Differential diagnosis of hyperdynamic shock

Acute adrenocortical failure
Septic shock
Thyrotoxicosis
Arteriovenous shunt
Anaemia
Pregnancy
Beriberi
Liver failure

response to the steroid replacement, although other concurrent disease may mask this response.[8]

The low incidence of acute adrenal failure in patients who are in intensive care makes it hard to justify routine testing of all patients admitted to intensive care. Adrenocortical function should be assessed in any patient in whom a diagnosis of adrenocortical failure is considered.

Studies of patients with acute adrenocortical insufficiency show that the cardiovascular findings may be described as one of two distinct types. All patients have appreciable hypotension, but some patients have hyperdynamic shock with a high cardiac index and a low systemic vascular resistance index (box). Other patients have myocardial depression with decreased plasma volume and a raised systemic vascular resistance index. After fluid resuscitation patients with myocardial depression and a raised systemic vascular resistance index have been found to have the haemodynamic features of hyperdynamic shock with a high cardiac index and low systemic vascular resistance index. Giving glucocorticoid agents to either group results in an increase in myocardial contractility, with an increase of at least 20% in the left ventricular stroke work index.[9]

We thank Drs A McCrirrick and A Williams for their help in preparing this manuscript.

Practical points

- A high index of suspicion is required in all patients admitted to intensive care to identify those patients with adrenocortical failure
- Acute adrenocortical failure is best diagnosed with stimulation testing with tetracosactrin
- Steroid replacement treatment should not be delayed by waiting for cortisol concentrations to be reported
- Treatment with dexamethasone will not interfere with stimulation testing with tetracosactrin

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(Accepted 13 September 1994)

South Africa's Health

New South Africa's mental health

Rajendra Kale

This is the third in a series of articles reporting on health care in South Africa

The environment in South Africa has been characterised by a long history of abuse of human rights, repression, racial segregation, forced physical removal, pass laws, laws preventing interracial marriages, violence, alcohol related problems, malnutrition, and poverty. If environment is a major determinant of mental health, then the mental health of South Africans might be expected to be poorer than that of people elsewhere.

Dr Brian Robertson, professor of psychiatry at the Groote Schuur Hospital in Cape Town, agreed: "A lot depends, however, on how mental health is defined, what indicators of mental health are used, and the effects of protective factors. If mental health is defined broadly as symptoms rather than categorical illnesses, there are clear indicators that the mental health of South Africans has been seriously damaged: I am referring to indicators such as the high levels of substance abuse, crime, and violence.

"There is no evidence of a higher incidence of functional psychoses in South Africa than elsewhere. Functional psychoses, however, are generally regarded as being less influenced by environmental factors than 'neurotic' disorders."

Dr M B Magner is a psychiatrist attached to the Lentegeur Psychiatric Hospital in Cape Town and also in private practice. He felt that the range of psychiatric problems in South Africa was similar to those in other countries. "But the symptomatology may be different at 'non pathologic' levels," he added. "We lack, however, valid data on the mental health profile of South Africans. While most psychiatric services have analysed their own patient data, nationally or provincially coordinated data are lacking."

Health Trends in South Africa (1993), published by the department of health and population development, makes no mention of psychiatric morbidity. Melwyn Freeman of the Centre for Health Policy in the University of Witwatersrand agreed that reliable data on the mental health of South Africa were not available and that this posed problems while planning a mental health strategy.[1] Even if data were available these might not help planning a mental health service. "Difficulties arise in mental health epidemiology," he explained "because there are no strict and definitive dividing lines between, for example, a healthy and unhappy person and someone with a mental disorder. Moreover, if the rationale for assessing incidence is to plan services, the question as to whether the unhappy person or the person with a particular life crisis should be excluded from planning must be addressed."

Brian Robertson mentioned some studies carried out near Cape Town: "A study from Khayelitsha, an established black township, which was done when it was still a new and informal settlement, showed a high prevalence in the rate of depression. Of 99 women, 44% were depressed, and 25% of the 71 men were depressed. They would have been treated for depression if seen by a psychiatrist. This rate was higher than that in Langa, (13% of all men and 17% of 101 women) an established black township in Cape Town.[2] Another study in 1993 of children and adolescents in Khayelitsha yielded a prevalence for depression and conduct disorder that was no greater than international rates." The variation in prevalence in the few studies that are available remains largely unexplained.

What is glaringly evident, however, is the lack of data on mental health, and as Daniel Ncayiyana, editor of the *South African Medical Journal*, said, this is potentially a rich area for research.

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BMJ 1995;310:1254-6

PAUL WEINBERG/PANOS

Mental health professionals felt that the phenomenon of apartheid belonged with politics, not the science of mental health

Effects of apartheid on the white population

Data on the effects of apartheid on the white population are also lacking. Andrew Dawes, associate professor of psychology in the University of Cape Town, says that mental health professionals ignored the problem of apartheid. They felt that it belonged with politics and not with the science of mental health. Said Dawes: "Those who did venture onto this terrain were castigated by their colleagues. As a result there is very little psychiatric and psychological literature from the apartheid era that examines the impact of apartheid on mental health. The Psychological Association of South Africa never spoke out against apartheid."

"In several studies of young white South Africans we have found very high levels of fear of change and negative perspectives on the future and high levels of racism. Among the elderly, anedotal evidence suggests that recent events have produced a high level of fear."

Personality development of white people may have been skewed along racial lines in the apartheid era. Apartheid may have tended to incite arrogance, a sense of superiority, even omnipotence in the white people.[3] As Andrew Dawes explained, "The penetrating mental health impact in the white people was the normalisation of racism among them. It was so normalised that mental health professionals did not see it as an issue. The apartheid system also normalised massive violations of human rights, including torture and imprisonment without trial."

During casual conversations with white people it became clear to me that the environment created by apartheid in which the white ruling class lived was abnormal compared with, say, European standards. The schooling white children received was skewed by an apartheid view of the world and its history. Emphasis was on the achievements of white people, and people like Martin Luther King and Mahatma Gandhi either were not discussed or their achievements were played down, as were the achievements of black sportspeople or musicians. Dr Magner felt that the environment in which children were brought up was different for Afrikaans and English speakers. Afrikaans speaking South Africans had a more rigid upbringing; they were more likely to be influenced by the Dutch Reformed Church and its interpretations of religious values to suit apartheid.

Some white people must have harboured feelings of guilt due to either their active involvement in apartheid or their passive complicity. Living in a pariah country and being ostracised by their counterparts in the rest of the world must have affected sportspeople, scientists, and academics. "Those whites who went into political exile often had to cope with the loss of those close to them, adjustment to life abroad, and rejection by more conservative members of the family at home," said Andrew Dawes. Those who were charged with the responsibility for the repression of resistance suffered the consequences of the role of their choice. Thus a high incidence of stress related disorders has been reported among the police, particularly those who worked in the townships." Stress related disorders among law enforcement officers who work in areas with a high level of crime and violence, however, are not unique to South Africa.

Even if data were available, would the instruments used by psychiatrists in everyday practice be sensitive to the influence of apartheid on mental health? It is reasonable to suggest, as Melwyn Freeman did, that they are not. It is necessary to develop appropriate instruments for any future research.

PAUL WEINBERG/PANOS

Most black children in South Africa would not have access to child mental health clinics

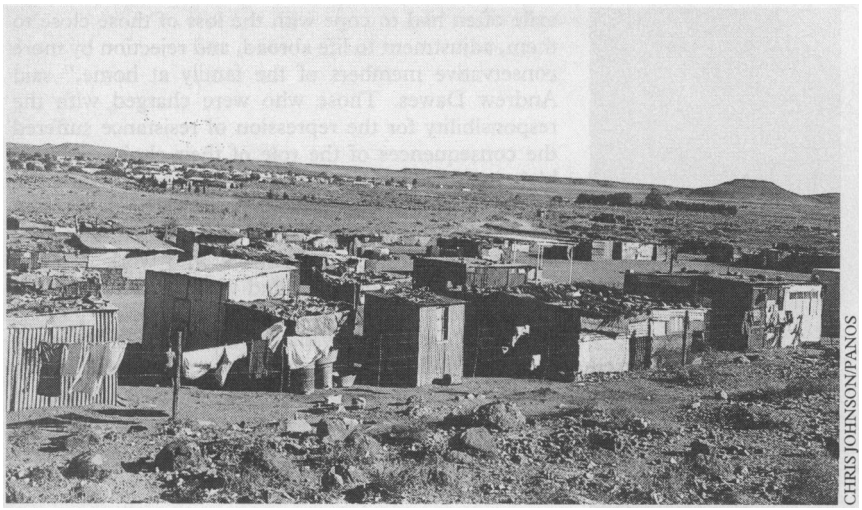
Existing mental health services

Psychiatric care in South Africa is largely centred around large institutions. Very little care is available in the community, except in the Orange Free State. Though 290 doctors are registered as psychiatrists, the Society of Psychiatrists estimates that the number of practising psychiatrists is around 220. Emigration may be one reason for the reduced numbers. The ratio of psychiatrists to people works out, for a population of 40 million, to be 1:183 000. Given that most psychiatrists practise in urban areas and serve the affluent white population, the number of psychiatrists looking after black people, especially in rural areas, is abysmally low. Similarly, of the 1060 registered clinical psychologists in South Africa, 200 are concentrated in the greater Johannesburg area, giving a ratio of psychologists to population of about 1:3000. In poorly developed Bantustans there are only 20 psychologists, and the ratio of psychologists to population is 1:800 000.

There are some 30 000 beds for mentally ill and learning disabled people, and the mental health budget, which is 10% of the total health budget, is spent mainly on this large number of beds in institutions. Said Professor Robertson: "Acute beds in psychiatric hospitals are occupied by the same proportions of ethnic groups as in the general population; chronic beds and outpatient facilities favour the whites and the middle classes. There are too few beds in the general hospitals, and most state psychiatric facilities serve patients with serious psychotic rather than neurotic conditions. Most facilities are racially fully integrated, but inequities from the past still survive. Unfortunately, primary health care personnel do not feel responsible for the management of psychiatric patients. Community clinics run from psychiatric hospitals have little time to do more than renew prescriptions and refer cases for admission to the psychiatric hospitals."

Can white psychiatrists look after black patients?

Another criticism of South African psychiatry is that nearly all psychiatrists are white. They are far removed from the cultural milieu in which their black patients live and do not speak the language of their patients. Professor Robertson, however, feels that psychiatric patients are looked after by a team that includes nurses and social workers who speak the patients' language: "I believe that an ability to understand, accept, and identify each patient in his or her particular family and cultural context is more important than being from the same language or cultural group. All too often the inadequacies of psychiatrists in serving black patients are wrongly ascribed to cultural differences rather than to ignorance, prejudice, and stereotyped thinking."



Racial segregation and poverty can contribute to mental health problems

Dr Magner agreed that white psychiatrists do a good job. "They provide satisfactory care through interpreters and an understanding of culture. South Africa is, however, seriously deficient in black psychiatrists: we need more."

Traditional healers

The success of traditional healers in dealing with psychological problems is accepted by many doctors, though the evidence is anecdotal.[4] Asked about their role in managing psychiatric illnesses, Brian Robertson said, "Traditional healers heal by helping the patient make sense of the symptoms using traditional explanations, which seem irrational to psychiatrists. Many myths abound about their abilities and functioning, which need further scrutiny." According to Dr Magner, the more westernised black people become the less faith they have in traditional healers. In the established medical system healers play only a minor role.

In one study 26% of black patients reported seeing a traditional healer at the same time as attending a community clinic, and 45% of black patients had consulted a healer for their problem at some point.[5]

Mental health care in the Orange Free State

All psychiatric services in Orange Free State were initially centred at the 1250 bed Oranje Hospital in Bloemfontein and served mainly the white population. Orange Free State has a population of about 2·4 million, of which 2m are blacks, 330 000 whites, and 60 000 coloured. In the early 1980s plans were made to build additonal inpatient facilities for up to 2000 beds, but these were shelved in favour of a community oriented mental health service to improve the access of patients to services. This made Orange Free State exceptional, as psychiatric services all over South Africa are centred on institutional care.

At present Oranje Hospital has 115 forensic beds, 108 non-forensic beds, and a 60 bed geriatric ward. Secondary hospitals are encouraged to admit psychiatric patients in Orange Free State, and community care is provided at 78 clinics spread over in its four districts. In 1992, over 4000 patients were admitted to the secondary hospitals with psychiatric problems. In 1993, 5877 patients were seen in the community clinics, compared with 1698 in 1985, the year when decentralisation began. Approximately 76% of the population is black and around 67% of all psychiatric patients seen are black. The community clinics are run by community psychiatric nurses and primary level staff. Each clinic is visited by consultants at intervals of one, three, or six months depending on its location and work load. Psychotherapy units, child mental health clincis, a liaison service with other departments, and one halfway house are run under the community scheme. A 24 hour telephone consultancy service is available from the Oranje Hospital to the community centres.

Dr J H O Pretorius, deputy director general of health services, was impressed with the results of the community psychiatry project. He said, "In the Orange Free State we have developed a model of community psychiatric services that involved much training in the periphery and a support system so that the common problems could be handled in the community. As a result the number of inpatients in the local hospital fell from 110% to 17%. This model has had some research done on it. We now have an idea of how to improve on it. These data will be used to decide what we do countrywide."

Audit of community clinics

Freeman and colleagues' review of 672 medical records from 17 community clinics, and interviews with 114 patients, provide us with possibly the best available audit of patients attending psychiatric services in South Africa.[6] Of 672 patients, 453 were black and 216 white; three of unknown race. The diagnoses included schizophrenia (52%), mood disorder (19%), and substance abuse (5%). Highly significant racial differences in the diagnosis of schizophrenia and mood disorders were evident. Schizophrenia was diagnosed in 68% of black patients compared with 19% of white patients; mood disorders were diagnosed in 9% of black patients compared with 41% of white patients. Interpreting these data is difficult. They may mean that black patients are unlikely to receive care unless they have a major psychotic illness or that black patients are more likely to be diagnosed as having schizophrenia simply because it is believed to be more common among them; or black people may not be seeking care for other psychiatric illnesses, possibly due to social prejudice. Clearly, more studies are needed before we know the explanation of the high percentage of schizophrenia among black patients found in this study.

The Orange Free State's programme has been successful in decentralising services, and access to patients has improved considerably since 1985. Though racial integration has been achieved to some extent, the services are still more available and of better quality to white patients. For example, 82% of black patients had to wait in queues for treatment but only 23% of white patients did so, and a higher proportion of black patients had to wait for more than 30 minutes.

To summarise, there is a lack of reliable data on the prevalence of mental illnesses in South Africa, and this is clearly a major area for future research. Data on the effects of apartheid on the development of the personality of black and white people, and on mental health in general, are also needed as these will help to manage future psychiatric problems. Two well recognised deficiencies characterise the existing mental health services: the lack of black psychiatrists who speak the patients' language and understand their culture, and the lack of community based services.

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