses to be informed about such advances. Research on genetic implications and biological structures in the brain is showing important results. Primary care clinicians need to keep abreast of the current knowledge and practices. It is also believed that when mental disorders are understood to be medical conditions with biological causes rather than a sign of weakness, there is a likelihood that less stigmatisation will be attached to having such a disorder (Haghighat, 2001; Jorm, 2000; Swan, 1999). This is true for most medical conditions that are understood to be biological disorders while medical conditions that are not understood, such as epilepsy, tend to be attached with the same stigma as seen in psychiatric conditions.

When the causes of the different disorders were compared, biological factors (heredity) were more endorsed for schizophrenia and psychosocial factors were endorsed more for anxiety disorders. Angermeyer and Matschinger (1996a, 1996b) found similar findings in Germany. Studies have found that families of people with schizophrenia perceive the disorder as having been inherited (Holzinger, Müller, Prieb, & Angermeyer, 2001a, 2001b). Similar findings were also found in a South African study of family members with schizophrenia (Mbanga et al., 2002).

5.5 TREATMENT METHODS

The choice of a treatment method and a management method is influenced by knowledge and beliefs about the cause of the disorder. In this study it was found that the classification of the behaviour (disorder described on the vignette) as a medical or emotional problem seemed to influence the type of management and treatment endorsed.

Schizophrenia was classified as a medical disorder (Table 4.2) and the highly endorsed method of management was referring the patients to a GP (n=15), hospital (n=15), and psychiatrist or psychologist (n=14). Under management of the disorder, well-known and widely used treatment methods such as psychotherapy (n=7) and psychotropic drugs (n = 6) were not rated high. When compared with self-help methods such as relaxation (n = 6) there was only a slight difference in their rating. Nonetheless, the latter methods were not as highly rated as one would expect, considering their effectiveness in the management of schizophrenia (Dickerson, 2000; Kane, 2000; Lauriello, Bustillo, & Keith, 1999; Sauriol et al., 2001).

The analysis of the treatment methods section, i.e., psychotropic drugs, psychotherapy and traditional or alternative healing showed that medication was highly endorsed for the treatment of schizophrenia (Table 4. 5). This recommended method for schizophrenia is in line with the convention whereby psychotic patients are treated with medication and when the patient is stabilized, psychotherapy can commence (Stein, Emsley, & Seedat, 1998).

The classification of panic disorders and PTSD as normal responses influenced the management methods endorsed by the nurses. The management methods recommended for panic disorder and PTSD were mostly self-help methods, such as relaxation (Table 4.16 and Table 4.20). The recommended methods are in line with the myth found among the public that symptoms of

anxiety disorders are not medical conditions but are reactions to stress or stressful life events and can be self- treated. While such beliefs can be expected among the lay public, it is of concern that professionals also recommend methods that have not shown any effectiveness in the management of medical disorders such as PTSD and panic disorder. For the treatment of panic disorder (n=19, Table 4.18), and PTSD (n=13, Table 4. 24), psychotherapy was highly rated compared to psychotropic drugs.

Bipolar mood disorder was the most poorly understood disorder among all the disorders. It was classified by the majority of respondents as an emotional problem (n=19, Table 4.8) and a medical disorder (n=20, Table 4.8). The recommended management methods of the disorder included relaxation techniques (n=19), and psychotropic drugs (n=17). However, referral to a GP, hospital, and psychologist or psychiatrist was endorsed more often than the other methods (Table 4.10). Treatment methods for this condition were also poorly understood. Psychotropic drugs were endorsed by 13 respondents compared to 14 who did not. There was a slight difference in the group that endorsed psychotherapy as the treatment of choice (n=14 "yes", n=9 "no"). These results suggest a need to revise and improve the psychiatry component of the nurses training. While bipolar disorder is not well known among the lay public it is common in general practice. Like with schizophrenia, there has been an increased interest on bipolar disorder and current research is focusing on etiology and treatment (Blackwood, Visscher & Muir, 2001). Some of the methods being researched include cognitive behaviour therapy and psychotropic drugs (Frank, Swartz, & Kupfer, 2000).

5.6 TRADITIONAL BELIEFS VS WESTERN BELIEFS

Understanding the nurses' beliefs is important as it may influence the help-seeking patterns recommended to patients and even outcomes. The majority of the nurses that participated in the study did not endorse supernatural factors as causes of the different disorders. Supernatural causes included the influence of signs of zodiac; will of God, and witchcraft. Even in the schizophrenia case study, supernatural causes received a low endorsement from the respondents. In some communities, schizophrenia or "madness" as it is referred in lay terms has been commonly attributed to supernatural causes (Razali, Khan, & Hashanah, 1996). Mental disorders, and illness in general, have long been seen by some communities as being caused by misfortune, not being in harmony with your ancestors, bewitchment, and evil spirit possession (Høyersten, 1996; Mbanga et al., 2002; Mkhize, 1998b; Ngubane, 1977; Swartz, 1998).

Therefore the results of this section suggest that beliefs among the nurses about the cause of schizophrenia are in line with current western beliefs.

The influence of western beliefs seems to have transcended to all the different cultural groups represented in the study. It is therefore interesting to note that even groups that are associated with traditional beliefs rejected the traditional beliefs in favour of the biomedical explanation for the disorder. The majority (n=51) of the participants were Xhosa-speaking and studies done with Xhosa families have shown that supernatural causes are often attributed to the development of schizophrenia (Mbanga et al., 2002). In Mbanga et al.'s study, families with a member who had schizophrenia, attributed the development of schizophrenia to possession by evil spirits and other psychosocial factors. This difference in belief systems may be attributed to education and the influence of western culture on the nurses compared to the less educated and rural group sampled in the family study reported above.

The differences between lay knowledge and professional knowledge is to be expected. The change in the belief systems of the nurses might be attributable to different factors such as rejection of traditional beliefs (Lamensdorf, Offori-Atta, & Linden, 1995). This is reflected by the minority of nurses who endorsed traditional or alternative methods of healing (Tables 4.7, 4.13, 4.19, and 4.25) suggesting that there is a small section of the nursing population that may still hold traditional beliefs.

It is also possible that the rejection of traditional beliefs as explanation models and the view that traditional or alternate methods are not effective may not only reflect desired response effect, but may be a rejection of traditional methods on the basis that they are not scientific. These methods have been described as "primitive and pseudo-scientific" (Freeman & Motsei, 1990, p.7). Such beliefs are reflected in opinions of prominent members of the medical profession such as Dr. Ntatho Motlana, who is quoted as having said: "traditional medicine is based on superstitious, meaningless pseudo-psychological mumbo-jumbo, which is harmful" (cited in Freeman & Motsei, 1990, p. 7). The negative attitudes towards traditional medicine were also found in the present study. Only a small number of respondents supported this method. Nurses were more likely to believe that traditional or alternative healing methods were harmful and likely to make one more ill.

Negative attitudes to traditional healing were also observed in other studies. One particular study highlights the tendency of nurses to see biomedicine as superior to other treatment methods and how methods such as traditional healing are discouraged (Petersen, 2000). The outright rejection of traditional methods does not only reject the method but negates the beliefs of those that make use of these methods. This may pose a problem in primary health care settings in the sense that patients might find it difficult to relate the symptoms as understood in the cultural context and how they are dealing with these symptoms using traditional healing for example. This in turn increases the chances of non-recognition of mental disorder and psychological distress because there is no open and honest communication between patient and clinician. The need to reject traditional methods of healing has also been observed in patient studies conducted in primary care. A large percentage (87%) of patients in one such study reported a preference for using biomedicine, while a small percentage of respondents (10%) reported using both biomedicine and traditional healing, and only 3% reported that they would use a traditional healer to discuss trauma exposure problems (Carey & Stein, 2001). The reality is that most of these patients use Western and traditional forms of healing simultaneously (Abiodun, 1995; Freeman & Motsei 1990, Maclachlan, Nyirenda, & Nyando, 1995).

The low reported rates of using traditional healing found by Carey and Stein (2001) is similar to the rates reported by the nurses in the present study. While this might be a true reflection of the nurses' practices, it is important to note that both the present study and Carey and Stein's study were conducted in primary health care clinics and respondents might have felt under pressure to give desired responses.

The above findings suggest a need to review nurses' attitudes to traditional healing and may also even suggest a need to expose nurses to traditional healers and alternative medicine healers (Korber, 1990). This should be done in an effort to create a balanced view of these practitioners and hopefully to create a more accepting environment for disclosure by patients if they are using both systems. The inherent danger in the use of traditional and alternative healing methods is the possibility of drug interaction that could be fatal (Jovel, Cabanillas, & Towers, 1996; Mkize, 2001). Evidence of such interaction has been well documented in the use of St. John's Wort combined with antidepressants (Gaster & Holroyd, 2000; Hunt, Arar, & Akana, 2000). Controlled trials suggest that St. John's Wort and antidepressants both have the same effects on the nervous system. Therefore clinicians are encouraged to inquire about the use of alternate

treatments when prescribing. Positive, accepting attitudes are desired to encourage disclosure by patients. It has been proposed that comprehensive health care demands culturally congruent care which considers and respects patients' beliefs and views about their own illness (Petersen, 1999). There is a need to address negative attitudes towards other forms of treatment in primary care and not to impose beliefs about biomedicine's superiority on patients.

Beliefs have been shown to play a role in response to treatment. For example, a controlled trial showed that positive outcome can be associated to beliefs about the causes of mental illness and the use of a treatment method that is congruent to these beliefs. Beliefs in relationship problems as causes for example were associated with better outcome when the patients were treated with behavioural therapy, while beliefs in existential causes were associated with better outcomes when treated with cognitive therapy (Addis & Jacobson, 1996). It is important to investigate the beliefs of clinicians further as they might also influence the methods recommended and used in the treatment of mental disorders.

5.7 KNOWLEDGE AND PRESENTATION

In the present study, the vignette on schizophrenia was identified as abnormal and classified as a medical disorder. In contrast, anxiety disorders were more likely to be seen as stress-related or emotional problems. This suggests that psychotic disorders are easily recognised. There is support for this in the literature, which has shown that the presentation of the disorder influences the level of recognition (Lee et al., 1995). This hypothesis is based on observations that the number of psychotic disorders diagnosed at primary health care level is often higher than anxiety disorders (Freeman et al., 1999; Lee et al., 1995). This is largely a function of the different presentation of these disorders. Psychotic disorders tend to manifest in disruptive, sometimes bizarre, behaviour making it difficult to hide or remain unnoticed. In most cases, the patients are brought by the police as a result of some disruptive behaviour or are forced by the family to seek help (Swartz, 1998). The analysis of the schizophrenia and PTSD vignette showed general insight to the disorder, in contrast to lack of insight in panic and bipolar disorder.

The above finding suggests a need to review the training of nurses in psychiatry. The results point to a poor understanding of anxiety disorders, which is perhaps a, i.e. in hospital psychiatry wards. Community learning sites where anxiety disorders present quite frequently should form a

larger part of the psychiatry component to ensure exposure to these disorders and increase nurses' familiarity with the presentation of anxiety disorders.

5.8 KNOWLEDGE AND BELIEFS ABOUT SELF-HELP METHODS

Self-help methods have gained popularity worldwide and they are mostly advocated by support groups and other sectors such as alternative healers. The rise of the self-help movement has led to increasing numbers of believers advocating natural remedies and other self-help methods. Kleinman (1980) terms this movement the popular sector. This sector is said to consist of people who are not trained in mental health such as family, neighbours, and support groups. The role of the popular sector is to provide support and advise on different issues including home treatments (Stein, Wessels, Zungu-Dirwayi, Berk, & Wilson, 1999; Swartz, 1998). However, this sector seems to have also gained support from professionals. In the present study nurses tended to recommend relaxation techniques, exercise, and talking it over as treatment methods of certain mental disorders. This was seen more in the panic disorder and PTSD vignettes (Tables 4.16, 4.22), and to a lesser extent for bipolar disorder (Table 4.10). The high endorsement of self-help methods has also been commonly found in the lay public studies (Jorm, Korten, Jacomb, Rodgers et al., 1997; Parker & Brown, 1982).

The beliefs and advice of the popular sector were found to be common among the nurses, who advocated methods such as talking it over, relaxation techniques, meditation, and yoga for the treatment of conditions such as PTSD. A study among members of the Anxiety and Depression Support Group found high rates of satisfaction among the members of the support group. Being a member of the group was found to have been very helpful for the members (Stein et al., 1999). Support groups, like professionals, differ in their approach. Some encourage the use of medications, while others might advise members to use other methods that have been found useful by members. Often the advice is based on experience and may not necessarily be based on any scientific principle or evidence.

The problem with self-help methods is that there is not much evidence on the effectiveness of all the methods. For milder states of depression there is evidence that family support is effective (Goldberg & Huxley, 1992). Other methods that have been shown to be effective include physical exercise (Martinsen, 1994), self-help books based on cognitive-behavioural therapy (Cuijpers, 1997), and herbal remedies, such as St John's Wort (Gaster & Holroyde, 2000). In

other fields of medicine there is evidence for the effectiveness of intercessory prayer (Harris et al., 1999; Hunt et al., 2000). Therefore self-help methods should be used to complement scientifically proven methods and should not supplement them when no evidence of effectiveness of the method is available.

5.9 KNOWLEDGE AND BELIEFS ABOUT PROFESSIONAL HELP

When the management sections (Tables 4.4, 4.10, 4.16, and 4.22) of the different disorders were analysed, it was found that psychologists and psychiatrists were rated high for schizophrenia, bipolar disorder and PTSD, while GP's were rated higher for panic disorder. Traditional healers were the least recommended group for all the disorders presented. The results for panic disorder clearly depict the problem of misdiagnosis that is often reported in literature. In the present study nurses did not recognise panic disorder as a psychiatric disorder. This explains why they would refer the case to the hospital rather than to a psychologist or psychiatrist. One of the factors that contribute to the high of cost of untreated anxiety disorders is misdiagnosis. In the case of panic it is the high cost of tests that are often prescribed in the hospitals after patients are repeatedly referred from primary health care settings with chest pains or suspected heart attacks (Katon, Von Korff, & Lin, 1992). Nurses did not see a mental health professional or specialized psychiatric care as important in this case. This supports findings that suggest that panic disorder is often misdiagnosed as chest pain or even heart problems (Karterndahl & Realini, 1995; Katon et al., 1988; Leon, Olfson, & Portera, 1997; Roy-Byrne et al., 1999; Stein, Asmundson, Ireland, & Walker, 1994).

In similar surveys, general practitioners were rated very highly by the public in comparison to psychiatrists and psychologists (Jorm, Korten, Jacomb et al., 1997; Priest, Vize, Roberts, & Tylee, 1996; Wolff et al., 1996a, 1996b). The ratings has been shown to be dependent on the disorder, for example, in the present study GP's were rated high for panic but not for the other disorders. Similar results have been found in other studies (Jorm, Angermeyer, & Katschining, 2000; Mckeon & Carrick, 1991). The differences in the endorsement of mental health professionals between the lay public and the nurses in the present study might be attributed to more knowledge and exposure to these professionals compared to the lay public. There is also a possibility that the lay public might hold negative attitudes towards mental health professionals or have misconceptions about the roles of these professionals in dealing with mental disorders. It could also be a reflection of the relationship between patients and their GP's. Many patients rely

on their GP's as the first port of call for any health related problem that they may encounter.

5.9.1 ATITTUDES TO PSYCHOTROPIC MEDICATION AND TRADITIONAL HEALING

In the current study, traditional healers and traditional healing methods were not endorsed while studies with the general public in Ethiopia showed high rates of support for traditional sources of help such as herbalists and holy water, which were preferred over medical help. A study done in South Africa with families of patients with schizophrenia found that psychotropic drugs were favoured more than traditional healing among family members (Mbanga et al., 2002). Nurses in the present study commonly recommended psychotropic drugs for schizophrenia. Unfortunately the study by Mbanga et al. (2002) has methodological flaws in that it was conducted by a psychiatric nurse known to the respondents. This might have influenced the high recommendation of psychotropic drugs rather than traditional methods of treatment. Therefore the rejection of traditional healing medicines should be interpreted cautiously.

The analysis of the treatment for the different disorders showed negative attitudes to psychotropic drugs (Table 4.5, 4.11, 4.17, 4.23). Psychotropic drugs were only recommended for schizophrenia and were endorsed for their ability to act fast and bring about rapid results. Respondents also found the sedative effects desirable. Psychotropic drugs were generally seen as not safe due to the potential for dependency and damage to the brain. The drugs were criticized for not being able to deal with the cause but masking the problem instead. Similar findings have been found across the world (Angermeyer et al., 1993; Abiodun, 1998; Fischer, George, Zbiden, & Guimón, 1999; Hillerst et al., 1999; Jorm et al., 2000; Priest et al., 1996; Regier et al., 1988; Wessels et al., 1999).

The results can be interpreted as a lack of knowledge about psychotropic treatment or an indication of negative attitudes towards medication. Many recent advances in the treatment of PTSD and panic disorder have been made and both these conditions are now understood to be caused in part by heritable factors and stressful life events in early childhood (Gorman, Kent, Sullivan, & Coplan, 2000). While psychotherapy, such as cognitive behaviour therapy, is still the treatment of choice for some clinicians, there is evidence on the effectiveness of medication in the treatment of PTSD (Seedat, Lockhat, Kaminer, Zungu-Dirwayi, & Stein, 2001; Stein, Zungu-Dirwayi, & Seedat, 2000), and panic disorder (Gorman, Kent, Sullivan, & Coplan, 2000;

Roy-Byrne et al., 1999). There is a need for primary care clinicians to be kept up to date with research on the various areas pertaining to patients' treatment (Boitex, Battle, & Bolibar, 1996). This is in line with the philosophy of evidence-based medicine.

The negative views about psychotropic drugs are in contrast to the positive attitudes shown to psychotherapy (Table 4.6, 4.12, 4.18, 4.24). In this study, psychotherapy was the treatment of choice except for schizophrenia. This has been found across countries; counselling and psychotherapy are highly endorsed by the general public (Jorm, 2000; Jorm, Korten, Jacomb, Christensen, & Henderson, 1999; Priest et al., 1996; Wessels et al., 1999).

Negative attitudes towards medication need to be addressed as they may contribute to lack of treatment with effective medication. If not addressed, the negative attitudes might be communicated to patients, leading to problems with compliance (Warlburn, Gray, Gournay, Quraishi, & David, 2001). A study in primary care facility in the Western Cape, found high rates of psychiatric morbidity but low (1%) rates of treatment by clinicians (Carey & Stein, 2001). Among those diagnosed, a review of patients' charts revealed no data on the psychiatric disorder. Those with a prescription were treated with low doses of tricycles antidepressant medication for insomnia. The lack of treatment in these settings may be a function of two factors namely, lack of knowledge of effective methods and negative attitudes towards psychotropic medication. Negative attitudes to psychotropic drugs go hand in hand with the stigma attached to having a mental disorder. While it is acceptable to take medication for asthma, it may not be as desirable to disclose the use of antidepressants. Thus people using such drugs tend to hide this type of information because they fear being stigmatised (Regier et al., 1988).

5.11 CONCEPTUAL FRAMEWORK FOR PTSD

There was a difference in the conceptualisation of PTSD. On the question of cause, nurses ascribed stressful life events as the stressor. For the treatment, they recommended psychotherapy as the best and most reliable treatment for the condition. When the nurses were requested to indicate whether the behaviour was abnormal or not, the majority indicated that the behaviour was normal. As noted above these results can be interpreted as an indication of a lack of knowledge or it can be interpreted as reflecting the theory of PTSD. Posttraumatic stress reaction has been defined as a normal response to an abnormal event. Therefore, the answer "normal" given by the respondents is not necessarily wrong when examined from this point of

view.

The nurses were presented with a vignette depicting a rape survivor. Thus the behaviour might have been seen as normal after such a traumatic experience. This understanding is in line with the original theoretical proposition that PTSD was a normal reaction (Andreasen, 1980; Herman, 1992). However, empirical evidence has challenged this theory by showing biological alterations take place that serve to characterise the state of prolonged or persistent symptoms in response to a traumatic event (Charney, Deutch, Krystal, Southwick, & Davis, 1993; Giller, 1991; Murburg, 1994; Yehuda, 1999; Yehuda, Giller, Southwick, Lowly, & Mason, 1994). This means that the event alone cannot be the cause; there maybe other biological causes of the symptoms (Yehuda & McFarlane, 1995).

There is a need to address the belief that symptoms of PTSD are normal reactions to trauma as this might account for why PTSD is not being diagnosed at primary care health clinics. A primary health care study found PTSD rates of 20% and none of these cases had been diagnosed, although patients were frequent attenders (Carey & Stein, 2001). Another study in the same population group also found high rates of psychiatric morbidity and low levels of treatment in a sample of human rights survivors who reported to frequent their primary health clinics (Kaminer et al., 2000; Zungu-Dirwayi et al., 2000). The high rates of undiagnosed psychiatric disorders are unacceptable and there is a need to educate nurses more about PTSD and its etiology with special emphasis on the current research findings on this subject. Poor detection of PTSD is not only seen in South Africa but has been reported in other countries too (Taubman-Ben-Ari, Rabinowitz, Feldman, & Vaturi, 2001).

5.12 RELIGIOUS BELIEFS AND KNOWLEDGE

Religion and beliefs are often explored in the discipline of mental health, but there is limited research on this topic within the nursing field. A review of coping strategies suggests that illness often leads to feeling out of control and often patients will revert to what they believe will enhance self-empowerment, and thus find a meaning or purpose for the illness (Baldacchino & Draper, 2001). This implies that the nurses have to facilitate various coping strategies employed by the wide range of patients they encounter.

The review by Baldacchino and Draper (2001) focused on the beliefs of patients rather than

nurses. One of the important rules of counselling is not to impose your beliefs, whether religious or other, on the client. It is, therefore, interesting to find that some nurses would recommend prayer as a management method. Looking at the results across the disorders; n=5 recommended prayer for schizophrenia, n=17 for bipolar, n=5 for panic, and (n=12) for PTSD.

There are different reasons why nurses might recommend prayer. Firstly, it might be a reflection of the powerlessness they feel and a need to shift the power to heal or improve the situation onto a being higher than themselves (Nolan & Crawford, 1997). In a study by Petersen (2000) an interview between a nurse and a widow illustrates the need to shift the focus from the nurse to a higher power. The patient has just lost her husband, the nurse encourages the patient not to cry too much because crying will make her sick, "you need to accept what has happened. God will help you and your children" (p.14). For the PTSD vignette, prayer was recommended by 12 respondents, the highest percentage (Table 4.22), compared to the other disorders. Using the above explanation, recommending prayer in the case of rape may be a reflection of the sense of powerlessness such incidents evoke in women, and forces nurses, who are mostly women, to also reflect on how vulnerable they are.

There is a need to train nurses on the principles of counselling as the nurses might understand counselling to be advice-giving, putting pressure on themselves to come up with solutions. The introduction of religion or beliefs system can also serve as an avoidance technique for the nurse when their patients discuss psychosocial problems. Transferring the focus to a higher power might serve to terminate any further discussion of psychosocial problems by the patient. Therefore, this practice needs to be addressed in order for nurses to be able to serve as comprehensive clinicians in primary health care settings.

5.13 COMMUNITY ATTITUDES TO THE MENTALLY ILL

The main finding of the factor analysis was that the results did not support the four different factor model proposed by Taylor and Dear (1981). The present study found that the scale effectively has 3 factors. Factor 4 had items that overlapped with other factors making it impossible to determine if this factor is indeed different from the others. Similar findings were also found by Wolff et al. (1996) and Brockington et al. (1993). Both these studies proposed a three-factor model based on the Taylor and Dear (1981) and both left out the Authoritarianism Scale.

Another finding was that the items on different factors did not all correspond to the structure proposed by Taylor and Dear (1981). While Taylor and Dear's factors had 10 items per factor the factor analysis on the nurses study found that some of the item overlapped across factors (see Table 5.1) and that some factors had more items with a high loading when compared to other factors. For example factor 1 has 11 items while factor 2 has 7 and factor 3 has 9 and factor 5 has 6 factors (see Table 5.1). These findings are also supported by the results of a similar study that found that factor 3 had only 3 items (Wolff et al., 1993).

Another issue related to the factors is the issue of the names of the factors. The original names given by Taylor and Dear, namely: Authoritarianism, Benevolence, Social Restrictiveness and Community Mental Health Ideology have been changed by different authors. I also found that the names of the factors were rather subjective and that the names used by Wolff et al. (1996) were more descriptive of the scales. They came up with Fear and Exclusion, Social Control and Goodwill, which correspond with Taylor and Dear's scales namely Community Mental Health Ideology, Social Restrictiveness and Benevolence. Although the names of the scales are slightly different, the items on the scale are mostly similar across the two studies. The analysis of themes across the 3 factors in the nurses' study showed a theme of fear that runs across the factors. This is in line with the notion that attitudes are mostly structured around fear and the need to exclude and control any variable that is perceived as threatening to a person. The nurses' study found positive results on this scale compared to similar studies (refer above) suggesting that the sample had positive attitudes to the mentally ill.

5.14 CHALLENGES OF UNDERTAKING THE STUDY

Two hundred questionnaires were distributed at 13 community health clinics. Of the 200, only 87 questionnaires were completed and returned. Ten questionnaires were returned in sealed envelopes but were not complete. These were treated as non-response questionnaires and were not included in the final sample.

Inquiry by means of follow-up visits with the contact person at each clinic about the non–completion of questionnaires revealed the following reasons: questionnaires were misplaced or lost; nurses found the content of the questions difficult; nurses were too busy to complete the questionnaire; nurses had no interest in completing the questionnaire; and finally, one nurse

GRADUATE SCHOOL IN HUMANITIES
Faculty of Humanities

Room 3.07, Graduate School in Humanities Building
Private Bag Rondebosch 7701
Telephone: (021) 650 4414
Fax No: (021) 650 5751
E-mail: aweger@humanities.uct.ac.za

4 November, 2002

Ms NP Dirwayi
10 Nightingale Close
Eagle Crescent
SOMERSET WEST
7130

Dear Ms Dirwayi

I have pleasure in informing you that the Director of the Graduate School, acting on behalf of the Faculty Board, has approved the following recommendation regarding the award of the degree Masters in Research Psychology

> **that the dissertation be passed and the degree awarded subject to the candidate making the corrections required by examiners to the satisfaction of the supervisor.**

Please make contact with your supervisor who has been sent copies of the examiners' reports. The unbound/library copies of your dissertation may be collected from my office.

Yours sincerely

ANNE WEGERHOFF
ADMINISTRATIVE OFFICER

cc Professor J Louw - HOD, Psychology & supervisor (copies of the examiners' reports enclosed)

C:\aw-result-corr

EXAMINER'S REPORT: MASTER'S DISSERTATION

Student:	**Ms Nompumelelo Precious Dirwayi (ZNGNOM001)**
Degree:	**M.A. in Research Psychology**
Title:	**Mental illness in primary health care: A study to investigate nurses' knowledge of mental health illness and attitudes of nurses toward the mentally**
Examiner:	**Prof. AV Naidoo Department of Psychology University of Stellenbosch**
Supervisor:	**Prof. J. Louw**

Evaluation:

In this study Ms Dirwayi endeavours to investigate the mental health literacy of nurses working in primary health settings. With regard to the mental health knowledge of nurses, she set herself the following research objectives:

- to assess the ability of nurses to diagnose or identify different types of mental conditions
- to assess their understanding of the cause(s) of the condition
- to assess their understanding of how to treat and manage the conditions appropriately
- to assess their knowledge of the recommended health seeking pathways.

In addition, the attitudes of nurses to the mentally ill were also surveyed.

The focus of the study is particularly important and relevant given the demands placed on nurses given the Department of Health's decision to implement the district health system model. The new health system integrates the range of health services to be centralised in primary health as a means of providing basic health services for all. There are myriad challenges to the new health system as it is premised on a comprehensive health service that includes an integration of mental health care into primary health care. Hence this study has particular import as nurses are the care-givers at primary health level expected to be both mini-doctors and now mini-psychiatrists. Their knowledge of and attitudes to mental health conditions will invariably affect the mental health service delivery.

Ms Dirwayi has conducted an extensive and comprehensive review of the relevant literature. She consulted 375 literature sources to present a well-integrated review of the related literature. This body of work in chapter 2 is, itself, an excellent source for other scholars wanting to research the interface of mental health and primary health

care in the South African context. She provides a well-argued rationale for her studying systematically supporting the basis for her research objectives.

The methodology chapter is also well presented with adequate detail given to sample description, sampling technique, procedure, instrumentation, and ethical considerations that informed the study. Lacking, however, was some description of how the data was analysed.

Ms Dirwayi's systematic scholarship is again very evident in the results chapter where the data from her survey are presented in frequency distrubution tables. A surprise in Chapter 4 is the sudden appearance of a factor analysis on one of the instruments (CAMI) and a multiple regression analysis without any prior indication or rationale for these analyses. This can be easily remedied by inserting a data analysis section in Chapter 3 indicating the purpose for these analyses. This will enhance the overall structure and integrity of the study.

The results are adequately discussed with the student consistently linking her findings back to literature surveyed and providing insightful reflections on the results obtained. I strongly recommend that the student be encouraged to publish this important work as it has direct implications for the training of nurses in primary health care who already carry the additional responsibility of the mental health of their patients.

Please see enclosed manuscript for typographical corrections and other formatting and editorial matters for attention. I request a copy of the final thesis for my own reference.

Against the difficulties and challenges in undertaking the study with a difficult sample, I extend my congratulations to the candidate, Ms Dirwayi, and her supervisor, Prof. Louw, for the tenacity in completing the study, and for the high level of academic scholarship reflected in this thesis.

A mark of 73% is awarded for this thesis.

Prof. AV Naidoo

21 October 2002

procedure that was followed that is not mentioned in the discussion (p. 119) is that giving the questionnaire to nurses to complete in their own time (the reasons for doing this is made clear) implies that they have time to look up the answers or discuss it with other people. The low mental health literacy found probably indicates that this was not done.

It would probably have been a good idea to include a control group of non-nurses. One suspects that the level of ignorance about mental health problems within the population of nurses is similar to that of the general lay public of a comparable level of education, but without a control this remains merely a suspicion. A comparison of nurses' attitudes to mental health patients with those of the general public would also have yielded interesting results (the argument given for the absence of a control group - that this is mainly an exploratory study (p. 59) - does not quite hold). A comparison provided : Wessels et al 2002

Using vignettes to present the subjects with scenarios representing respectively symptoms of schizophrenia, bipolar mood disorder, panic disorder and post traumatic stress disorder, and setting a variety of response options relating to diagnosis, cause, management and treatment around these, is an interesting choice of method. It seems to be a fair solution to the problem of confronting the subjects with situations that have some 'ecological validity', and is probably better than a questionnaire containing formal lists of symptoms. The results seem to indicate that the method have worked reasonably well.

I have some reservations concerning the methods by which some of the data was analysed, or rather the way in which this was reported. The descriptions of responses to the vignettes is generally thorough. In the case of the factor analysis on the results of the attitude questionnaire (CAMI), however, too little information is given. There are various kinds of factor analytic methods available, plus different methods of factor rotation. While one may argue that these often lead to a similar ultimate result, information on the type of factor analysis that was actually performed is important to anyone who might want to replicate the analysis to further investigate the validity of the test.

In a similar vein., the description of the multiple regression analyses and ANOVAs performed on the factors and demographic data (under section 4.5.3 on page 101) is hard to follow. It is necessary to give more information on precisely what was done to which variables. The way in which the significance levels are reported is also wrong: 'p. 0.11' presumably means 'p = 0,11', while 'p. 0.00' means 'p = 0,00' and so on. If this is true then the following statement is an error: "Factor 1 showed a significant (at 1%) association to gender (p. 0.11)" since this implies a non-significant result. The same applies to the implication that 'p. 0.17' is of significance for Factor 3 related to occupation (assuming 'p. 0.17' is to be read as 'p = 0,17'). More information about how the regression or ANOVA was performed would have cast some light on an assertion such as the following: "Factor 2 showed an association with language (p. 0.02) and the location of the clinic (p. 0.00). This factor labelled social control or social restrictiveness was associated with being an Afrikaans speaker." One presumes that this means the Afrikaans speaking group got a significantly higher factor loading on Factor 2 than the other groups, but it could have been stated more clearly. A table giving the factor loadings would have been useful, also to get some idea of the effect sizes.

Care should also be taken with the use of technical vocabulary. On p. 105 the candidate

Examiner's report on *Mental Illness in Primary Health Care: a Study to Investigate Nurses' Knowledge of Mental Illness and Attitudes of Nurses towards the Mentally Ill*, a dissertation submitted by N P Dirwayi for the degree of Master of Arts (Research Psychology) at the University of Cape Town.

The aim of this dissertation was to investigate the knowledge of nurses of the symptoms of psychiatric disorders as well as their attitudes towards mental illness. It is argued that nurses at primary health care facilities often act as the filter through which patients are admitted into and steered through the health system. Since disorders that imply some form of psychosocial problem, which may indicate mental or psychiatric illness, are highly prevalent and associated with significant morbidity, it is crucial that the nurses who screen the potential patient should be able to recognize cases that may fall within this category. To determine the level of their knowledge of mental health problems, as well as their general attitudes to mental illness, a questionnaire was presented to 87 nurses (excluding psychiatric nurses) from thirteen community clinics in the Western Cape.

The results were disconcerting, in that 94% of the sample were able to recognize neither problems of a stress or anxiety-related kind, nor general indications of psychosis. In the case of stress-related problems the nurses in the sample generally recommended treatment by self-help methods. Disorders with psychotic features were most often seen as medical disorders with a biological origin, and referrals to a general practitioner was often recommended. On the other hand, psychotherapy was favoured above the use of drugs to treat such problems. As far as attitudes are concerned, the nurses were generally accepting toward people presenting with mental illness, showing only subtle hints of negative attitudes.

My general impression is that this is a well motivated and generally well thought-out study, which can make a worthwhile contribution to the training of nurses. The candidate seems to have worked in a systematic way, and has a clear writing style which is easy to read, with only the occasional lapse, e.g.:

> "However, the present study will focus on the clinician's role i.e. nurses in poor detection rather than the patient's role" (on p. 23);
>
> "The presence of mental health disorders in primary care means that psychiatry cannot be left out of primary thus any opposition to its integration and viewing this process, as a burden is a mistake" (p. 43); and
>
> "Untreated mental disorders cost the health system and the economy (Blue & Harpham, 1994; WHO, 1990" (on p. 18: cost the health system and the economy what?)

These are however fairly rare and does not distract much from the overall quality of the study.

The method by which the data was gathered is acceptable, given the constraints of actual field research, with 87 out of 200 targeted nurses responding. A possible limitation of the

writes, "There was no significant difference between those who believed bipolar to be caused by brain disease and those who did not (n=12 'yes' & n=11 'no')." The expression 'significant difference' usually implies that some statistical procedure (e.g., a binomial test to compare proportions in this case) was performed to see if the difference reaches statistical significance, which is not true in this case. Also the use of 'bipolar' as shorthand for bipolar disorder is not encouraged in technical writing.

The reference on p. 90 to Table 5.2 should probably read Table 4.26, while Table 5.2 on p. 91 presumably refers to Table 4.27.

On p. 57 'gender' is misspelled as 'genbder', while there is a reference to 'continues variables' on p. 101 which should be 'continuous variables'.

In conclusion, I would like to encourage this candidate to report these research findings to a wider audience, perhaps by writing an article for a journal that focuses on primary health care or nursing education. The results are of general importance to anyone with an interest in primary health care and the education of nursing professionals.

refused to complete the questionnaire after inquiring about reimbursement for participation and being informed that there was none. These reasons are in line with results from other studies confirming the difficulty of researching this population (Kaner et al., 1998).

According to Bless and Higson–Smith (2000), the rate of returned questionnaires in a mailed survey ranges from 20% to 40%. In the present study, the return rate was 43%. Questionnaires were delivered and collected at the clinic by the researcher. Attempts to increase the response rate included the use of a contact person who would be able follow up on the questionnaires and provision of envelopes to ensure anonymity. Temple-Smith, Mulvey and Doyle (1998) recommend using the telephone to follow-up the non-responders. This method was employed with the contact nurses.

5.15 LIMITATIONS OF THE METHOD

Despite many advantages, the self-report method also has various disadvantages. This method does not allow the researcher to probe further and gather more qualitative data from the participants. The problem of non-completion could be avoided through the use of interviews. This would allow the interviewer to make sure that all sections of the questionnaire have been completed. The size of the sample also affects the ability to generalise the findings to the whole nursing population (Amstrong & Ashworth, 1998). These limitations are acknowledged and future studies should consider gaining the co-operation of the Department of Health to conduct the study during office hours and to allow individual interviews or the use of focus groups.

5. 16 RECOMMENDATIONS

The integration of mental health into primary care has exposed the gaps in knowledge. Clinicians working at these setting are therefore facing a challenge of keeping abreast of the latest techniques and knowledge in different areas relevant to primary health care.

Based on the findings on this study (see knowledge section) there is a need to train nurses in mental health and psychiatry. The level of knowledge found in this study suggests a need to revisit the mental health component and psychiatry component of the nurses training. The level of knowledge displayed seems to be very basic and not adequate to promote the comprehensive health care proposed for the country. The lack of knowledge affects the ability to diagnose and manage psychiatric disorders in primary care.

There is therefore a strong indication for continuing training in this area. This should be viewed in the light of the respondents' inability to recognise anxiety disorders and the endorsement of self-help methods for treatment serious psychiatric disorders characterized by high rates of morbidity. It is suggested that the training envisaged should concentrate on anxiety and mood disorders. The training should not only focus on anxiety disorders, but should be extended to include different disorders presenting at primary care with emphasis on disorders that do not present outwardly and therefore are more likely to be missed.

Research has shown that the majority of people presenting at primary health care have psychosocial problems and that they may benefit from other interventions either than medication. It is important for nurses to be equipped with skills that will enable them to function as mental health workers at primary care. Counselling skills and interviewing skills are some of the skills that can be introduced as part of the training. These skills are important during the screening and management of the psychological problems presented by patients. I am not suggesting that nurses should become counsellors at primary care but acquiring these skills might increase their ability to provide comprehensive health care.

The results on etiology also indicate the need for training in etiology of the different psychiatric disorders. The etiology theories suggested by the nurse mostly illustrated lack of knowledge in this area and most of the theories may be regarded as out-dated. The analysis of the treatment methods suggests an association between etiology theories and the treatment methods recommended. It is arguable if holding erroneous etiology theories will also lead to wrong choice of treatment methods. If the two processes feed in to each other, it might be important to correct etiology theories of the nurses.

The proposed mental health and psychiatry training should be approached as part of a continued education programme, rather than a once off programme. It has been shown that short-term courses lack sustainability and rarely leads to lasting change in the clinicians' practices. The proposed programmes should therefore encourage ongoing learning and be designed along the Continued Professional Development (CPD) points programme required for the general practitioners. Incentives and penalties should be introduced to ensure that nurses are motivated to continue education in their chosen field. Such programmes can be monitored by the Nursing

Council who can ensure that nurses who fail to submit the required points within the stipulated period face certain penalties. It is arguable whether nurses have the time or capacity for additional training in mental health in view of their workload. My observations of the clinic practice during the study suggest that with good coordination it would be possible to introduce training sessions during office hours for nurses. In most clinics that were visited there is a quota system in place. This means that on a given day nurses will not see more than the allocated quota giving them more control of their workload. In the majority of clinics patients are attended to in the morning and by lunchtime most of the departments except pharmacy have been cleared of patients. The rest of the afternoon is free. Another observation was that there were days that were more busy compared to others, e.g. Mondays tended to be busy compared to the middle and the end of the week. The free time on these days could be used for improving the education and knowledge base of the nurses in community clinics.

The results also showed high rates of stigma directed towards methods that are used in the treatment of mental illness. Nurses in this study did not endorse the use of psychotropic drugs. Psychotropic drugs were not highly rated except for schizophrenia. While drugs should not be prescribed indiscriminately by clinicians, the failure to prescribe effective medication due to negative attitudes translates to bad clinical practice. While nurses do not normally prescribe schedule five drugs unless on application, they are often given the task of monitoring the patients between visits with the psychiatrist. Their role as supervisors and managers of patients' medication makes them important in the chain that determines compliance of patients in taking their medication. Negative attitudes of nurses to psychotropic drugs might discourage patients from taking their medication should this be communicated to patients.

I also found that nurses tended to endorse self-help methods higher than psychotropic drugs. World wide there is a move away from use of chemicals and a promotion of natural remedies that are viewed to be safer and have less side-effects. Like all the medications that are registered natural medications need to be tested for safety and efficacy to ensure that such medication meet scientific standards and benefit patients. Promoting untested methods might be dangerous and constitutes high-risk or even dangerous practices. Should these herbs or natural remedies show negative long-term effects the nurse is likely to take the blame for his or her recommendations. Nurses at primary care should also be exposed to training in psychopharmacology to address the

negative attitudes associated with psychotropic medications. Psychopharmacology workshops and case presentations are indicated at primary health care.

Another area that needs to be addressed at primary health care is the relationship between primary health care and traditional healers. The results showed that the majority of participants had negative attitudes to traditional healing. The role of traditional healers should not be ignored, as there are still sections of South Africans who believe in and use traditional healers. Often Western medicine and Traditional healing are used complimentary by patients. There have been positive reports where traditional healers have been integrated within the primary health care sector and brought in to combat conditions such as tuberculosis by providing medication to patients within the community. There is a need to expose nurses to the work of the traditional healers and also address the negative attitudes that are often displayed by nurses to patients who admit to still use this system of healing. This is even more important in mental health as symptoms are sometimes explained along cultural lines. In such cases the intervention of the traditional healer might be more effective in addressing the perceived cause of the symptoms as understood by the patient.

Lastly, there is a need to address negative and ambivalent attitudes of the nurses. The results indicate a need for programme that addresses the stigma that is associated with mental illness. This can be done by exposing nurses to people with different mental illnesses. In the past the training of nurses in psychiatry has mostly been in mental hospitals. This changed recently when the psychiatry-training programme was changed to incorporate a community component. Therefore, some of the nurses might still hold traditional views about mentally ill patients. This might lead to poor recognition and negative attitudes to these patients. Exposure and reorientation of nurses will hopefully address the prejudices directed to people with mental illnesses within the health care sector. The prejudices are illustrated by assumptions that people with mental illness can be identified by just looking at them. The entire training programme should be supported and monitored to ensure that they lead to change in the primary mental health care.

There needs to be policies within the primary health care that ensure that nurses are trained and supported during the transition. This is imperative if comprehensive health care is to become a reality at primary health care. There is now a Mental Health Care Bill that protects the rights of

the mentally ill. The Bill and what it stands for should be incorporated as part of the reorientation programme to ensure that the rights of patients with mental illnesses are protected at primary health care.

5.15 CONCLUSION

The finding of this study can be used to inform training courses for the nurses in primary care. There is an indication for certain areas that seem to have been neglected such as keeping up to date with the latest research in this area. Nurses need to be exposed to the different treatment methods to be able to make diagnosis and treat appropriately. There is also a need to address the negative attitudes associated with having a mental disorder.

The findings of this study have implications for mental health in primary care. Because of the small sample these results cannot be generalized; these clinics are also in urban areas or semi urban areas. These results might present a best scenario with outlying areas being worse. There is, therefore, an indication for reviewing the mental health and psychiatry component of the nurses training. It is also suggested that future studies use other methods such as group or individual interviews that allow further probing and allow the researcher to also collect qualitative data on the problem. We also found that nurses' negative attitudes were displayed subtly rather than openly suggesting a need for programmes that address the attitudes of primary care workers in general.

REFERENCES

Abdool Karim, Q., & Abdool Karim, S. A. (1999). Sitting on a time bomb? Medical Research Council, 30, 9.

Abiodun, O. A. (1989). Psychiatric morbidity in a primary health care centre in a rural community in Nigeria. The Central Africa Journal of Medicine, 34, 372-377.

Abiodun, O. A. (1991). Knowledge and attitudes concerning mental health of primary health care workers in Nigeria. The International Journal of Social Psychiatry, 37, 113-120.

Abiodun, O. A. (1994). A validity study of the hospital anxiety and depression scale in general hospital units and a community sample in Nigeria. British Journal of Psychiatry, 165, 669-672.

Abiodun, O. A. (1995). Pathways to mental health care in Nigeria. Psychiatric Services, 46, 823-826.

Abiodun, O. A. (1998). Psychotropic drug use in primary health care units in Nigeria. East Africa Medical Journal, 75, 339-41.

Addis, M. E., & Jacobson, N. S. (1996). Reasons for depression and the process and outcome of cognitive behavioural psychotherapies. Journal of Consulting and Clinical Psychopathology, 64, 1417-1424.

African National Congress (ANC). (1994a). A national health plan for South Africa. Johannesburg: African National Congress.

African National Congress. (1994b). The reconstruction and development programme: A policy framework. Johannesburg: African National Congress.

Alda, M. (1997). Bipolar disorder: from families to genes. Canadian Journal of Psychiatry, 42, 378-387.

Almedia-Filho, N., Mari J de J., Coutinho, E., Franca, J. F., Fernades J., Andreoli, S. B., & Busnello, E. D., (1997). Brazilian multicentric study of psychiatric morbidity. Methodological features and prevalence estimates. British Journal of Psychiatry, 171, 524-529.

Allwood, C. W. (1997). Psychiatry in South Africa, yesterday, today and tomorrow. Presented at the Annual Meeting of the American Psychiatric Association, San Diego, 9-24 May 1997. South African Medical Journal, 87, 1728-1732.

Allwood, C. W., & Gagiano, C. A. (1997). Hand book for psychiatry for primary care. Cape Town: Oxford University Press.

American Psychiatric Association (APA). (1994). Diagnostic and statistical manual of mental disorders (4th ed.) (DSM-IV). Washington D. C.: American Psychiatric Association.

Andreasen, N. C. (1980). Posttraumatic stress disorder. In H. I. Kaplan, A. M. Freedman, & D. J. Sadock. (Eds.), Comprehensive textbook of psychiatry, (3rd ed, Vol 2.) **(pp. 1517-1525)**. Baltimore: Williams & Wilkins.

Angermeyer, M. C., Däumer, R., & Matschinger, H. (1993). Benefits and risks of psychotropic medication in the eyes of the general public: Results of a survey in the Federal Republic of Germany. Pharmacopsychiatry, 26, 144-120.

Angermeyer, M. C., & Matschinger, H. (1996a). Relatives beliefs about causes of schizophrenia. Acta Psychiatrica Scandanavica, 93, 199-204.

Angermeyer, M. C., & Matschinger, H. (1996b). The effects of diagnostic labelling on the lay theory regarding schizophrenia disorders. Social Psychiatry and Psychiatric Epidemiology, 31, 316-320.

Angermeyer, M. C., & Matschinger, H. (1996c). Public attitudes towards psychiatric treatment. Acta Psychiatrica Scandanavica, 94, 326-336.

Angermeyer, M. C., & Matschinger, H. (1996d). The effects of personal experience with mental illness on the attitudes towards individuals suffering from mental disorders. Social Psychiatry and Psychiatric Epidemiology, 31, 321-326.

Armstrong, D. (1987). Theoretical tensions in biopsychological medicine. Social Science and Medicine, 25, 1213-1218.

Armstrong, D., & Ashworth, M. (1998). When questionnaire response rates do matter: a survey of general practitioners and their views of NHS changes. British Journal of General Practice, 50, 479-480.

Ayuso Gutierrez, J. L., & Saiz Ruiz, J. (1980). A comparative study of the psychiatric nurses's attitudes towards mental patients. International Journal of Rehabilitation Research, 3, 588.

Babie, E. (1992). The practice of social research (6th ed). Carlifornia: Wadsworth, Inc.

Badger, L. W., Ackerson, B., Buttel., F., & Rand, E. H. (1997). The case of integration of social work psychosocial services into rural primary care practice. Health and Social Work, 22, 20-29.

Baldacchino, D., & Drapper, P. (2001). Spiritual coping strategies: a review of the nursing research literature. Journal of Advanced Nursing, 34, 822-832.

Barber, R., & Williams, A. S. (1996). Psychiatrist working in primary care: a survey of general practitioners' attitudes. Australian and New Zealand Journal of Psychiatry, 30, 278-286.

Barret, J. E., Barett, J. A., Oxman, T. R., & Geber, P. D. (1988). The prevalence of psychiatric disorders in a primary care practice. Archives of General Psychiatry, 45, 1100-1119.

Barondess, J. (1979). Disease and illness: A crucial distinction. American Journal of Medicine, 66, 375-376.

Bartz, R. (1999). Beyond the biopsychosocial model: new approaches to doctor-patient interactions. The Journal of Family Practice, 48, 601-607.

Baumman, S. E. (Ed.) (1998). An interactive biopsychosocial or systems model. In S. E. Baumman, (Ed.), Psychiatry and primary care. A practical guide for health care workers in Southern Africa **(pp.29-36)**. Cape Town: Juta & Co, Ltd.

Baum, F., & Sanders, D. (1995). Can health promotion and primary health care achieve health for all without a return to their more radical agenda? Health Promotion International, 10, 149-160.

Bebbington, P., Brugha, T., Meltzer, H., Farrel, M., Ceresa, C. Jenkins, R., & Lewis, G. (2000). Psychiatric disorder and dysfunction in the UK National Survey of psychiatric morbidity. Social Psychiatric and Psychiatry Epidemiology, 35, 191-197.

Bebbington, P., Meltzer H., Brugha, T. S., Farrell, M., Jenkins, R., Ceresa, C., & Lewis, G. (2000). Unequal access and unmet need: neurotic disorders and the use of primary care services. Psychological Medicine, 30, 1359-1367.

Beidel, D. C. (1998). Social anxiety disorder: Etiology and early clinical presentation. Journal of Clinical Psychiatry, 59, 27-31.

Ben-Arie, O., Swartz, L., & Dickman, B. J. (1997). Depression in the elderly living in the community: Its presentation and features. British Journal of Psychiatry, 150,169-174.

Ben-Tovim, D. I. (1987). Development psychiatry. Mental health and primary care in Botswana. London: Tavistock.

Bezchilnyk, Y. B., Wang, J. F., McQueen, G. M., & Young, L. T. (2001). Gene expression differences in bipolar disorder revealed by cDNA array analysis of post-moterm frontal cortex. Journal of Neurochemistry, 79, 826-834.

Bibeau, G. (1997). Cultural psychiatry in cereolizing world: Question for a new research agenda. Transcultural Psychiatry, 34, 9-4.

Bierman, J., & Muller, M. (1994). Legal limitations in the practice of primary health care nurse. Curationis, 17, 24-34.

Bignami, G. (1982). Disease model and reductionist thinking in the biomedical sciences. In S. Rose. (Ed.), Against biological determinism **(pp. 94-110)**. London: Allison & Bushy.

Bindman, J., Johnson, S., Wright, S., Szmukler, G., Bebbington, P., Kuipers, E., & Thornicroft, G. (1997). Integration between primary and secondary services in the care of the severely mentally ill: patient's general practitioners views. British Journal of Psychiatry, 171, 169-174.

Binedell, J. (1991). Methods and madness: researching community health workers perceptions of mental illness in Khayelitsha and Nyanga. Unpublished masters thesis: University of Cape Town.

Bhagwanjee, A., Parekh, A., Paruk, Z., Petersen, I., & Subedar, H. (1998). Prevalence of minor psychiatric disorders in an adult African rural community in South Africa. Psychological Medicine, 28, 1137-47.

Bhat, R. B., & Jacobs. T. V. (1995). Traditional herbal medicine in Transkei. Journal of Ethnopharmacology, 48, 7-12.

Blackwood, D. H., Visscher, P. M., & Muir, W. J. (2001). Genetic studies of bipolar affective disorder in large families. British Journal Psychiatry, 178 (suppl. 41), S 134-6.

Bless, C., & Higson-Smith, C. (2000). Fundamentals of social research methods: An African perspective. Cape Town: Juta.

Blue, I., & Harpham, T. (1994). The World Bank 'World development Report 1993: Investing in health' reveals the burden of common mental disorders but ignores its implications [Editorial]. British Journal of Psychiatry, 165, 9-12.

Bodibe, C., & Sodi, T. (1997). Indigenous healing. In D. Foster, M. Freeman, & Y. Pillay, (Eds.), Mental health policy issues for South Africa (pp. 181-192). Cape Town: Medical Association of South Africa.

Boitex, M., Battle, E., & Bolibar, I. (1996). Benzodiazepines in primary health care: A survey of GP's prescribing patterns. Addiction, 91, 549-556.

Boonzaier, E., & Sharp, J. (1985). Choice of a healer: An important area of interest of general practitioners. South African Family Practice, 6, 235-240.

Bower, P., Richards, D., & Lovell, K. (2001). The clinical and cost-effectiveness of self help treatments in anxiety and depressive disorders in primary care: A systematic review. British Journal of Family Practice, 51, 838-845.

Brady, K. T. (1997). Posttraumatic stress disorder and comorbidity: Recognizing the many faces of PTSD. Journal of Clinical Psychiatry, 58, 12-15.

Breslau, N., Davis, C. G., Peterson, E. L., & Schultz, L. (1997). Psychiatric sequelae of posttraumatic stress in woman. Archives of General Psychiatry, 54, 81-87.

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis. G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorders in the community: The 1996 Detroit area survey of trauma. Archives of General Psychiatry, 55, 626-632.

Briggs, C. J., Capdegelle, P., & Garner, P. (2001). Strategies for integrating primary health services in middle and low-income countries: Effects on performance, cost and patient outcomes (Cochrane Review). Cochrane Data System Review, 4, CD003318.

Brockington, I. F., Hall, P., Levings, J., & Murphy, C. (1993). The community's tolerance of the mentally ill. British Journal of Psychiatry, 162, 93-99.

Brody, H. (1999). The biopsychosocial model, patient-centered care, and cultural sensitive practice. The Journal of Family Practice, 48, 585-587.

Brown, G. W., Birley, J. L. T., & Wing, J. K. (1972). Influence of family life on the course of schizophrenic disorder; a replication. British Journal of Psychiatry, 121, 241-258.

Brugha, T. S., Wing, J. K., & Smith, B. L. (1989). Physical health of the long-term mentally ill in the community. Is there unmet need? British Journal Psychiatry, 1557, 77-81.

Buch, E. (1985). Primary health care in the South African homelands: Primary or secondary class. In A. Zwi & L. D. Saunders (Eds.), Towards health care for all. NAMDA Conference Proceedings 1985 **(pp.79-89)**. Johannesburg: NAMDA.

Buchan, T. (1969). Depression in African patients. South Africa Medical Journal, 23, 1055-1058.

Buhrmann, M. V. (1977). Western Psychiatry and the Xhosa patient. South African Medical Journal 51, 464-466.

Buhrmann, M. V. (1982). Thwasa and bewitchment. South Africa Medical Journal, 61, 877-879.

Buhrmann, M. V. (1983). Training of Xhosa medicine-men and analytic psychologists analytic training: Depth dimensions of physical existence. (papers of the 8th International Congress of Analytical Psychology) (pp.237-245). Fellbach-Oeffingen (West Germany): Bonz.

Butler, T. (1993). Changing mental health services: The politics and policy. London: Chapman and Hall.

Button, E. (1988). Psychological problems in primary health care. London: Croom Helm.

Burvill, P. W., & Knuiman, M. W. (1983). The influence of minor psychiatric morbidity on consulting rates to general practitioners. Psychological Medicine, 13, 635-634.

Byrne, H. (1987). Pyschiatric disturbance in children. Nursing RSA, 2 (1), 10-11.

Byrne, D. G. (1981). Sex differences in the reporting of symptoms of depression in the general population. British Journal of Clinical Psychology, 20, 83-92.

Byrne, A., & Byrne, D. G. (1993). The effects of exercise on depression, anxiety and other mood states: a review. Journal of Psychosomatic Research, 37, 565-574.

Callaghan, P., Shan, C. S., Yu, L. S., Ching, L. W., & Kwan, T. L. (1997). Attitudes towards mental illness: testing the contact hypothesis among Chinese students in Hong Kong. Journal of Advanced Nursing, 26, 33-40.

Campbell, T. L., Franks, P., Fiscella, K., McDaniel, S., Zwazinger, J. Mooney, C., & Serbero, M. (2000). Do physician who diagnose more mental health disorders generate lower health care costs. The Journal of Family Practice, 49 (40), 305-310.

Capdegelle, B. C. J., & Garner, P. (2001). Strategies for integrating primary health services in middle-low-income countries: effects on performance, cost and patient outcomes (Cochrane Review). Cochrane Data Base Systems Review, CD 003318.

Carey, P. D., & Stein, D. J. (2001). Trauma and posttraumatic stress disorder (PTSD) in an urban Xhosa primary care population in Khayelitsha: Epidemiology, co-morbidity and service use patterns. Poster presented at the Biennial meeting of the South Africa Society of Biological Psychiatrists. Psychopharmacology Congress 20001. Spier Wine Estate, Stellenbosch, 20-22 September.

Charney, D. S., Deutch, A. Y, Krystal, J. H., Southwick, S. M., & Davis, M. (1993). Psychobiologic mechanisms of posttraumatic stress disorder. Archives of General Psychiatry, 50, 295-305.

Chipfakacha, V. (1994). The role of culture in primary health care. South African Medical Journal, 84, 860-862.

Chisholm, D., Sekar, K., Kumar, K., Kishore, K., Saeed, K., James, S., Mubbashar, M., & Murthy, R. S. (2000). Integration of mental health care into primary care: demonstration cost-outcome study in India and Pakistan. British Journal of Psychiatry, 176, 581-588.

Clark, A., Hook, J., & Stein, K. (1997). Counsellors in primary are Southhampton: a questionnaire survey of the qualifications, working arrangements, and casemix. British Journal of General Practice, 47, 613-617.

Collins, A. M., & Diago, B. S. (1996). Mental health promotion and protection. Journal of Psychosocial Nursing, 38, 27-32.

Collins, P. Y., Wig, N. N., Day, R., Varma, V. K., Malhorta, S., Misra, A. K., Schanzer, B., & Susser, E. (1996). Psychosocial and biological aspects of acute brief psychoses in developing country site. Psychiatric Quarterly, 67 (3), 177-193.

Cooper, B. (2000). Nature, nurture and mental disorder: old concepts in the new millennium. British Journal of Psychiatry.178 (40), 91-102.

Compton, M. T., & Nemeroff, C. B. (2001). The evaluation and treatment of depression in primary care. The evaluation and treatment of depression in primary care. Clinical Cornerstone 3, 10-22.

Connor, P. D., & Manning, J. S., Ratcliffe J., Gask, L., Creed, F., & Lewis, B. (1999). Psychiatry training for family doctors: what do GP registrars want and can a brief course provide this? Medical Education, 33, 434-438.

Costello, E. J. (1986). Primary care pediatric and child psychopathology: A review diagnostic treatment, and referral practices. Pediatrics, 78, 1044-1051.

Costello, E. J., Burns, B. J., Costello, A. J., Edelbrock, C., Dulcan, M., Brent, D., & Janiszeweski, S. (1988a). Psychiatric disorders in pediatric primary care: Prevalence and risks factors. Archives of General Psychiatry, 45, 1107-1116.

Costello, E. J., Burns, B. J., Costello, A. J., Edelbrock, C., Dulcan, M., Brent, D., & Janiszeweski, S. (1988b). Service utilization and psychiatric diagnosis in pediatric primary care: The role of the gatekeeper. Pediatrics, 83, 435-441.

Costello, E. J., (1989). Child Psychiatric disorders and their correlates: A primary care primary care pediatrics sample. Child and Adolescent Psychiatry, 28, 851-855.

Cotroneo, M., Outlaw, F.H., King, J., & Brince, J. (1997). Advanced practice psychiatric-mental health nursing in a community–based nurse-managed primary care program. Journal of Nursing, 35, 18-25.

Cotroneo, M., Hopkins, F., Outlaw, F. H., King, J., & Brice, J. (1997). Integrated primary health care. Opportunities for psychiatric mental health nurses in a reform health care system. Journal of Psychosocial Nursing, 35, 21-27.

Cuijpers, P. (1997). Bibliotherapy for unipolar depression: a meta-analysis. Journal of Behaviour Therapy and Experimental Psychiatry, 26, 230-237.

Dawes, A. (1985). Politics and mental health: the position of clinical psychology in South Africa. South African Journal of Psychology, 15, 55-61.

DeGruy, F. V. (2000). Mental health diagnosis and the costs of primary care. The Journal of Family Practice, 49, 311-313.

De Jong, J. (1987). A descent into African psychiatry. Amsterdam: Royal Tropical Institute.

De Jong, J. (1996). A comprehensive public mental health programme in Guinea-Bissau: A useful model for Africa, Asian and Latin American countries. Psychological Medicine, 26, 97-108.

De Jong, J. T., De Klein, G. A., & Ten Horn, S. G. (1987). A base line study on mental disorders in Guine-Bissau. British Journal of Psychiatry, 148, 27-32.

De Mochy, C. (1990). More attention should be paid to the formation of attitudes in doctors. Medical Teacher, 12, 339-344.

Department of National Health. (1996). A policy of the development of a district health system in South Africa. Pretoria: Department of National Health.

Department of National Health. (1997). White paper for the transformation of health system in South Africa. Pretoria: Department of National Health.

Desjarlais, R., Eisenberg, L., Good, B., & Kleinman, A. (1995). World mental health: problems and priorities in low-income countries. New York and: Oxford University Press.

Dhadphale, M., Ellison, R. H., & Griffin, L. (1982). Frequency of mental disorders among outpatients at a rural district hospital in Kenya. The Central African Journal of Medicine, 28, 85-89.

Dhadphale, M., & Ellison, R. H. (1983). The frequency of mental disorders in the outpatients of two Nyanza hospitals. The Central African Journal of Medicine, 29, 29-32.

Dhadphale, M., Ellison, R. H., & Griffin, L. (1983). The frequency of psychiatric disorders among patients attending semi-urban and rural general out-patient clinics in Kenya. British Journal of Psychiatry, 142, 379-383.

Dickerson, F. B. (2000). Cognitive behavioural psychotherapy for schizophrenia: a review of recent empirical studies. Schizophrenia Research, 43, 71-90.

Diop, B., Collignon, R., Gueye, M., & Harding, T. W. (1982). Diagnosis and symptoms of mental disorders in a rural areas of Senegal. Africa Journal of Medicine and Science, 11, 95-103.

Dowrick, C. (1992). Improving mental health through primary care. British Journal of Psychiatry, 42, 282-386.

Drennan, G. (1996). Counting the cost of language services in psychiatry. South African Medical Journal, 86, 343-345.

Drennan, G. (1998). Cultural and language Issues. In S. E. Baumman (Ed.), Psychiatry and primary care. A practical guide for health care workers in Southern Africa **(pp.29-36)**. Cape Town: Juta & Co, Ltd.

Drennan, G. (1999). Psychiatry, post-apartheid integration and the neglected role of language in South African institutional contexts. Transcultural Psychiatry, 36, 5-22.

Drennan G., & Swartz, L. (2002). The paradoxical use of interpreting in psychiatry. Social Science & Medicine, 54, 1853-1866.

Duncan, G. (2000). Mind-body dualism and the biopsychosocial model of pain: what did Descartes really say? The Journal of Medicine and Philosophy, 25, 485-513.

Dunn, D. S. (1999). The practical researcher: A student guide to conducting psychological research. Boston Burr Ridge, IL: McGraw-Hill College.

Eaton, W. W., Morten, P. B., & Frydenberg, M. (2000). Obstetric factors, urbanization and psychosis. Schizophrenia Research, 43, 117-123.

Eaton, W., & Harrison, G. (2000). Ethnic disadvantages and schizophrenia. Acta Psychiatrica Scandanavica, 102, 38-43.

Ebigbo, P. (1992). Development of a culture specific (Nigeria) screening scale of somatic complaints. Culture Medicine and Psychiatry, 6, 29-44.

Edwards, F. S. (1983). Healing and transculturation in Xhosa Zionist practice. Culture, Medicine and Psychiatry, 7, 177-198.

Edwards, S. D., Cheetam, R. W. S., Majozi, E. & Lasich, A.J. (1982). Zulu culture-bound psychiatric syndromes. South Africa Journal of Medicine, 8, 82-86.

Edwards, S. D., Grobbelaar, P. W., Makunga, N. V., Sibaya, P. T., Nene, L. M., Kunene, S. T., & Magawaza, A. S. (1983). Traditional Zulu theories of illness in psychiatric patients. The Journal of Social Psychology, 121, 213-221.

Eguchi, L. (1988). The social construction of mental illness. Psychological Medicine [Editorial], 18, 1-9.

Eisenberg, L. (1988). The social construction of mental illness. Psychological Medicine, 18, 1-9.

Eisenberg, L. (1995). The social construction of the human brain. American Journal of Psychiatry, 152, 1563-1575.

Eldestein, G. (1996). Are day hospitals effective units of learning for students nurses? Unpublished research paper, University of the Western Cape.

Ellsberg, M. C., Pena, R., Herrera, A., Winkvist, A., & Kullgren, G. (1999). Domestic violence and emotional distress among Nicaraguan women: results from a population-based study. American Psychologist, 54, 30-36.

Emsley, R. (2001). Focus on psychiatry in South Africa. British Journal of Psychiatry, 178, 382-386.

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. Science, 196, 129-136.

Engel, G. L. (1980). The clinical application of the biopsychosocial model. The American Journal of Psychiatry, 137, 535-544.

Engel, G. L. (1996). From biomedical to biopsychosocial: I. Being scientific in the human domain. Families, Systems, & Health, 14, 425-433.

Ensink, K., & Robertson, B. (1996). Indigenous categories of distress and dysfunction in South African Xhosa children and adolescents as described by indigenous healers. Transcultural Psychiatric Research Review, 33, 137-172.

Ensink, K., & Robertson, B. (1999). Patient and family experiences of psychiatric services and African indigenous healers. Transcultural Psychiatry, 36, 23-43.

Ensink, K., Leger, P. H., & Robertson, B. A. (1997a). Mental health services in the Western Cape. Part I. Introduction and review of public sector expenditure, 1992/93. South African Medical Journal, 87, 1183-1192.

Ensink, K., Leger, P. H., & Robertson, B. A. (1997b). Mental health services in the Western Cape. Part II. Review of public sector expenditure services, 1992/93. South African Medical Journal, 87, 1196-1100.

Ensink, K., Robertson, B. A., Zissis, C., & Leger, P. (1997). Posttraumatic stress disorder in children exposed to violence. South African Journal of Medicine, 87, 1526-1530.

Ethics and Law, (1997). Column in Nursing News: 22 (5). Pretoria: Denosa. May.

Fàbrega, H, Jr. (2001). Culture and history in psychiatric diagnosis and practice. The Psychiatric Clinics of North America, 24, 391-405.

Fifer, S. K., Mathias, S. D., Patrick, D. L., Mazonson, P. D., Lubeck, D. P., & Buesching, D. P. (1994). Untreated anxiety among adult primary care patients in a health maintenance organization. Archives of General Psychiatry 51, 740-750.

Fighting the stigma of mental illness. (2001). Nursing Update, 25 (3), 10-12.

Fink, P., Sørensen, L., Engberg., M., Holm., M., & Mukn-Jørgensen, P. (1999). Somatization in primary care. Prevalence, health care utilization, and general practitioner recognition. Psychomatics, 40, 330-338.

Fischer, W., Goerge, D., Zbinden, E., & Guimón, J. (1999). Determining factors and effects of attitudes towards psychotropic medication. In J. Guimón, W. Fischer, & N. Satorius (Eds.), Image of madness: The Public Face of Mental Illness and Psychiatric Treatment **(pp. 162-186)**. Basel: Karger.

Flisher, A. J., Riccitelli, G., Jhetam, N., & Robertson, B. A. (1997). A survey of professional activities of psychiatrists in South Africa. Psychiatric Service, 48, 707-9.

Ford, K., Middleton, J., Palmer, B., & Farrington, A., (1997). Primary health care workers: training needs in mental health. British Journal of Nursing, 6, 1244-1250.

Francell, E. G. (1996). My role as a consumer –provider: challenges and opportunities. Journal of Psychosocial Nursing and Mental Health Services, 34, 29-31.

Frank, E., Swartz, A., & Kupfer, D. J. (2000). Interpersonal and social rhythm therapy: managing the chaos of bipolar. Biological Psychiatry, 48, 593-604.

Freeman, M. (1989a). Mental health in a crisis in South Africa. Paper No. 16. Centre for Health Policy. Johannesburg: University of Witwatersrand.

Freeman, M., (1989b). Paving a road towards a primary mental health care approach in South Africa. Paper No. 18. Centre for Health Policy. Johannesburg: University of Witwatersrand.

Freeman, M (1992). Providing mental health care in crisis for all in South Africa: Structure and Strategy. Paper no. 24, Centre for Health Policy. Johannesburg: University of Witwatersrand.

Freeman, M. (1998). Mental health service change. South African Medical Journal, 88, 742-744.

Freeman, M., & Mostei, M. (1990). Is there a role for traditional healers in health care in South Africa. Paper No. 20. Centre for Health Policy. Johannesburg: University of Witwatersrand.

Freeman, M., Ceris, N., & Price, M. (1991). Assessing mental health needs in the Southern-Eastern Transvaal. Poster presentation presented at the epidemiological Society of Southern Africa Conference, Cape Town.

Freeman, M., Lee, T., & Vivian, W. (1994). Evaluation of mental health services in the Orange Free State. The Centre for Health Policy. Johannesburg: University of the Witwatersrand

Freeman, M., & Pillay, Y. (1997). Mental health policy -plans and funding. In Foster, D., Freeman, M., & Pillay, Y. (Eds.), Mental health policy issues for South Africa **(pp. 32-54)**. Cape Town: Medical Association of South Africa Multimedia Publications.

Freeman, M., Lee, T., & Vivian, W. (1999a). Evaluation of mental health services in the Free Sate. Part III. Social outcome and patient perceptions. South African Medical Journal, 89, 311-315.

Freeman, M., Lee, T., & Vivian, W. (1999b). Evaluation of mental health services in the Free State. Part IV Family burden and perspective. South African Medical Journal, 89, 315-320.

Gagiano, C. A. (1989). Development of psychiatric community service in the Orange Free State, Republic of South Africa. In C. N. Stefanis, C. R. Soldatos, & A. D. Rabavillas, (Eds.), Psychiatry: A World perspective. Vol 4. Proceedings of the VII World Congress of Psychiatry, Athens, 12-19 October, 1989, Amsterdam, Elservier, 1990:503-532.

Gagiano, C. A. (1995). A psychiatric service at primary care level. South African Medical Journal, 85, 568.

Gask, L., Sibbald, B., & Creed, F. (1997). Evaluating models of working at an interface between mental health service and primary care. British Journal of Psychiatry, 170, 6-11.

Garfinkel, P. E., & Dorian, B. J. (2000). Psychiatry the new millennium. Canadian Journal Psychiatry, 45, 40-47.

Gaster, B., & Holroyd, J. (2000). St John's wort for depression. A systematic Review. Archives of Internal Medicine, 160, 152-156.

Gelman, T. (1999). The prevalence and detection of possible minor psychiatric morbidity in students. Unpublished masters thesis. University of Cape Town.

Gelenberg, A. (1999) Depression is still underrecognised and undertreated. Archives of Internal Medicine, 159, 1657-1658.

Geerlings, S. W., Beekman, A. T. F., Deeg, D. J. H., & Van Tilburg, W. (2000). Physical health and the onset and persistence of depression in older adults: an eight-wave prospective community-based study. Psychological Medicine, 30, 369-380.

Geyer, N. (1998). Legal limitations for nurse prescribes in primary health care. Curationis, December, 28- 33.

Gijana, E. W. M., & Louw, J. (1981), Psychiatric disorders in developing community as reflected by archival material. South African Medical Journal 59, 988-991.

Giller, M. J. (1991). Biological assessment and treatment of posttraumatic stress disorder. Washington D.C. : American Psychiatric Press.

Gillis, L. S., & Stone, G. L. (1973). A follow-up study of psychiatric disturbance in a Cape Coloured community. British Journal of Psychiatry, 123, 279-283.

Gillis, L. S., Trollip, D., Jakoet, A., & Holden, T. (1987). Non-compliance with psychotropic medication. South African Medical Journal, 72, 602-606.

Gillis, L. S. (1992). Depression in newly-urbanised elderly South Africans. Southern African Journal of Gerentology, 1, 20-24.

Gilson, I. (1997). The lesson of user fee experience in Africa. Health Policy and Planning, 12, 273-285.

Gilson, I. (1998). In defense and pursuit of equity. Social Science Medicine, 47, 1891-1896.

Gilson, L., Morar, R., Pillay, Y., Rispel, L., Shaw, V., Tollman, S., & Woodward, C. (1996). Decentralisation and health system change in South Africa. Johannesburg: Department of National Health, Health Policy Co-ordinating Unit.

Girón, M., Manjon-Arce, P., Puerto-barber, J., Sanchez-Garcia, E., & Gomez-Beneyto, M. (1998). Clinical Interview skills and identification of emotional disorders in primary care. American Journal of Psychiatry, 155,530-535.

Glied, S. (1998). Too little time? The recognition and treatment of mental health problems in primary. Health Service Research, 33, 891-910.

Goldberg, D. (1999). Integrating mental health in primary health care. In H. Freeman & J. Henderson (Eds.), Evaluation of comprehensive care of mentally ill **(pp. 115-126)**. London: Gaskell (Royal College of Psychiatrists).

Goldberg, D., & Huxley, P. (1980). Mental Illness in the community. Pathways to psychiatric care. New York: Tavistock Publications.

Goldberg, D., & Huxley, P. (1992). Common mental disorders. A bio-social model. London & New York: Tavistock/ Routledge.

Goldberg, R. J., Novack, D. H., & Gask, L. (1992). The recognition and management of somatization. What is needed in primary care training. Psychosomatics, 33, 55-61.

Goldberg, D. P, & Lecrubier, Y. (1995). Form and frequency of mental disorders across centres. In T. B. Üstün & N. Sartorius (Eds.), Mental illness in general health care: An international study, **(pp.323-334)**. Chichester: John Wiley & Sons on behalf of the World Health Organization.

Gold, J. H. (1998). Gender differences in psychiatric illness and treatments: a critical review. Journal of Nervous and Mental Diseases, 186, 769-775.

Goodwin, F. K., & Jamison, K. R. (1990). Suicide, in manic-depressive illness **(pp. 227-244)**. New York: Oxford University Press.

Gossop, M., Stewart, M. S., Lehman, P., Edwards, C., Wilson, A., & Segar, G. (1998). Substance use, health and social problems and social problems of service users at 54 drug treatment agencies. British Journal of Psychiatry, 173, 166-171.

Gorman, J. M., Kent, J. M., Sullivan, G. M., & Coplan, J. D. (2000). Neuroanatomical hypothesis of panic disorder, revised. American Journal of Psychiatry, 57, 493-505.

Greenberg, P. E., Sistsky, T., Kessler, R. C., Finkelstein, S. N., Berndt, E. R., Davidson, J. R. T., Ballenger, J. C., & Fyer, A. J. (1999). The economic burden of anxiety disorders in the 1990s. Journal of Clinical Psychiatry, 60, 427-435.

Gujere, O., Simon, G. E., Üstün, T. B., & Golberg, D. P. (1997). Somatization in cross-cultural perspective: a World Health Organization study in primary care. American Journal of Psychiatry, 154, 989-995.

Gwele, N. S. (1996). Exit standards for the Baccalaureate Degree in Nursing in South Africa. Curationis, 19, 66-67.

Haghighat, R. (2001). A unitary theory of stigmatization. Pursuit of self-interest and routes to distigmatization. British Journal of Psychiatry, 178, 207-215.

Hall, A., & Williams, H. (1987). Hidden psychiatric morbidity Part 1: A study of prevalence in an out-patient population at Bindura Provincial Hospital. The Central African Journal of Medicine, 33, 239-243.

Hall, P., Brockington, I. F., Levings, J., & Murphy, C. (1993). A comparison of responses to the mentally ill in two communities. British Journal of Psychiatry, 162, 99-108.

Hannaford, P. C., Thompson, C., & Simpson, M. (1996). Evaluation of an educational programme to improve the recognition of psychological illness by general practitioners. British Journal of General Practice, 46, 333-337.

Hanson, K. W. (1998). Public survey and mental health parity debate: lessons from the survey literature. Psychiatric Services, 49, 1059-1066.

Harding, T. W., De Arango, M. V., Baltazar, J., Climent, C. E., Ibrahim, H. H., Landrigo-Ignancio, L., Murthy, R. S., & Wing, N. N. (1980). Mental disorders in primary health care: A study of their frequency and diagnosis in four developing countries. Psychological Medicine, 10, 231-241.

Harding, T. W., Busnello, E., Climent, C. E., Diop, M. B., El-hkim, A., Giel, R., Ibrahim, H. H. A., Ladrido-Ignacio, L., & Wig, N. N. (1983). The WHO collaborative study on strategies for extending mental health care, III: Evaluation design and illustrative results. American Journal of Psychiatry, 149, 1481-1485.

Harris, W. S., Gouda, M., Kolb, J. W., Strychacz, C. P., Vacek, J. L., Jones, P. G., Forker, A. O'keefe. J. H., & McCallister, B. D. (1999). A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit. Archives of Internal Medicine, 159, 2273-2278.

Harpham, T., & Blue, I. (1995). Urbanization and mental health in developing countries. Aldershot: Avebury.

Health Policy Coordinating Unit/ Department of Health. (1995). A policy for development of a district health system for South Africa. Pretoria: Health Policy Coordinating Unit/ Department of Health.

Helman, C. (1987). Heart disease and the cultural construction of time: The type A behaviour pattern as a western culture bound syndrome. Social Sciences and Medicine, 25, 969-979.

Helman, C. (1994). Culture health and illness: An introduction for health professionals (3rd ed.). Oxford: Butterworth-Heinemann.

Helman, C., & Kirmayer, L. J. (1988). Mind body as metaphors: Hidden values in biomedicine. In M. Lock & D. R. Gordon (Eds.), Biomedicine examined **(pp.57-93)**. London: Kluwer Academic Publishers.

Henbest, R. J., & Fehrsen, G. S. (1992). Patient-centredness: Is it applicable outside the west? Its measurement and effects on outcome. Family Practice, 9, 311-317.

Hepburn, S. J. (1988). W. H. R. Rivers Prize (1986): Western minds, foreign bodies. Medical Anthropology Quarterly, 2, 59-74.

Herran, A., Vazquez-Barquero, J. L., Artal, J., Garcia, J., Iglesias, C., Montejo, J., & Diez-Manrique, J. F. (1999). El reconocimieto de la enfermedad metal en Atencion Primaria y sus factores determinates. [The recognition of metal disease in primary health care and its determining factors]. Actas-Espana-Psiquiatrique [Abstract], 27, 87-95.

Herman, J. L. (1992). Trauma recovery. New York: Basic Books.

Hewson, M. G. (1998). Traditional healers in Southern Africa. Annals of internal Medicine, 128, 1029 –1034.

Higgins, E. S. (1994). A review of unrecognised mental illness in primary care. Archives of Family Medicine, 3, 908-917.

Hillerst, S., Sandmann, J., Ehmig, S. C., Weisbecker, H., Kepplinger, M. H., & Benkert, O. (1999). The general public's cognitive and emotional perception of mental illnesses: an alternative to attitudes-research. In J Guimón, W. Fischer, & N. Sartorius (Eds.), The image of madness: The public facing mental illness and psychiatric treatment **(pp. 56-71)**. Basel: Karger.

Hodges, B., Inch, C., & Silver. I, (2001). Improving the psychiatric skills and attitudes of primary care physicians, 1950-2000: A review. American Journal of Psychiatry 158, 1579-1586.

Holden, R.J, (1990) Models, muddles and medicine. International Journal of Nursing Studies, 27, 23-234.

Holzinger, A., Müller, P., Priebe, S., & Angermeyer, M. C. (2001a). Die Ursachen der Schizophrenia aus der Sicht der Angehörigen. [Etiology of schizophrenia from the viewpoint of family]. Psychiatrische Praxis [Abstract], 28 (3), 139-143.

Holzinger, A., Müller, P., Priebe, S., & Angermeyer, M. C. (2001b). Die Ursachen der Schizophrenia aus der Sicht der Patienten. [Etiology of schizophrenia from the viewpoint of patient]. Psychiatrische Praxis [Abstract], 28 (4), 174-179.

Horder, J. (1983). The Alma-Ata Declaration. British Medical Journal, 286, 191-194.

Høyersten, J. G. (1996). Som bessat! Noen historiske, psyckiatriske og aktuelle momemnter ved demonbesettelse (Possessed some historical, psychiatric and current moments of demonic possession). Tidsskift for Den Norse Laegeforing [Abstract], 113, 3602-3606.

Howe, A. (1998). Can GPs audit their ability to detect psychological distress? One approach and some unresolved issues. British Journal of General Practice, 48, 899-902.

Hunt, L. M., Arar, H. N., & Akana, L. L. (2000). Herbs, prayer and insulin. Use of medical alternative treatments by a group of Mexican, American Diabetes patients. The Journal of Family Practice, 49, 216-223.

Huysamen, G. K. (1994). Methodology for social and behavioural sciences. Southern: Halfway House.

Ignacio, L. L., De Arango, M. V., Baltazar, J., D' Arrigo Busnello, E., Climent, C. E., MB Diop, B. S., Alhakim, A., Farb, M., Gueye, M., Harding, T. W., Ibrahim, H. H. A., Srinivasa Murthy, R., & Wig, N. N. (1983). Knowledge and attitudes of primary health care personnel concerning mental health problems in developing countries. American Journal of Public Health, 73, 1081-1084.

Ingstad, B. (1989). Healer, witch, prophet or modern health worker? The changing role of Ngaka ya Setswana. In A. Jacobson-Widding & D. Westerlund (Eds.), Culture, Experience and pluralism **(pp.247-276)**. Stockholm: Almqvist & Wiskell.

Jablensky, A., Sartorius, N., Ernberg, G., Anker, M., Korten, A., Cooper, J. E., Day, R., & Berteseln, A. (1992). Schizophrenia: Manifestations, incidence, and course in different cultures. A World Health Organization ten-country study. Psychological Medicine, Monograph Supplement 20.

Jackson, G., Gater, R., Goldberg, D., Tantam, D., Loftus, L., & Tayler, H. (1993). A new community mental health team based in primary care. A description of service and its effects on service use in the first year. British Journal of Psychiatry, 162, 175-384.

Jenkins, R. (1985). Minor psychiatric morbidity in employed men and women and its contribution to sickness absence. British Journal of Industrial Medicine, 42, 147-154.

Jenkins, R. (1995). The national survey of psychiatric morbidity in Great Britain. Social Psychiatry & Psychiatry Epidemiology, 30, 1-4.

Jenkins, R. (1997a). Reducing the burden of mental illness. Lancet, 349, 1340.

Jenkins, R. (1997b). Nations for mental health. Social Psychiatry & Psychiatry Epidemiology, 32, 309-11.

Jenkins, R. (2001). World Health Day 2001: Minding the world's mental health. Social Psychiatry and Psychiatry Epidemiology, 36, 165-168.

Jenkins, R., Bebbinton, P., Brugha, T. S., Farrell, M., Lewis, G., Meltzer, H. (1998). British psychiatric morbidity survey. British Journal of Psychiatry, 48, 1734-1737.

Jenkins, R., & Üstün, T.B. (1998). Preventing mental illness: Mental health promotion in primary care. Chichester: Wiley.

Jenkins, R. & Strathdee, G. (2000). The integration of mental health care with primary care. International Journal of Law and Psychiatry, 23, 277-291.

Jorm, A. F. (2000). Mental health literacy. Public knowledge and beliefs about mental disorders. British Journal of Psychiatry, 177, 386-401.

Jorm, A. F., Korten, A. E., Rodgers, B., Jacomb, P. A., Christensen, H., & Jiao, Z. (1997). Beliefs system of the general public concerning the appropriate treatment for mental disorders. Social Psychiatry and Psychiatric Epidemiology, 32, 468-473.

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). Mental health literacy: A survey of the public's ability to recognise mental disorders and beliefs about the effectiveness of treatment. Medical Journal of Australia, 166, 182-186.

Jorm, A. F., Korten, A. E., Jacomb, P. A., Rodgers, B., Pollitt, P., Christensen, H., & Henderson, S. (1997). Helpfulness of interventions for mental disorders beliefs of health professionals compared with the general public. British Journal of Psychiatry, 171, 233-237.

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., & Henderson, S. (1999). Attitudes towards people with mental disorders: a survey of the Australian public and health professionals. Australian and New Zealand Journal of Psychiatry, 33, 77-83.

Jorm, A. F., Angemeyer, M., & Katschinig, H. (2000). Public knowledge of attitudes to mental disorders: A limiting factor in optimal use of treatment services. In G. Andrews & S. Henderson (Eds.), Unment need in psychiatry **(pp. 399-413)**. Cambridge: Cambridge University Press.

Jovel, E. M., Cabanillas, J., & Towers, G. H. N. (1996). An ethnobotanical study of traditional medicine of Mestizo people of Suni Miraño, Loreto, Peru. Journal of Ethnopharmacology, 53, 149-156.

Jurewicz, I., Owen, R. J., O' Donovan, M. C., & Owen, M. J. (2001). Searching for susceptibility gene in schizophrenia. European Neuropsychology: The Journal of the European College of Neuropsychopharmacology, 11, 395-398.

Kaliski, S. (1998). The Southern African Context. In E. Baumman (Ed.), Psychiatry and primary care. A practical guide for health care workers in Southern Africa **(pp.29-36)**. Cape Town: Juta & Co, Ltd.

Kaminer, D., Stein, D. J., Mbanga, I., & Zungu-Dirwayi, N. (2001). The truth and reconciliation commission in South Africa: relation to psychiatric status and forgiveness among survivors of human rights abuses. British Journal of Psychiatry, 178, 373-377.

Kane, J. M. (1999). Pharmacological treatment of schizophrenia. Biological Psychiatry, 46, 1396-1408.

Kane, J. (2000). Treatment of schizophrenia in the next decades. European Neuropsychology, 10,107.

Kaner, E. F. S, Haighton, C. A., & Mcavoy, B. (1998). 'So much post, so busy with practice-so, no time: A telephonic survey of general practitioners' reasons for not participating in postal questionnaire surveys. British Journal of General Practice, 48, 1067-1069.

Katon, W. J., Von Korff, M., & Lin, E. (1992). Panic disorder: relationship to high medical utilization. American Journal of Medicine, 92, 7S-11S.

Katon, W., Hall, M. L., Russo, J., Cormier, L., Hollified, M., Vitaliano, P. P., & Beitman, B. D. (1988). Chest pain; relationship of psychiatric illness to coronary artriographic results. American Journal of Medicine, 84, 1-9.

Karlsson, H., Joukamaa, M., & Lehtinen, V., (2000). Differences between patients with identified and not identified psychiatric disorders in primary care. Acta Psychiatrica Scandanavica, 102, 354-358.

Karterndahl, D. A., & Realini, J. P. (1995). Where do panic attacks sufferers seek care? Journal of Family Practice. 40, 237-43.

Kessler, R. C., Brown, R. L. & Broman. C. L. (1981). Sex differences in psychiatric help seeking: evidence from four large scale surveys. Journal of Health and Social Behaviour, 22, 49-64.

Kessler, L. G., Clearly, P. D., & Burke, J. D. (1985). Psychiatric disorders in primary care. Archives of General Psychiatry, 42, 583-587.

Kessler, R.C., McGonagle, K. A., Zhao, S., Nelson, C.B., Hughes, M., Eshleman, S., Wittchen, H.U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. Archives of General Psychiatry, 51, 8-19.

Kessler, R. C., Sonnega, A., Broment, E., Highes, M., & Nelson, C. (1995). Posttraumatic Stress Disorder in the national comorbidity survey. Archives of General Psychiatry, 52, 1048-1060.

Kessler, R. C., Stang, P. E., Wittchen, H. U., Üstün, T. B., & Walters, E. E. (1998). Lifetime panic depression comorbidity in the National Comorbidity Survey. Archives of General Psychiatry, 55, 801-808.

Kessler, R. C., Walter, E. E., & Forthofer, M. S. (1998). The social consequences of psychiatric disorders, III: Probability of Marital stability. American Journal of Psychiatry, 155, 1092-1096.

Kessler, R. C., Stang, P. E., Wittchen, H. U., Stein, M., & Walters, E. E. (1999). Lifetime comorbidities between social phobia and mood disorders in the US National Comorbidity Survey. Psychological Medicine, 29, 555-567.

Kessler, R. C. (2000). Posttraumatic stress disorder: the burden to the individual and to society. Journal of Clinical Psychiatry, 61, 4-12.

Kleinman, A., Eisenberg, L., & Good, B. (1978). Culture, illness and care. Annals of Internal Medicine, 88, 25-258.

Kleinman, A. (1986). Social origins of distress and disease: Depression, neurathenia, and pain in modern China. New Haven and London: Yale University Press.

Kleinman, A. (1987). Rethinking psychiatry. From cultural category to personal experience. Free Press: New York.

Kleinman, A. (1995). Do psychiatric disorders differ in different cultures? The methodological questions. In N. R. Golberg & J. B. Veroff (Eds.), The culture and psychology reader **(pp.631-651)**. New York: New York University Press.

Kleinman, A. (1996). How is culture important for DSM-IV. In J. E. Mezzich, A. Kleiman, H. Fabrega, & D. L. Parron, (Eds.), Culture and psychiatric diagnosis. A DSM IV perspective **(pp.15-29)**. Washington: American Psychiatric Press.

Kohn, R., Dohrenwend, B. P., & Mirotznik, J. (1998). Epidemiological findings on selected psychiatric disorders in the general population. In B. P. Dohrenwend (Ed.), Adversity, stress and psychopathology **(235-284)**. Oxford: Oxford University Press.

Korber, I. (1990). Indigenous healers in a future mental health system: A case for cooperation. Psychology in Society, 14, 47-62.

Kroenke, K. (2001). Depression screening is not enough. Annals of Internal Medicine [Editorial], 34, 418-420.

Kruger, D. (1978). Towards an understanding of Xhosa diviner. The Leech, 48 (20), 7-13.

Lamberg, L. (1996a). Psychiatry and primary care forge new bonds. The Journal of American Medical Association, 275, 1865-1866.

Lamberg, L. (1996b). Treating depression in medical conditions may improve quality of life. Journal of the American Association, 279, 857-8.

Lamberg, L. (1998). Social phobia- Not just another name for shyness. Medical news & perspectives. Journal of the American Medical Association, 280, 685-686.

Lamensdorf Offori-Att, M. A., & Linden, W. (1995). The effects of social change on causal beliefs of mental disorders and treatment preferences in Ghana. Social Science Medicine, 40, 1231-1242.

Lans, B. J., & Strauss C. L. (1995). Depression in general practice. South African Medical Journal, 85, 577-580.

Lauriello, J., Bustillo, J., & Keith, S. (1999). A critical review of research on psychosocial treatment of schizophrenia. Biological Psychiatry, 46, 1409-1417.

Lee, T., Price, M., & Allwood, C. W. (1995). The outpatient care of psychiatric patients in a rural area: Mhala District, Northern Transvaal. South African Medical Journal, 85, 571-576.

Lee, T., & Zwi, R. (1997). Mental health. In South African Health Review 1997 **(pp.153-163)**. Chapter 17. Internet edition: http: //www. healthlink.org.za/hst/sahr/97/chapt17.htm. Health Systems Trust: Durban.

Lee, T., Freeman, M., & Vivian, W. (1999a). Evaluation of mental health services in the Free State. Part I. Quality of outpatient care. The South African Journal of Medicine, 89, 302-305.

Lee, T., Freeman, M., & Vivian, W. (1999b). Evaluation of mental health services in the Free State. Part II. Training, attitudes, and practices of generalist psychiatric nurses. South African Journal of Medicine, 89, 306-310.

Lechnry, R. (1993). The cost savings of mental health service. EAP Digest, 22, 43.

Lecrubier, Y, & Ustun, T. B. (1998). Panic and depression: a worldwide primary care perspective. International Clinical Psychopharmacology, 13 (Suppl. 4), S7-S11.

Leff, J., Wig, N. N., Ghoshm, A., Bedi, A., Menon, D.K., Kuipers, L., Morten, A., Ernberg. G., Day, R., Sartorius, N., & Jablensky, A. (1987). Expressed emotion and schizophrenia in North India. III: Influences of relatives' expressed emotion on the course of schizophrenia in Chandigarh. British Journal of Psychiatry, 151, 166-173.

Leff, J., Satorious, N., Jablensky, A., Korten, A., & Ernberg, G. (1992). The international pilot study of schizophrenia: Five -year follow-up findings. Psychological Medicine, 22, 131-145.

Lehman, A. F., Steinwachs, D. M., & Co-investigators of the PORT Project, (1998). At issue: translating research into practice. The Schizophrenia Patient Outcome Research Team (PORT) treatment recommendations. Schizophrenia Bulletin, 24, 1-10.

Leon, A. C., Olfson, M., & Portera, L. (1997). Service utilization and expenditures for the treatment of panic disorder. General Hospital Psychiatry, 19, 82-88.

Le Roux, E. (1995). Report on press Conference held by the Minister of Health, Dr. Zuma. GP Bulletin, February, 18-19.

Leverich, G. S., Nolen, W. A., Rush, J., McElroy,S. L., Keck, Jr., P. E., Denicoff, K. D., Suppess, T., Altshuler, L. L., Kupka, R., Kramlinger, K. G., & Post, R. M. (2001). The Stanley foundation bipolar treatment outcome network I. Longitudinal methodology. Journal of Affective Disorders, 67, 33-44.

Lewis-Fernández, R., & Kleinman, A. (1996). Cultural formulation of psychiatric diagnosis. Culture, Medicine and Psychiatry, 20, 133-144.

Littlewood, R. (1996). Cultural comments on culture-bound syndromes. In J. E. Mezzich, A. Kleiman, H. Fabrega, & D. L. Parron (Eds.), Culture and psychiatric diagnosis. A DSM-IV perspective **(pp. 15-29)**. Washington: American Psychiatric Press.

Littlewood, R., & Lipsedge, M. (1997). Aliens and alienists: Ethnic minorities and psychiatry (3rd Ed.). London: Routledge.

Llody, S., Jenkins, R., & Mann, A. H. (1996). The long-term outcome of patients with neurotic illness in general practice. British Medical Journal, 313, 26-28.

Lolas, F. (1996). Theoretical medicine: A proposal for reconceptualizing medicine as a science of actions. The Journal of Medicine and Philosophy, 21, 659-670.

Lund, C., & Swartz, L. (1998). Xhosa speaking schizophrenic patients' experiences of their condition: Psychosis and amafufunyane. South African Journal of Psychology, 28, 62-70.

Lund, C., Flisher, A. J., Robertson, B. A., Lee, T., & Porteus, K. (2001). A model for estimating mental health service needs in South Africa. South African Journal of Psychiatry, 7, 23-28.

Maclachlan, M., Nyirenda, T., & Nyando, C. (1995). Attributions for admission to Zomba Mental Hospital: Implications for the development of mental health services in Zimbabwe. International Journal of Social Psychiatry, 41, 79-87.

Madionos, M. G., Economou, M., Hatjiandreou, M., Papageorgiou, A., & Rogakou, E. (1999). Changes in public attitudes towards mental illness in the Athens area (1979/ 1980-1994). Acta Psychiatrica Scandanavica, 99, 73-78.

Maj, M., Janssen, R., Starace, F., Zaudig, M., Satz, P., Sughondhabirom, B., Luabeya, M., Riedel, R., Ndetei, D., Calil, B., Bing, E. G., St Louis, M., & Sartorius, N. (1994). WHO neuropsychiatric AIDS study, cross-sectional phase I: Study design and psychiatric findings. Archives of General Psychiatry, 51, 39-49.

Makepeace, R. (1969). The history of psychiatry in South Africa. Canadian Psychiatry Association Journal, 14, 221-222.

Malik, M. L., Connor, K. M., Sutherland, S. M., Smith, R. D., Davidson, R. M., & Davidson, J. R. (1999). Quality of life and posttraumatic stress disorder: a pilot study assessing changes in

SF-36 scores before and after treatment in a placebo-controlled trial. Journal of Traumatic Stress, 12, 387-393.

Malaspina, D. (2001). Paternal factors and schizophrenia risk: de novo mutations and imprinting. Schizophrenia Bulletin, 27, 379-393.

Manning, J. S., Haykal, R. F., Connor, P. D., & Akiskai, H. S. (1997). On the nature of depressive anxious states in a family practice setting: the high prevalence of bipolar II and related disorders in a cohort followed longitudinally. Comprehensive Psychiatry, 38, 102-108.

Marais, A., de Villiers, P. J., Möller A. T. & Stein, D. J. (1999). Domestic violence in patients visiting general practitioners- prevalence, phenomenology, and association with psychopathology. South African Medical Journal, 89, 635-640.

Mari, J., & Williams, P. (1984). Minor psychiatric disorders in primary care in Brazil: a pilot study. Psychological Medicine, 14, 223-227.

Martinsen, E. W. (1994). Physical activity and depression: clinical experience. Acta Psychiatrica Scandanavica, 377, 23-27.

Martinson, N. A. (1997). Primary care continuity vs. segregation. South African Medical Journal, 87, 765-766.

Matschinger, H., & Angermeyer, M. (1996). Lay beliefs about cause of mental disorders a new methodological approach. Social Psychiatry and Psychiatric Epidemiology, 31, 309-315.

Mavundla, T. R., & Uys, L. R. (1997). The attitudes of nurses towards mentally ill people in a general hospital setting in Durban. Curationis, 20 (2), 37.

May, W. V. (1995). A case study of primary health care practice in selected urban area in South Africa. Curationis, 18, (2), 28-32.

Mbanga, N. I., Niehaus, D. J. H., Mzamo, N. C., Wessels, C. J., Allen, A., Emsley, R. A., & Stein, D. J. (1998). Attitudes towards and beliefs about schizophrenia in Xhosa families with affected probands. Paper presented at 10 Biannual Congress of the South African Psychiatrist Association. Helderfontein, Johannesburg. September, 1998.

Mbanga, I., Niehaus, D., Emsley, R., & Oosthuizen, P. (2001). Traditional psychopharmacology and culture –bound syndromes in a Xhosa schizophrenia population. Paper presented at the Psychopharmacology Congress 20-22 September, 2001, Spier Estate, Stellenbosch.

Mbanga, N. I., Niehaus, D. J. H., Mzamo, N. C., Hugo, C. J., Allen, A., Emsley, R. A., & Stein, D. J. (2002). Attitudes towards and beliefs about schizophrenia in Xhosa families with affected probands. Curationis, 25, 69-73.

McCoy, D. (1996). Free health care for pregnant women and children under six in South Africa. Unpublished report, Health Systems Trust, Durban.

McIntyre, D., & Gilson, L. (2002). Putting equity in health back onto the social policy agenda: experiences from South Africa. Social Science and Medicine, 54, 1637-1656.

McDonald, P. (1993). Response rates in general practice studies. British Journal of General Practice [Letter], 43, 484.

Mckeon, P., & Carrick, S. (1991). Public attitudes to depression: a national survey. Irish Journal of Psychological Medicine, 8, 116-121.

Mehl-Madrona, L. E. (1998). Frequent users of rural primary care comparisons with randomly selected users. Journal of American Board of Family Practices, 11, 105-115.

Mekwa, J. (2000). Transformation in nursing education. In The South African Health Review 2000 (pp. 271-284), Health Systems Trust, Durban.

Meltzer, H. Y. (2000). Genetics and etiology of schizophrenia and bipolar. Biological Psychiatry 47, 171-173.

Mendlowicz, M. V., & Stein, M. B. (2000). Quality of life in individuals with Anxiety disorders. American Journal of Psychiatry, 157 (5), 669-682.

Mental Health Care Bill (69) 2001. Government Gazette No. 22598 of 21 August 2001. Pretoria: Department of National Health.

Mezey, G., King, M., & MacClintock, T. (1998). Victims of violence and the general practitioner. British Journal of General Practice, 48, 906-908.

Michels, R. (2000). Psychiatric care and communities. Acta Psychiatrica Scandanavica, 101, 55-56.

Mickus, M., Colenda, C. C., & Hogan, A. J. (2000). Knowledge of mental health benefits and preferences for type of mental health providers among the general public. Psychiatric Service, 51, 199-202.

Miller, T., & Swartz, L. (1990). Clinical psychology in general hospital settings, Issues in interprofessional relationships. Professional Psychology: Research and Practice, 21, 48-53.

Miller, T., & Swartz, L. (1991). Integration or marginalization. Clinical psychology as a strategy for dealing with psychosocial issues in a South African neuro-surgery ward. Sociology of Health and Illness 13, 293-309.

Miller T., & Swartz, L. (1992). Psychology and epidemiology: An uncomfortable alliance. South African Journal of Psychology, 22, 52-58.

Mills, J. (1985). The possession state intwaso: An anthropological re-appraisal. South Africa Journal of Sociology, 16, 9-13.

Minister of Finance. (1998). Budget Speech (1997). Government Printers, Pretoria.

Mkize, D. L. (1998a). Amafufunyane - is it a cultural bound syndrome. South African Medical Journal, 88, 329-331.

Mkize, D. L. (1998b). Cross-cultural issues perspectives of psychiatry amongst blacks in South Africa. Specialist Medicine, XX (8), 7-12.

Mkize, D. L. (1998c). Traditional healing in a rural community in South Africa. Paper presented at the 10th Biennial Congress of the Society of psychiatrist of South Africa. Helderfontein Estate, Johannesburg, 7-11 September, 1998.

Mkize, D. L. (2001). Community aspects of psychopharmacology. Paper presented at the Psychopharmacology Congress 20-22 September, 2001, Spier Estate, Stellenbosch.

Mogoduso, T., & Butchart, A. (1992). Authoritarianism and autonomy, power, politics and alienated nursing care in South African primary health care system. South African Journal of Psychology, 22, 194-201.

Mogotsi, M., Kaminer, D., & Stein, D. J. (2000). Quality of life in the anxiety disorders. Harvard Reviews in Psychiatry, 8, 273-282.

Mokutu, M. P. (1998). Black clinical psychologist in the Western Cape: their perspective on their work. Unpublished masters thesis, University of Cape Town.

Morita. H., Suzuki, M., Suzuki, S., & Kamoshita, S. (1993). Psychiatric disorders in Japanese secondary school children. Journal of Child Psychology and Psychiatry, 34, 317-332.

Mouton, J. (2001). How to succeed in your master's and doctoral studies. A South African Guide and Resource Book. Pretoria: Van Schaik Publishers.

Mubbashar, M. H. (1999). Mental health services in rural Pakistan. In: Tansella M, Thornicroft G. (Eds.). Common mental disorders in primary care. London: Routledge.

Mubbashar, M. H., & Farooq, S. (2001). Mental health literacy in developing countries. British Journal of Psychiatry [Letter], 197, 75.

Mumford, D. B., Minhas, F. A., Akhtar, I., Akhter, S., & Mubbashar, M. H. (2000). Stress and psychiatric disorder in urban Rawalpindi. Community Survey. British Journal of Psychiatry, 177, 557-562.

Murray, C. J. L., & Lopez, A. D. (Eds.). (1996a). The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Cambridge, MA, Harvard School of Public Health on behalf of the World Health Organization and the World Bank (Global Burden of Disease and Injury Series, Vol. I).

Murray, C. J.L., & Lopez, A. D. (1996b). Global health statistics. Cambridge, MA, Harvard School of Public Health on behalf of the World Health Organization and the World Bank (Global Burden of Disease and Injury Series, Vol. II).

Murray C. J. L., & Lopez, A. D. (1997a). Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. Lancet, 349, 1498-1504.

Murray, C. J. L., & Lopez, A. D. (1997b). Global mortality, disability, and the contribution of risk factors: Global burden of disease study. Lancet, 349, 1436-1442.

Murray, C. J. L., & Lopez, A. D. (2000). Progress and directions in refining the global burden of disease approach: a response to Williams. Health Economics, 9, 69-82.

Murburg, M. M. (1994). Catecholamine function in PTSD: Emerging concepts. Washington, DC. : American Psychiatric Press.

Nady, S., Chalmers-Watson, C., Gantley, M., & Underwood, M. (2001). Referrals for minor mental illness: qualitative study. British Journal of General Practice, 51, 461-465.

Nair, M. G, & Pillay, S. S. (1997). Psychiatric disorder in a South African general hospital prevalence in medical, surgical and gynecological wards. General Hospital Psychiatry, 19, 144-148.

Nederbragt, H. (2000). The biomedical disciplines and the structure of biomedical and clinical knowledge. Theoretical Medicine and Bioethics, 21, 553-556.

Ng, S. L., Martin, J. L., & Romans, S. E. (1995). A community's attitudes towards the mentally ill. The New Zealand Medical Journal, 108, 505-508.

Ngubane, H. (1977). Body and mind in Zulu medicine: An ethonography of health and disease in Nyuswa-Zulu thought and practice. London: Academic Press.

Nolan, P., & Crawford, P. (1997). Towards a rhetoric of spirituality in mental health care. Journal of Advance Nursing, 26, 289-94.

O'Hara, M. W., Gorman, L.L., & Wright, E. J. (1996). Descriptive and evaluation of the Iowa depression awareness, recognition, and treatment program. American Journal of Psychiatry, 153, 645-649.

Orley, J., & Wing, J. K. (1979). Psychiatric disorders in two African villages. Archives of General Psychiatry 36, 513-526.

Orley, J., & Sartorious, N. (1986). Mental Illness in primary care in the developing countries. In M. Shepherd, G. Wilkinson, & P. Williams (Eds.), Mental Illness in primary care settings **(pp. 195-200)**. London: Tavistock Publications.

Orley, J., & Kuyken, W. (1994). Quality of life assessment: International perspectives. Basel: Springer-Verlag.

Orley, J., Saxena, S., & Herrman, H. (1998). Quality of life and mental illness: reflections from the perspective of WHOQOL. British Journal of Psychiatry, 172, 291-293.

Ormel, J., Lindenberg, S., Stevenrink, N., & Von Korff, M. (1997). Social Science Medicine, 45, 1051-1063.

Ormel, J., Van Den Brink, W., Koeter, M. W. J., Giel, R., Van der Meer, K., Van de Willige, G., & Wilmink, F. W. (1990). Recognition, management and outcome of psychological disorders in primary care: A naturalistic follow-up study. Psychological Medicine, 20, 909-923.

Ormel, J., Koeter, M. W. J., Van Den Brink, W., & Van de Willige, G. (1991). Recognition, management and course of anxiety and depression in general practice: A naturalistic follow-up study. Psychological Medicine, 20, 909-923.

Parker, G. B., & Brown, L. B. (1982). Coping that mediate between life events and depression. Archives of General Psychiatry, 39, 1386-1391.

Parker, G., Mahendran, R., Yeo, S. G., Loh, M. I., & Jorm, A. F. (1999). Diagnosis and treatment of mental disorders: a survey of Singapore mental health professionals. Social Psychiatry and Psychiatric Epidemiology, 34, 555-563.

Parry, C. D. H. (1996). A review of psychiatric epidemiology in Africa: Strategies for improving validity when using instruments transculturally. Transcultural Psychiatric Research Review, 33, 173-178.

Parry, C. D. H., & Swartz, L. (1997). Psychiatric epidemiology. In J, Katzenellenbogen, G Joubert, & S. S. Abdool-Karim (Eds.). Epidemiology: A manual for Southern Africa **(pp.230-242)**. Cape Town: Oxford University press.

Pastore, D. R., Fisher, M., & Friedman, S. B. (1996). Violence and mental health problems among high school students. Journal of Adolescent Health, 18, 320-324.

Pausnau, R. O. (1988). Consulation-liason psychiatric: progress, problems, and prospects. Psychosomatics, 29, 4-15.

Pausnau, R. O., & Bystritsky, A. (1990). An overview of anxiety disorders. Bulletin of the Menniger Clinics, 54, 157-70.

Pausnau, R. O. (1990). Darwin's illness: a biopsychosocial perspective. Psychosomatics, 31, 121-128.

Patel, V. (1995a). Spiritual distress: an indigenous model of non-psychotic mental illness in primary care in Harare, Zimbabwe. Acta Psychiatrica Scandanavica, 92, 103-107.

Patel, V. (1995b). Explanatory models of mental illness in Sub-Saharan Africa. Social Science Medicine, 40, 1291-1298.

Patel, V. (1998). Culture and common mental disorders in sub-Saharan Africa (Maudsley Monograph, No. 41). London: Psychology Press.

Patel, V. (2001). Poverty, inequality, and mental health in developing countries. In D. Leon & G. Walt (Eds.), Poverty, inequality and health: An international perspective **(pp. 247-261)**. Oxford, Oxford University Press.

Patel, V., & Winston, M. (1994) 'Universality of mental illness" revisited: Assumptions, artefacts and new directions. British Journal of Psychiatry, 165, 437-440.

Patel, V., Simunyu, E., & Gwazura, F. (1997). The pathways to primary mental health care in high-density suburbs in Harare, Zimbambwe. Social Psychiatry and Psychiatry Epidemiology, 32, 97-103.

Patel, A, & Knapp, M. R. J. (1998). Costs of mental illness in England. Mental Health Research Review, 5. 4-10.

Patel, V., Araya, R., de Lima, M., Ludermir A., & Todd, C. (1999). Women, poverty and common mental disorders in four restructuring societies. Social Science and Medicine, 49, 1461-1471.

Pearson, V. (1995). Goods on which one loses: women and mental health in China. Social Science and Medicine, 41, 1159-1173.

Peltzer, K.M, & Ebigbo, P. (Eds.) (1989). Clinical psychology in Africa. Enugu: Working Group of Psychology in Africa. Pena, J. M., & Koss-Chioino, J. D.

Peltzer, K. M. (1995). Psychology and health in African cultures: examples of ethnopsychotherapeutic practice. Frankfurt: IKO – Verlag Für Interkulturelle Kommunikation.

Penayo, U., Jacobsson, T., Caldera, T., & Bermann, G. (1988). Community attitudes and awareness of mental disorders. A key informant study in two Nicaraguan towns. Acta Psychiatrica Scandanavica, 78, 561-566.

Petersen, I. (1998). Comprehensive integrated mental health care in South Africa. The need for a shift in the discourse of care. South African Journal of Psychology, 28, 196-203.

Petersen, I. (1999). Training for transformation: Reorientating primary health care nurses for provision of mental health care in South Africa. Journal of Advanced Nursing, 30, 907-915.

Petersen, I. (2000a). Comprehensive Integrated primary mental health care for South Africa. Pipe dream or possibility. Social Science Medicine, 51, 321-334.

Petersen, I. (2000b). From policy to praxis: rethinking comprehensive integrated primary mental health care. Unpublished doctoral dissertation, University of Cape Town.

Petersen, I., & Parekh, A. (1996). Understanding minor psychiatric disorders. In I. Petersen, A. Bhangwanjee, A. Parekh, Z. Paruk, & H. Subedar (Eds.), Developing primary mental health care systems in Southern Africa: The case of KwaDedangendlale **(pp. 67-73)**. Durban: The community Mental Health Project, Department of Psychology, University of Durban Westville.

Petersen, I., Bhagwanjee, A., & Parekh, A. (2001). From policy to praxiz. A framework for the delivery of district mental health care in KwaZulu-Natal. South African Journal of Psychiatry, 6, 54-60.

Peterson, C., & Martin, C. (1998). Integrating methodologies in general practice research. Does it work. Australian Family Physician, 27 (Suppl. 1), S5-S6.

Perez-Stable, E. J., Miranda, J., Munoz, R. F, & Ying, Y. W. (1990). Depression in medical outpatients. Underrecognition and misdiagnosis. Archives of Internal Medicine, 150, 1083-8.

Perkonning, A., Kessler, R. C., Storz, S., & Wittchen, H-U. (2000). Traumatic events and posttraumatic stress disorder in the community: prevalence, risk factors and comorbidity. Acta Pyschiatrica Scandanavica, 101, 46-59.

Pillay, A. L., & Lockhat, M. R. (1997). Developing community mental health services for children in South Africa. Social Science Medicine, 45, 1493-1501.

Pillay, Y. G. (1993). Mental health policy: Options for South Africa. Curationis, 16, 50-53.

Pillay, Y. G., & Subedar, H, (1992). Primary mental health care indications and obstacles. Curationis, 15, 5-7.

Plummer, S. E., Ritter, S. A., Leach. R. E., Mann, A. H. & Gournay, K. J. (1997). A controlled comparison of the ability of practice nurses to detect psychological distress in patients who attend their clinics. Journal of Psychiatry and Mental Health Nursing, 4, 221-222.

Posse, M., & Hällström, T. (1998). Depressive disorders among somatizing patients in primary care. Acta Psychiatrica Scandanavica, 98, 187-192.

Preising, M., Bellivier, P. M., Fenton, B. T., Baud, P., Berney, A., Courtet, P. Hardy, P., Golaz, J., Leboyer, M., Mallet, J., Metthey, M. L. Mouthon, D., Neidhart, E., Nosten-Bertrand, M., Stadelmann-Dubuis, E., Guimón, J., Ferrero, F., Buresi, C., & Malafosse, A. (2000). Association between bipolar disorder and monoamine oxidase a gene polymorphism: results of a multicenter study. The American Journal of Psychiatry, 157, 948-955.

Priest, R. G., Vize, C., Roberts, A., Roberts, M., & Tylee, A. (1996). Lay people's attitudes to treatment of depression: results of an opinion poll for Defeat Depression Campaign just before its launch. British Medical Journal, 313, 858-859.

Rajkumar, S. (1991). Mental health services in India. Journal of Sociology and Social Welfare, 18 (2), 41-55.

Rashliesel, J., Scott, K., & Dixon, L. (1999). Co-occurring severe mental illness and substance abuse disorders: a review of recent research. Psychiatric Services, 50, 1427-1434.

Razali, S. M., Khan, U. A., & Hasanah, C. I. (1996). Belief in supernatural causes of mental illness among Malay patients: impact on treatment. Acta Psychiatrica Scandanavica, 94, 229-233.

Reeler, A. P. (1987). Psychological disorders in Africa II: Clinical issues. Central African Journal of Medicine, 33, 15-19.

Reeler, A. P., Williams, H., & Todd, C. H. (1993). Psychopathology in primary care patients: A 4 year study in rural and urban settings in Zimbabwe. Central African Journal of Medicine, 39, 1-7.

Regier, D. A., Goldberg, I. D., & Taube, C. A. (1978). The de facto US mental health services system: a public health perspective. Archives of General Psychiatry, 35, 685-93.

Regier, D.A., Boyd, J.H., Burke, J. D., Rae, D. S., Myers, J. K., Kramer, M., Robins, L. N., George, L. K., Karno, M., & Locke, B. Z. (1988). One-month prevalence of mental disorders in the United States. Based on five epidemiological catchment area sites. Archives of General Psychiatry, 45, 977-986.

Reynolds, J., & Swartz, L. (1993). Professional construction of a lay illness: Nerves in a rural Coloured community in South Africa. Social Science Medicine, 36, 657-663.

Reynolds, J. (1990). Nerves in Mamre: Somatization as communication. Unpublished honours project, Department of Psychology, University of Cape Town.

Rice, D. P., Kelman, S., Miller, L. S., & Dummeyer, S. (1990). The economic costs of alcohol and drug abuse and mental illness: 1985. Rockville, MD, Alcohol, Drug Abuse and Mental Health Administration (Publication No. (ADM) 90-1694).

Richardson, L. A., Keller, A. M., Selby-Harrington, M. L., & Parrish, R. (1996). Identification and treatment of children 's mental problems by primary care providers: A critical review of research. Archives of Psychiatric Nursing, X, 293-303.

Richardson, J., Feder, G., Eldridge, S. Chung, W. S., Coid, J., & Moorey, S., (2001). Women who experience domestic violence and women survivors of childhood sexual abuse: a survey of health professionals' attitudes and clinical practice. British Journal of General Practice, 51, 468-470.

Robertson, B. (1996). Handbook of child psychiatry for primary care. Oxford University press, Cape Town.

Robertson, B. & Freeman, M. (2001). World health day 2001 -' Mental health'. South African Medical Journal [Editorial], 91, 227-228.

Robertson, B., & Kottler, A. (1993). Cultural issues in the psychiatric assessment of Xhosa children and adolescents. South African Medical Journal, 83, 207-8.

Robertson, B., Zwi, R., Ensink, K., Malcom, C., Milligan, P., Motinho, D., & Uys, L. (1997). Psychiatric service provision. In D. Foster, M. Freeman, & Y. Pillay, (Eds.), Mental health policy issues for South Africa (pp. 69-93). Cape Town: Medical Association of South Africa: Multimedia Publications.

Roy-Byrne, P. P., Stein, M. B., Russo, J., Mercier, E., Thomas, R., Mcuid, J., Katon, W. J., Craske, M.G., Bystritsky, A., & Sherbourne, C. D. (1999). Panic disorder in the primary care

setting: Comorbidity, disability, service utilization, and treatment. Journal of Clinical Psychiatry, 60, 492-499.

Rumble, S., Swartz, L., Parry, C., & Zwarestein, M. (1996). Prevalence of psychiatric morbidity in an adult rural population of rural South African Village. Psychological Medicine, 30, 189-197

Sabelli, H. C., & Carlson-Sabelli, L. (1989). Biological priority and psychological supremacy. A new integrative paradigm derived from process theory. American Journal of Psychiatry 146, 1541-1551.

Sartorius, N., Ustun, B., Costa e Silva, J., Golberg, D., Lecruier, Y., Ormel, J., Von Korff, M., & Wittchen, H. (1993). An international study of psychological problems in primary care. Preliminary report from the World Health Organization collaborative project on psychological problems in general health. Archives of General Psychiatry, 50, 819-824.

Sartorius, N. (1997) Psychiatry in framework of primary health care: a threat or boost to psychiatry. American Journal of Psychiatry, 154, 67-72.

Sartorius, N. (1992). Comment on "prognosis for schizophrenia in the Third World', by Alex Cohen. Culture, Medicine and Psychiatry, 16, 81-84.

Sartorius, N., & Harding, T. W. (1983). The WHO collaborative study on strategies for extending mental health care, I: The genesis of the study. American Journal of Psychiatry, 140, 1470 –1473.

Sauriol, L., Laporta, M., Edwardes, M. D., Deslandes, M., Ricard, N., & Suissa, S. (2001). Meta-analysis comparing newer antipsychotic drugs for the treatment of schizophrenia: evaluating the indirect approach. Clinical Therapeutics, 23, 942-956.

Schneider, H., Malumane, L., Ngwenya, S., & Blackett-Sliep, Y. (1989). The training of primary care nurses. Nursing RSA – Verpleeging, 4, 37-38.

Schulberg, H. C., & Burns, B. J. (1988). Mental disorders in primary care: Epidemiological, diagnostic, and treatment research direction. General Hospital Psychiatry, 10, 79-87.

Schurmans, K., & McCrank, E. (1997). Benefits of a nurse-psychiatrist collaborative practice in an anxiety disorders unit. Journal of Psychosocial Nursing, 35, 26-31.

Schwindack, R. M., Gagiano, C. A., & Joubert, G. (1995). Occurrence of major depression and generalized anxiety disorder in patients suffering from chronic pain. South African Medical Journal, 85, 1384-1390.

Seedat, S., van Nood, E., Vythilingum, B., Stein, D. J., & Kaminer, D. (2000). School survey of exposure to violence and posttraumatic stress symptoms in adolescents. Southern African Journal of Child and Adolescent Mental Health, 12, 38-43.

Seedat, S., Lockhat, R., Kaminer, D., Zungu-Dirwayi, N., & Stein, D. J. (2001). An Open trial of citalopram in adolescents with post-traumatic stress disorder. International Clinical Psychopharmacology, 16, 2-25.

Sellick, K., & Goodear, J. (1985). Community attitudes towards mental illness: The influence of contact and demographic variables. Australian and New Zealand Journal of Psychiatry, 19, 293-298.

Sevigny, R., Yang, W., Zhang, P., Marleua, J. D., Yang, Z., Su, L., Li, G., Xu, D., & Wang, H. (1999). Attitudes toward the mentally ill in a sample of professionals working in a psychiatric hospital in Beijing (China). International Journal of Social Psychiatry, 45, 41-55.

Shah, A., & Jenkins, R. (2000). Mental health economics studies from developing countries reviewed in the context of those from developed countries. Acta Psychiatrica Scandanavica 101, 87-103.

Shaw. J., & Creed, F. (1991). The cost of somatization. Journal of Psychosomatics Research, 35, 307-312.

Shaw, J., Kennedy, S. H., & Joffe, R. T. (1995). Gender differences in mood disorders: A clinical focus. In M. V. Seeman (Ed.). Gender and psychopathology **(pp. 89-111)**. Washington, D. C.: American Psychiatric Press.

Shezi, E. N., & Uys, L. R. (1997). Culture bound syndrome in a group of Xhosa with psychiatric disorders. Curationis, 20, 3-7.

Sibbald, B., Addington-Hall, J., Brenneman, D., & Freeling, P. (1994). Telephone versus postal survey of general practitioners: methodological consideration. British Journal of General Practice, 44, 297-300.

Simon, G., Ormel, J., Von Korf, M., & Barlow, W. (1995). Health care associated with depressive and anxiety disorders in primary care. American Journal of Psychiatry, 153, 353-357.

Simon, G. E., Ormel, J., Von Korf, M., & Durham, M. L. (1994). Predictors of outpatient mental health utilization by primary care patients in a health maintenance organization. American Journal of Psychiatry, 151, 908-913.

Singleton, A., & Tylee, A. (1996). Continuing medical education in mental illness: a paradox for general practitioners. British Journal of General Practice, 46, 339-341.

Skinner, D., & Swartz, L. (1989). The effects of a parent's detention on the preschool child: A preliminary South African study of caregivers' reports. Journal of Child Psychology and Psychiatry, 30, 243-259.

Slimmer, L. W., Wendt, A., & Martinkus, D. (1990). Effects of psychiatric clinical learning site on the nursing students' towards mental illness and psychiatric nursing. Journal of Nursing Education, 29, 127-133.

Smeeth, L. (2001). Why inequalities in health matter to primary care. British Journal of General Practice, June, 436-437.

Smith, G. R. (1994). The course of somatization and its effects on utilization of health care resources. Psychosomatics; 35, 263-267.

Smoyak, S. A. (2000). The history, economic and financing of mental health care. Part 2: The 20th Century. Journal of Psychosocial Nursing, 38, 26-37.

Sokhela, N. E. (1999). The integration of comprehensive psychiatric / mental health care into the primary health system: diagnosis and treatment. Journal of advanced Nursing, 30, 299-237.

Spiro, M. (1991). Illness models of realities of African psychiatric patients: Implications for a family -based services. Unpublished masters thesis, University of Cape Town.

Sullivan, M. (1986). In what sense is contemporary medicine dualistic. Culture, Medicine and Psychiatry, 10, 331-30.

Stabb, J., Evans, D. L., & Meltzer, R. E. (2001). A streamed line method for diagnosing common psychiatric disorder in primary care. Clinical Cornerstone, 3 (3), 1-9.

Steen, T. W., & Mazonde, G. N. (1993). Ngaka ya setwana, ngaka ya sekgoa or both. Health seeking behaviour in Bastwana with pulmonary tuberculosis. Social Science Medicine 48, 163-172.

Stein, D. J. (1993). Cross-Cultural psychiatry and the DSM-IV. Comprehensive Psychiatry, 34, 322-329.

Stein, D. J., Emsely, R., & Seedat, S. (1998). Psychiatric medications in primary care. Algorithms and guidelines. Times Media: South Africa.

Stein, D. J., Wessels, C., Zungu-Dirwayi, N., Berk, M., & Wilson, Z. (1999). Value and effectiveness of consumer advocacy groups: A survey of anxiety disorders support group in South Africa. Journal of Depression and Anxiety, 13,105-107.

Stein, D. J., Zungu-Dirwayi, N., van Der Linden G. J., & Seedat, S. (2000). Pharmacology of posttraumatic stress disorder. Cochrane Data Base System Review 2000, CD002795.

Stein, D. J., Zungu-Dirwayi, N., van der Linden, G. H., & Seedat, S. (2001). SSRIs and tricylic antidepressants increase response rates in post-traumatic stress disorder in the short term. Evidence Based Mental Health, 4, 54.

Stein, M. B., Asmundson, G. J. G., Ireland, D., & Walker, J. R. (1994). Panic disorder in patients attending a clinic for vestibular disorders. American Journal of psychiatry, 151, 1697-1700.

Steinhausen, H. C., Winkler, C., Metzke, C. W., Meier, M., & Kannenberg, R. (1998). Prevalence of child and adolescent psychiatric disorders: The Zurich Epidemiological Study. Acta Psychiatrica Scandinavica, 98, 262-271.

Strathdee, G., Jenkins, R., Carr, S., & Rawaf, S. (1999). Equity in mental health. What public practitioners should do. Public Health Medicine, 2, 61-67.

Strathdee, G., & Jenkins, R. (1996). Purchasing mental health care for primary care. In G. Thornicraft & G Strathdee (Eds.), Commissioning mental health services **(pp. 71-83)**. London: HMSO.

Swan, J. (1999). Wearing two hats. Consumer and provider. Journals of Psychosocial Nursing, 37, 20-24.

Swartz, L., & Foster, D. (1984). Images of culture and mental illness: South African psychiatric approaches. Social Dynamics, 10, 17-25.

Swartz, L. (1985). Issues for cross-cultural psychiatric research in South Africa. Culture Medicine and Psychiatry, 9, 59-74.

Swartz, L. (1986). Transcultural psychiatry in South Africa. Part I. Transcultural Psychiatric Research Review, 23, 273-301.

Swartz, L. (1987). Transcultural psychiatry in South Africa. Part II. Cross cultural issues in mental health practice. Transcultural Psychiatric Research Review, 24, 5-30.

Swartz, L.(1989). Aspects of culture in South Africa psychiatry. Unpublished Ph. D. thesis, University of Cape Town.

Swartz, L. (1991). The reproduction of racism in South African mental health care. Southern African Journal of Psychology, 21, 240-246.

Swartz, L. (1995). The politics of culture and mental illness: The case of South Africa. In I. AlIssa (Ed.) Handbook of culture and mental illness: An international perspective (pp.73-91). Madison: International Universities Press

Swartz, L. (1996a) Culture and mental in a rainbow nation. Transcultural Psychiatric Research Review, 33, 119-139.

Swartz, L. (1996b). Crossing or creating boundaries: challenges in clinical psychology in the community. Inaugural lecture. Cape Town: University of Cape Town.

Swartz, L. (1998). Culture and mental health. A Southern African perspective. Cape Town: Oxford University Press.

Tadesse, B., Kebede, D., Tegegne, T., & Alem, A. (1999). Childhood behavioural disorders in Ambo district, Western Ethopia: I. Prevalence estimates. Acta Psychiatrica Scandanavica, 100, 92-97.

Taubman-Ben-Ari, O., Rabinowitz, J., Feldman, D. & Vaturi, R. (2001). Posttraumatic stress disorder in primary-care settings: prevalence and physicians' detection. Psychological Medicine, 31, 555-560.

Taylor, M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. Schizophrenia Bulletin , 7, 225-240.

Temple-Smith, M., Mulvey, G., & Doyle, W. (1998). Maximising response rates in a survey of general practitioners: Lessons from a Victorian survey on sexually transmissible disease. Australian Family Physician, 27 (Suppl. 1), S15-S18.

Thanker, G. K., & Carpenter, W. T. Jr. (2001). Advances in schizophrenia. Nature Medicine, 7, 667-671.

Thipanyana, M., & Mavundla, T. R. (1998a). Part 1. The provision of health care in two rural district of the Eastern Cape Province with particular reference to human resources and accessibility. Curationis, June, 23-26.

Thipanyana, M., & Mavundla, T. R. (1998b). Part 2. The provision of health care in two rural district of the Eastern Cape Province with particular reference to human resources and accessibility. Curationis, June, 26-31.

Thom, R. G. M., Zwi, R., & Reinach, S. G. (1993). The prevalence of psychiatric disorders at a primary care clinic in Soweto, Johannesburg. South African Medical Journal, 83, 654-655.

Tiemens, B. G., Ormel, J., & Simon, G. E. (1996). Occurance, recognition, and outcome of psychological disorders in primary care. American Journal of Psychiatry, 153, 634-644.

Tsaung, M. (2000). Schizophrenia: Genes and environment. Biological Psychiatry, 47, 210-220.

Tshotsho, N. M. Z., & Strumpher, J. (1996). Assessment of Xhosa psychiatric patients using the transcultural approach. Curationis, 29, 63-66.

Trauma Centre for Survivors of Violence and Torture. (1991). Early one Sunday morning. The psychological impact of the affected people of Gugulethu, Manenburg, Tambo Village and Surrey Etstate. A report on a survey focusing on the levels of traumatic symptomatology amongst the survivors of the tornado, followed by a discussion of the observations made by the counselling team. Trauma Centre for Survivors of Violence and Torture, unpublished report.

UK 700 Group. (1999). Predictors of quality of life in people with severe mental illness. British Journal of Psychiatry, 175, 426-432.

U S Department of Health and Human Services, Public Health Service and, Agency for Health Care Policy and Research. (1993). Depression in primary care: Detection, diagnosis and treatment. Journal of Psychosocial Nursing, 31, 19-28.

Üstün, T. B., & Sartorius, N. (1995). Mental illness in general health care: An international study. Chichester: John Wiley & Sons.

Uys, L. R. (2000). The evaluation of public psychiatric service in three provinces of South Africa. South African Medical Journal, 90, 626-630.

Uys, R., Sokhela, E., & Mkize, D. (1996). The integration of psychiatric / mental health care into the primary health care into the primary health care system: Implementation and evaluation of a phased approach. Unpublished report to the health Systems Trust.

Valestein, M., Vijan, S., Zeber, J. E., Boehm, K., & Buttar, A. (2001). The cost-utility of screening for depression in primary care. Annals of Internals Medicine, 134, 345-360.

Van Rensburg, D., Viljoen, R., Heunis, C., Van Rensburg, E. J., & Fourie, A. (2000). Primary health care facilities survey. In The South African Health Review (pp. 3-50). Health Systems Trust: Durban.

Vazquez-Barquero, S., Herrera, C. S, Artal, J. J, Cuesta, N. J., Gaite, L., Goldberg, D., & Sartorius N. (1993). Pathways to psychiatric care in Cantabria. Acta Psychiatrica Scandanavica, 88, 229-234.

Vazquez-Barquero, J. L, García, J., Simón, J. A., Iglesias, C., Montejo, J., Herran, A., & Gunn, G. (1997). Mental health in primary care. An epidemiology study of morbidity and use of health resources. British Journal of Psychiatry, 170, 529-535.

Vicent, J. B., Masellis, M., Lawrence, J., Choi, V., Gurling, H. M., Parikh, S. V., & Kennedy, J. L. (1999). Genetics association analysis of serotonin system genes in bipolar affective disorder. The American Journal Psychiatry, 156, 136-138.

Vogelman, L. (1986). Apartheid and mental health. Proceedings of Organization for Appropriate Social Services in Southern Africa 'Apartheid and Mental" Conference (pp.3-12). Johannesburg: OASSSA.

Walburn, J., Gray, R., Gournay, K., Quraishi, S., & David, A. S. (2001). Systematic review of patient and nurse attitudes to depot antipsychotic medication. British Journal of Psychiatry 179, 300 -307.

Wells, J. E., Bushnell, J. A., Hornblow, A. R., Joyce, P. R., & Oakley-Browne, M. A. (1989). Christchurch psychiatric epidemiology Study. Part I: Methodology and lifetime prevalence for specific psychiatric disorders. Australian and New Zealand Journal of Psychiatry, 23, 315-326.

Westernberg, H. G. M. (1998). The nature of social anxiety disorder. Journal of Clinical Psychiatry, 59, 20-24.

Wessels, C., Boshoff, E.L.D., Traut, A., Zungu-Dirwayi, N., Mbanga, I., & Stein, D. J. (1998). Community knowledge of and attitudes toward mental illness. Poster presented at the 10 Biennial Congress of the Society of Psychiatrists of South Africa, Helderfontein Estate, Johannesburg, 7-11, September, 1988.

Wessels, C., Boshoff, E.L.D., Traut, A., Zungu-Dirwayi, N., Mbanga, I., & Stein, D. J. (1999). Community attitudes to psychotropics: A South African survey. Paper presented at the Biennial meeting of the South Africa Society of Biological Psychiatrists. Psychopharmacology into the New Millennium. Stellenbosch May, 1999.

Wessels, C., Boshoff, E.L.D., Traut, A., Zungu-Dirwayi, N., Mbanga, I., & Stein, D. J. (in press) Community knowledge of and attitudes toward mental illness. East African Medical Journal.

Wessels, W. H. (1985). Understanding culture-specific syndromes in South Africa-the Western dilemma. Modern Medicine of South Africa, 10, 51-63.

Westway, M. S., & Wolmarans, L. (1995). Well-being as perceived by black South African residents of an urban informal settlement area. South African Journal of Medicine, 85, 1372-1378.

Weyerer, S., Castell, R., Biener, A., Artner, K., & Dilling, H. (1988). Prevalence and treatment of psychiatric disorders in 3-14-year-old children: results of a representative field study in the small rural town region of Traunstein, Upper Bavaria. Acta Psychiatrica Scandinavica, 77, 290-296.

White Paper for Transformation of Health System in South Africa. (1997). Government Gazette Vol.383, No. 17910, Notice 667, Pretoria.

Whooley, M. A., Avins, A. L., Miranda, J., & Browner, W. S. (1997). Case finding instruments for depression. Two questions are as good as many. Journal of General Internal Medicine, 12, 439-45.

William, M. (1990). GPs' and CPN's attitudes to schizophrenia. Nursing Times, 86, 53.

Williams, J. W. Jr, Mulrow, C. D., Kroenke, K., Dhanda, R., Badgett, R. G., Omori, D., & Lee, S. (1999). Case finding for depression in primary care: a randomized trial. American Journal of Medicine, 106, 36-43.

Wohlfartth, T. D., van den Brink, W., Ormel, J., Koeter, M. W. J., & Oldehinkel, A. J. (1993). The relationship between social dysfunctioning and psychopathology among primary care attenders. British Journal of Psychiatry, 163, 37-42.

Wolff, G., Pathare, S., Craig, T., & Leff, J. (1996a). Community attitudes to mental illness. British Journal of Psychiatry, 168, 183-190.

Wolff, G., Pathare, S., Craig, T., & Leff, J. (996b). Community attitudes to mental illness. British Journal of Psychiatry, 168, 191-198.

World Health Organization. (1978). Alma-Ata (1978) Primary health care. Geneva: WHO.

World Health Organization. (1990). The introduction of mental health into primary health care. Geneva: WHO.

World Health Organization. (1992). ICD-10 classification of mental and behavioral disorders (ICD-10). Geneva: WHO.

World Health Organization. (1997). An overview of a strategy to improve the mental health of underserved populations. Geneva: World Health Organization.

World Health Organization. (1998). Diagnosis and management of mental disorders in primary care. Geneva: World Health Organization.

World Health Organization. (1999). Strengthening community mental health services and primary care. Community mental health services and primary care. Fact sheet 219 p1-2, Geneva: WHO.

World Health Organization. (2001a). WHO's Contribution to the world conference against racism, racial discrimination, xenophobia and related intolerance. Health and Human Rights Publication Series, issue No.2, August 2001. Geneva: WHO

World Health Organization. (2001b). World Health Report 2001. Geneva: WHO.

Wright, F. A., & Anderson, A. J. B. (1995). Newly identified psychiatric illness in one general practice: 12 – month outcome and the influence of patients's personality. British Journal of General Practice, 45, 83-87.

Yehuda, R. (1999). Biological factors associated with susceptibility to Posttraumatic Stress Disorder. Canadian Journal of Psychiatry, 44, 34-39.

Yehuda, R., Giller, E. L., Southwick, S. M., Lowly, M. T., & Mason, J. W. (1994). Hypothalamic-pituitary-adrenal dysfunction in PTSD. Biological Psychiatry, 30,1031-1048.

Yehuda, R., & McFarlane, A. C. (1995). Conflict between current knowledge about posttraumatic stress disorder and its original concept basis. The American Journal Psychiatry, 152, 1705-1713.

Zabow, T. (1995). The remedicalisation of psychiatry. South Africa Medical Journal, 85, 569-570.

Zaubler, T. S, & Katon, W. (1996). Panic disorder and medical comorbidity: a review of the medical and psychiatric literature. Bulletin of the Menniger Clinics, 60, (Suppl. 2A), A12-38.

Zimmerman, M., McDermut, W., & Mattia, J. I. (2000). Frequency of anxiety disorders in psychiatric outpatients with major depressive disorder. American Journal of Psychiatry, 157, 1337-1340.

Zung, W.W.K., Magill, M., Moore, J. T., & George, D. T. (1983). Recognition and treatment of depression in a family medicine practice. Journal of Clinical Psychiatry, 44, 3-6.

Zungu-Dirwayi, N., Kaminer, D., Mbanga, I., & Stein, D. J. (2000). The psychiatric sequelae of human rights violations: A challenge for primary health care. Paper presented at the 11th Biennial Congress of the Society of Psychiatrists of South Africa, Durban. September, 2000

APPENDIX A

PRIMARY HEALTH CARE QUESTIONNAIRE

INTRODUCTION FOR PARTICIPANTS

Dear Participant

I am Nompumelelo Zungu-Dirwayi. I am a Masters Student at the University of Cape Town and working as a researcher at an MRC Unit . I am conducting a study on primary health care. I am interested in your opinions and experiences in your clinic. This study will be conducted in the primary health care clinics in the Western Cape.

The information gathered will enable us to document your experiences and opinions. Such information can assist in planning for interventions and maybe used to influence policies with regards to primary care. The results of the study will be made available to participants. A thesis will also be written and papers for publication in research journals.

While I will be asking your demographic details, no information given can identify you and all information will be treated as confidential. I have enclosed an envelope with this questionnaire, please put your completed questionnaire in the envelope and seal it to ensure privacy. All completed questionnaires should be given to the sister-in-charge. You have a right not to participate in this study if you prefer not to, but please return the questionnaire in any event.

The questionnaire is divided into three sections and should take between 15-30 minutes to complete. Section one requires demographic details about yourself ; section two requires your opinion about the cause and management of an illness; and section three comprises a belief scale. There is no wrong or right answer in any of these questionnaires; I am interested in your opinions and beliefs and request that you answer the questions as honestly as possible.

Should you have any question about the study or anything related to this study please feel free to contact me at 938-9162 (w). Thank you for your time and co-operation.

I will be happy to give you feedback at the end of the study.

SECTION 1
Demographic characteristics

1. What is your occupation?

1. Enrolled nurse assistant
2. Enrolled nurse
3. Professional nurse
4. Senior professional nurse
5. Chief professional nurse
6. Nursing service manager
7. Deputy director
8. Other (please specify)_____

1.1 How many years have you been in practice?_____

2. In which age group are you presently?

1 20 –30 2 31 – 40 3 41 – 50
4 51 – 60 5 Over 60

3. Gender

1. Male 2. Female

4. What is your home language?

1 Afrikaans 2 English
3 Xhosa 4 other_____

5. Where is your clinic situated? _____

6. What is the highest standard or qualification passed?

1. Std 8 **2. Std. 10** **3 Nursing Diploma** **4. Nursing Degree**

6.1 Apart from your primary professional qualification, have you studied for any postgraduate course/s?

1 Yes 2 No

6.2 If yes please list them:

_____

_____

6.3. What is your area of specialization

1. Primary health care nursing
2. Psychiatric nursing
3. Community health nursing science
4. Nursing administration
5. Other_____

SECTION 2

Instructions: Before answering the questionnaire please read the case study and base your answers on the case study. Please respond to each question by circling the appropriate number.

1= definitely yes 2= probably yes 3= unsure
4= probably no 5= definitely

7. From the information given on the case study, what, if anything, is wrong with this person?

_____

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
7.1 Was this a normal response?	1	2	3	4	5
8. Is this a weak character?	1	2	3	4	5
9. Is this an emotional problem?	1	2	3	4	5
10. Is this a spiritual problem?	1	2	3	4	5
11. Is this a medical disorder?	1	2	3	4	5

Causes

What could have caused the behaviour of the person described in the case study?

(Rate each of the possible causes on the provided scale)

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
12. Difficulties in partner or family relationships	1	2	3	4	5
13. Work difficulties	1	2	3	4	5
14. Stressful life event	1	2	3	4	5
15. Brain disease	1	2	3	4	5
16. Heredity	1	2	3	4	5
17. Weak body	1	2	3	4	5
18. Lack of will power	1	2	3	4	5
19. Expecting too much of oneself	1	2	3	4	5
20. Unconscious conflict	1	2	3	4	5
21. Growing up in a broken home	1	2	3	4	5
22. Lack of parental affection	1	2	3	4	5
23. Overprotective parents	1	2	3	4	5
24. Loss of traditional values	1	2	3	4	5
25. Decay of natural ways of life due to modern society	1	2	3	4	5
26. Exploitation brought about by current society	1	2	3	4	5
27. Will of God	1	2	3	4	5
28. Witchcraft, possession by evil spirits	1	2	3	4	5
29. Signs of the Zodiac or other spiritual	1		3	4	5

Management

On the provided scale, please indicate the degree to which you favour or oppose the following methods of treatment for the person in the case study

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
30. Relaxation techniques	1	2	3	4	5
31. Pull oneself together	1	2	3	4	5
32. Talk it over	1	2	3	4	5
33. Exercise	1	2	3	4	5
34. Natural cures	1	2	3	4	5
35. Meditation/ Yoga	1	2	3	4	5
36. Psychotherapy	1	2	3	4	5
37. Psychotropic drugs	1	2	3	4	5
38. Pray for him/ her	1	2	3	4	5
39. Take him or her to a traditional/ alternative healer	1	2	3	4	5
40. Advise the person to consult a GP	1	2	3	4	5
41. Advise the person to go to a hospital/ clinic	1	2	3	4	5
42. Advise the person to see a psychiatrist/ psychologist	1	2	3	4	5

Medication treatment

Indicate on the given scale how you feel about the use of psychotropic medication in this case study

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
43. Drug treatment is the best way of treating this person	1	2	3	4	5
44. Drug treatment is the most reliable way of preventing relapse here	1	2	3	4	5
45. Drug treatment is mostly likely to bring about rapid improvement here	1	2	3	4	5
46. In a more severe case, drug treatment would be the only proper treatment	1	2	3	4	5
47. The benefit brought about by drug treatment far outweighs the risk associated with it in this case	1	2	3	4	5
48. The cause of this condition cannot be dealt with by drug treatment	1	2	3	4	5

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
49. Drug treatment can only calm this patient down	1	2	3	4	5
50. Taking drugs helps one to see everything through rose-tinted spectacles, leaving basic problems unchanged	1	2	3	4	5
51. Psychotropic drugs (psychiatric medication) carry high risk of dependency	1	2	3	4	5
52. If taken for long, these drugs can cause irreversible brain damage	1	2	3	4	5
53. In the end psychotropic drugs make one even more ill than one was before	1	2	3	4	5

Psychotherapy

Indicate on the given scale how you feel about psychotherapy in this case study

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
54. Psychotherapy (talk therapy) is the best way of treating this person	1	2	3	4	5
55. Psychotherapy is the most reliable way of preventing relapse	1	2	3	4	5
56. Psychotherapy is most likely to bring about rapid improvement	1	2	3	4	5
57. In a more severe presentation of mental illness, psychotherapy would be the only proper treatment	1	2	3	4	5
58. The benefit brought about by the psychotherapy far outweighs the risk associated with it	1	2	3	4	5
59. The cause of this condition cannot be dealt with by psychotherapy	1	2	3	4	5
60. Psychotherapy can only calm this patient down	1	2	3	4	5
61. Psychotherapy helps one see everything through rose tinted spectacles, leaving basic problem unchanged	1	2	3	4	5
62. Psychotherapy has a high risk of patients becoming dependent on the therapist	1	2	3	4	5
63. In the end psychotherapy makes one even more ill than one was before	1	2	3	4	5

Traditional / Alternative healing

Indicate on the given scale how you feel about traditional or alternative healing in this case study

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
64. Traditional / alternative healing is the best way of treatment this person	1	2	3	4	5
65. Traditional / alternative healing is the most reliable way of preventing relapse	1	2	3	4	5
66. Traditional/ alternative healing is most likely to bring about rapid improvement	1	2	3	4	5
67. In a more severe presentation of mental illness, traditional/ alternative healing would be the only proper treatment	1	2	3	4	5
68. The benefit brought about by the traditional/ alternative healing far outweighs the risks associated with it	1	2	3	4	5
69. The cause of this condition can not be dealt with by traditional/ alternative healing	1	2	3	4	5
70 Traditional/ alternative healing can only calm patients down	1	2	3	4	5
71. Traditional / alternative healing helps one to see everything through rose tinted spectacles, leaving basic problems unchanged	1	2	3	4	5
72. Traditional/ alternative healing has a high risk of patient becoming dependent on the healer	1	2	3	4	5
73. In the end traditional/ alternative healing makes one even more ill than one was before	1	2	3	4	5

****

You have now finished completing section 2 of this questionnaire. The next section is section 3, which is a scale on beliefs. As already mentioned above there are no wrong or right answers I am interested in your opinions.

SECTION 3

BELIEFS

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
1. One of the main causes of mental illness is lack of self-discipline and will power	1	2	3	4	5
2. The best way to handle the mentally ill is to keep them behind locked doors	1	2	3	4	5
3. There is something about the mentally ill that makes it easy to tell them from normal people	1	2	3	4	5
4. As soon as a person shows signs of mental disturbance, he should been hospitalized	1	2	3	4	5
5. Mental patients need the same kind of control and discipline as a young child	1	2	3	4	5
6. Mentally illness is an illness like any other	1	2	3	4	5
7. The mentally ill should not be treated as outcasts of society	1	2	3	4	5
8. Less emphasis should be placed on protecting the public from the mentally ill	1	2	3	4	5
9. Mental hospital are an outdated means of treating the mentally ill	1	2	3	4	5
10. Virtually anyone can become mentally ill	1	2	3	4	5
11. The mentally ill have long been the subject of redicule	1	2	3	4	5
12. More tax money should be spent on the treatment of the mentally ill	1	2	3	4	5
13. We need to adopt a far more tolerant attitude toward the metally ill in our society	1	2	3	4	5
14. Our mental hospitals seem more like prisons than places where the mentally ill can be cared for	1	2	3	4	5
15 We have a responsibility to provide the best possible care for the mentally ill	1	2	3	4	5
16. The mentally ill don't deserve our sympathy	1	2	33	4	5
17. The mentally ill are a burden to society	1	2	3	4	5

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
18 Increased spending on mental health services is a waste of tax payers money	1	2	3	4	5
19. There are sufficient existing services for the mentally ill	1	2	3	4	
20. It is best to avoid someone who has mental problems	1	2	3	4	5
21. The mentally ill should not be given any responsibility	1	2	3	4	5
22. The mentally ill should be isolated form the rest of the community	1	2	3	4	5
23. A women would be foolish to marry a man who suffered from mental illness, even though he seems fully recovered	1	2	3	4	
24. I would not want to live next door to someone who has been mentally ill	1	2	3	4	5
25. Anyone with a history of mental problems should be excluded from taking public office	1	2	3	4	5
26 The mentally ill should not be denied their individual rights	1	2	3	4	5
27. Mental patients should be encouraged to assume responsibilities	1	2	3	4	
28. No one has the right to exclude the mentally ill from their neighborhood	1	2	3	4	5
29. The mentally ill are far less of a danger than most people suppose	1	2	3	4	5
30. Most women who were once patients in a mental hospital can be trusted as baby sitters	1	2	3	4	5
31. Resident should accept the location of mental health facilities in their neighborhood to serve	1	2	3	4	5
32. The best therapy for many mental patients is to be part of normal community	1	2	3	4	5
33. As far as possible, mental health services should be provided through community based facilities	1	2	3	4	
34. Locating mental health services in residential neighborhoods does not endanger local residents	1	2		4	5
35. Residents have nothing to fear from people coming into their neighborhood to obtain mental health services	1	2	3	4	5

Question	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No
36. Mental health facilities should be kept out of the residential neighborhoods	1	2	3	4	5
37. Local residents have reason to resist the location of mental health services in their neighborhood	1	2	3	4	5
38 Having mental patients living within residential neighborhoods might be good therapy but the risks to residents are too great	1	2	3	4	5
39. It is frightening to think of people with mental problems living in residential neighborhoods	1	2	3	4	5
40. Locating mental health facilities in a residential area downgrades the neighborhood	1	2	3	4	5

THANK YOU FOR YOUR TIME AND CO-OPERATION

APPENDIX B

Case 1:A

Themba is a 21-year old sales representative, who seemed to be making steady progress in his career for several years. For the past several months, however, management had noted a substantial decrease in performance. When confronted about this, he admitted that his mind was no longer fully on his work. In particular, he felt that he had begun to enter a more spiritual realm. In fact, he even stated that he could hear and see things that other people could not hear. He believed that he posses special power to heal. His manager noted that he had difficulty concentrating and that his logic seemed very unclear.

Case 2: A

Thembi is a 28-year-old nursing assistant, who has become increasingly withdrawn at work. Her colleagues report that before she became withdrawn they had noticed a pattern with her moods swinging from extremely down to extremely high. They note that she has periods when she seems extremely happy and full of energy and periods when she is so down that nothing can get her out of bed in the morning. During these periods when she is on high she works non-stop and has little sleep. She does not use drugs and is in good physical health.

Case 3: A

Jack was driving to work one day when all of a sudden he experienced an intense sense of fear. His heart started to race, he felt short of breath, his hands were sweating, and his knees were trembling he felt as though he was about to die, and his first thought was to stop the car and get out. He pulled over, opened the door, and stood at the side of the road. After about 10 minutes, he was more in control and decided to go to the hospital to make sure that he had not suffered a heart attack. After extensive physical test, he was pronounced to be in general good health and was told to take it easy for a few days.

Case 4: A

Brenda is a 25-year-old woman. She reports to have bad dreams once or twice a week since she was seventeen and is not sleeping well at night. Her family has told her that she has changed. She agrees that she is very short tempered and often feels irritable. She describes herself as a loner, a person who prefers to be on her own most of the time. She claims that she has been described as cold by other people. On taking her history, she reports that she was raped when she was seventeen years old. She continues to have intrusive memories of this event and to avoid contact with men.

APPENDIX C

M E M O

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

[Community services]
DIREKTORAAT • ISEBE • DIRECTORATE

[Health]
Afdeling • Icandelo • Section

Dr C. de Villiers Vra vir • Buza u • Ask for	(021) 938 8273 or 938 8224 ~~Telefoon • Ifoni • Telephone~~	11 December 2000 Datum • Umhla • Date
(021) 938 8273 Faks • Fax	Devillic@tygerberg.gov.za ~~E-Mail~~	Medical Officers] Administrasie • Lolawulo • Administration
82 Alexandra Street , Parow Adres • Idilesi • Address		Verwysing • Isalathiso • Reference

To : Mrs Zungu-Dirwayi
MRC

RESEARCH REQUEST-ANXIETY AND STRESS OUR REF 11/00

You have been granted conditional approval subject to the department's criteria for research approval. (Attached)

Thank you

Dr C. de Villiers
Senior Medical Officer
for
Head of Health
Mrs L. Mtwazi

APPENDIX D

ENQUIRIES NAVRAE IMIBUZO **Mrs J. Hair**

TELEPHONE TELEFOON IFOWUNI **460-9209**

REFERENCE VERWYSING ISALATHISO

DATE DATUM UMHLA **01 November 2000**

PROVINCIAL ADMINISTRATION: WESTERN CAPE
Department of Health
PROVINSIALE ADMINISTRASIE: WES-KAAP
Departement van Gesondheid
ULAWULO LWEPHONDO: INTSHONA KOLONI
Isebe Lezempilo

Mrs. M.Z. Divwayi
MRC Research Unit on
Anxiety and Stress Disorder

PERMISSION TO DISTRIBUTE QUESTIONNAIRES FOR A SURVEY AT IDENTIFIED COMMUNITY HEALTH CENTRES

Permission is hereby given for questionnaires to be distributed to nursing personnel at the identified C.H.C's.

IDENTIFIED C.H.C'S.	CONTACT PERSON
Guguletu	Ms. Tibini / NGaba
Michael Mapongwana	Ms. Poswayo
Khayelitsha	Ms. Xhsondwa
Ravensmead	Ms. Baron 932 - 6068
Ruyterwacht	Ms. Smith 534 436
Scottsdene	Ms. Japhta 782 2027
Vanguard (not Langa)	Ms. Lewis
Goodwood	Ms. Damons
Goodhope	Ms. Steyn 511-8608/6
Morning Star	Ms. Thompson 970-3042
Parow	Ms. Stallenberg 930-4020

Please ensure that there is no interference with the clinical time as indicated.

Kind regards

SENIOR MEDICAL SUPERINTENDENT
/sm

COMMUNITY HEALTH SERVICES ORGANISATION
GEMEENSKAPSGESONDHEIDSDIENTSTE-ORGANISASIE
PRIVATE BAG 7 PRIVAATSAK 7
WOODSTOCK 7915 WOODSTOCK 7915