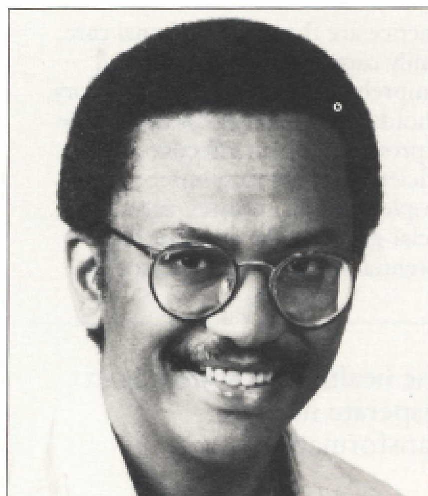
The Family Practitioner in a changing South Africa: Who will care for the underserved?

— Dr JA Volmink



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Curriculum vitae

Dr Volmink was born in 1957 and has lived and studied mostly in the Cape: obtained a BSc at UCT in 1977 and an MBChB in 1982. After internship at Groote Schuur and some time as medical officer at the Emkhuzweni Rurual Health Centre in Swaziland he also gained experience at the Red Cross Children's Hospital and Lentegeur Hospital. He obtained a Masters degree in Public Health from Harvard University in 1988. Jimmy is currently part time researcher at the Centre for Epidemiological Research in Southern Africa (MRC) and Family Practitioner in private practice in Colorado near Cape Town. He is active in a number of professional organizations and member of the Council of the Academy of Family Practice/Primary Care where he serves on the Research Committee. He is married to Blossom and they have 3 children.

Summary

The principles of family practice have universal validity and family practitioners are able to positively influence the health of individuals and communities. However, the non-availability of family doctors within certain areas in South Africa continues to deprive already disadvantaged communities of adequate health care and threatens the advancement of the discipline of family practice. This paper briefly describes the role of the family practitioner. Thereafter the problem of maldistribution of family practitioners is discussed and some suggestions offered for redressing the problem.

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Introduction

The health care system in South Africa is in desperate need of transformation. This fact has been recognised since 1918 when the influenza epidemic so dramatically exposed its shortcomings.[1] The Gluckman Commission of 1944[2] again revealed the glaring inadequacies of the health system. It described the services as being "disjointed and haphazard", "provincial and parochial", biased towards curative care and not "available to all sections of the people." Also, the "administrative, legislative and financial measures" available were regarded as being inadequate to provide the range and quality of services needed. The Commission made far-reaching proposals for the reconstruction of the health care system. However, due to opposition from the State and some sections of medical profession, these proposals were never implemented.[3] Today health care provision in South Africa can still be considered chaotic, inequitable and inefficient. Benatar's description of the present situation is illuminating: "Our current health care system can be accurately described as maldistributed, poorly funded and coordinated, fragmented and duplicated, discriminatory on a racial basis, hospital-based, and supported by very poorly developed ancillary services".[4] In recent years several factors have started to coalesce to provide a growing impetus for transformation of the health care sector. These include: the crisis in academic medicine,[5] concerns about the cost of private health care,[6] increasing dissatisfaction with the medical aid system on the part of both beneficiaries[6] and providers of care,[7] rapid socio-political developments in the country which will lead to growing pressure for a fair deal in terms of health services and the State's recent commitment to improving health care for all.[8] A wide consensus has thus started to evolve regarding the urgent need to establish a unitary health system that is "affordable, equitable, non-racial, comprehensive and effective"[4,5,8,16] While there may still be differences of opinion as to how such a system is to be achieved, it seems that the critical mass of opinion is now in place to ensure that certain significant changes will be effected in the near future.

In a recent speech in parliament the Minister of Health, expressing her determination to work towards the

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reconstruction of health services said, "With full open-heartedness and honesty we must take the health interest of the total population as our most important directive, which will necessitate full cooperation between all the role players."[8] As one of these "role players", the family practitioner clearly has an important part to play in the unfolding scenario of health care transformation in this country.

In this paper I explore one obstacle to the provision of an equitable health care service, namely that of geographical maldistribution of family practitioners. The role of the family practitioner will first be described in order to stress the relevance of the discipline of family practice in a present and future South Africa. Thereafter, the uneven distribution of family practitioners will be discussed and some options examined for redressing the situation. In particular, I explore the question of the nurse practitioner as substitute for the doctor, arguing that the ideal relationship with this category of health worker is one of teamwork rather than competition. The paper ends by pointing out that the failure of family practitioners to act as advocates for, and to supply quality care to the poor, jeopardises the future reputation of the profession.

> Only 5,5% of doctors serve in rural areas where more than 50% of our population lives

Role of the Family Practitioner

How does the role of the family practitioner differ from that of other health care providers? The job description of the "new" general practitioner (family practitioner) provided by the Leeuwenhorst working party[17] best answers this question:

"The general practitioner is a licensed medical graduate who gives personal, primary and continuing care to individuals, families, and the practice population, irrespective of age, sex, and illness. It is the synthesis of these functions which is unique. He will attend his patients in his consulting room, in their homes, and sometimes in a clinic or hospital. His aim is to make early diagnoses. He will include and integrate physical, psychological, and social factors in his considerations about health and illness. This will be expressed in the care of his patients. He will make an initial decision about every problem which is presented to him as a doctor. He will undertake the continuing management of his patients with chronic, recurrent, or terminal illness. Prolonged contact means that he can use repeated opportunities to gather information at a pace appropriate to each patient and build up a relationship of trust which he can use professionally. He will know how and when to intervene through treatment, prevention, and education, to promote the health of his patients and their families. He will recognize that he also has a professional responsibility to the community."

> Peri-urban areas will be in greatest need soon

The major strengths of family practice are therefore personal care, family care, continuous care and comprehensive care. Thus, in theory, it holds great promise of being able to provide both an effective and efficient primary care service to people from all cultures, races and social groups. The fact that this potential has not been realised in South Africa is a reflection not of the shortcomings of the discipline, but rather of the way family medicine is organised, taught and financed in this country.

> The health care system is in desperate need of transformation

The problem of maldistribution

Both McWhinney[18] and Levenstein[19] have argued for the universal validity of the principles of family practice. Levenstein writes, "If our discipline is not as valid in Soweto as it is in Pretoria, then it is not valid at all". But surely no matter how valid a discipline may be, if its practitioners are not available to serve a population then for that population the discipline reduces to little more than an irrelevancy.

Much has been written regarding the rural-urban, poor-rich and black-white maldistribution of doctors in this country.[21-23] Botha et al[24] estimated doctor/population ratios for non-specialist doctors registered with the South African Medical and Dental Council (SAMDC) during 1980. They found that for South Africa as a whole, ie the four

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provinces combined with the "national states", there were 2 198 people per doctor. While this overall average compares favourably with ratios achieved in developed countries such as Britain (1915 people per general practitioner)[25] and is superior to that in many third World countries (eg Nigeria 6 536 people per doctor)[26] it is a crude figure and masks the fact that only 5,5% of doctors (many of whom are hospital-based) are found in rural areas where 50% of the population live.[21] Mitchell[27] informs us that 40% of the country's doctors reside in Johannesburg and Cape town where only 11% of the population live. The doctor/population ratios for urban vs rural areas provided by Botha and his colleagues[24] further illustrate the marked urban-rural discrepancies which exist. (Table 1)

Of special note is the fact that there was 1 doctor for more than 13 000 people in all the "national states". For Gazankulu and Kangwane the ratios were respectively 1:22 360 and 1:32 232. There were no doctors registered in KwaNdebele (population size 156 380) in 1980. Recent work by Zwarenstein et al[28] reveals that the SAMDC registered address used as a surrogate for work address in the figures quoted above, overestimates rural and homeland non-specialists by about 9%. The urban-rural gap is therefore even larger than indicated in previous studies.

These figures provide convincing evidence of the need for general practitioners in rural areas and in particular the so-called homelands. But in addition urgent attention will have to be given to meeting the needs of the burgeoning peri-urban settlements brought about by rapid urbanisation. Between 37 and 50% of Africans were urbanised in 1980. By the year 2000 it is estimated that this figure will reach 75 to 79%.[29] There will thus be an increasing need for general practitioners in peri-urban areas in the future.

Table I. Doctor/Population Ratios in South Africa for urban and rural regions in 1980

(Adapted from Botha et al 1986)[24]

	Urban	Rural
Cape	1:1 033	1: 3 108
Natal	1: 937	1: 4 966
Transvaal	1:1 336	1: 4 405
Orange Free State	1:1 387	1: 5 824
KwaZulu	1:6 585	1:13 286
Gazankulu	-	1:22 360
Lebowa	1:9 784	1:14 147
QwaQwa	-	1:17 513
Kangwane	-	1:32 232
Transkei/Ciskei/Bophuthatswana/Venda	-	1:10 000

KwaNdebele (population size 156 380) - no doctors.

Causes of Maldistribution

Usual reasons given for variation in geographic distribution of doctors are well known. These include: place of prior training, availability of medical facilities and training opportunities, availability of housing, schools, social and cultural amenities and climate. All of the above have relevance in the South African context and wherever possible such adverse circumstances must be redressed.

> In the USA almost 50% of the nurses have a master's degree or higher

A further, not at all insignificant contributor to physician maldistribution, should also be noted. Privately funded health care depends for its existence on an adequate level of buying power which tends to be concentrated in urban areas. Where health care is financed from private sources (eg private health insurance and out-of-pocket payments) it will have the effect of drawing doctors into wealthy, urban centres and away from the relatively more deprived rural and peri-urban areas. It is interesting to observe that in countries such as Britain where publicly funded health systems exist,

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a much more equitable spread of physicians has been achieved.[25]

Potential Solutions

Internationally, numerous strategies have been adopted for improving the inequitable distribution of medical manpower. These strategies which typically apply "carrot" and/or "stick" include: market incentives, placement of medical schools in areas of need, alternative criteria for selection of medical students, tying of student bursaries to future work in underserved areas, heavier taxation for those who practice in areas where their marginal contribution to health is low, limited licensure in oversupplied areas and mandatory service in underdoctored areas for all newly qualified doctors.[30-32] Another strategy receiving increasing attention internationally[32] as well as locally[33] is the use of nurses as first contact practitioners in areas lacking in primary care doctors.

Which of the above options would be most appropriate in this country is a matter for debate. Such debate will of necessity need to take cognisance of the various political, economic, professional and community sensitivities, concerns and interests which prevail. Some issues of special relevance to the South African situation are highlighted below:

The Nurse Practitioner as GP substitute

Those who advocate nurse practitioners as cheap substitutes for family practitioners often draw on the results of such work as the Burlington randomized trial[34] conducted in Ontario, Canada in the early 1970's. This study showed that nurse practitioners can provide first-contact primary care as safely and effectively, and with a similar high degree of satisfaction to patients as a family physician. The nurse practitioners participating in the trial furthermore, were able to deal with two thirds of presenting problems without referral to a doctor. Such evidence for the effectiveness and acceptability of nurse practitioners together with the lesser cost of initial training and remuneration have led some to regard the nurse practitioner as the ideal primary care provider not only in underdoctored communities but also in other areas.[35]

> 4 PHC nurses are needed to do the work of 1 doctor

In evaluating the performance and cost of the nurse practitioner vis-a-vis the family doctor, several factors must be taken into consideration. Firstly, in North America nurse practitioners have a higher level of training than their South African counterparts. In a survey of 5 964 nurse practitioners in the USA, Towers[36] reported the following: 2,1% had doctorates, 44,4% master's degrees, 6,8% associate degrees and 17,6% diplomas. Thus, findings from studies such as the Burlington trial may not be generalizable to this country.

Secondly, the use of nurse practitioners does not necessarily imply cost savings. Nurse practitioners work more slowly and therefore see less patients than doctors. In a recent study in Britain[37] the nurse practitioner saw only one quarter of the number seen by the general practitioner in the same period. Similarly, from Soweto, Wagstaff and Beukes[38] report that 4 PHC nurses are needed to do the work of one doctor and Duncan and Gear[39] indicate that a doctor sees 3 times more patients than a PHC nurse. More recent work from Soweto has produced similar results. (Max Price, Centre for Health Policy, University of Witwatersrand - Personal Communication)

Continuing training and supervision of nurse practitioners further add to costs.

Finally, the roles of nurse practitioner and family practitioner may be different. There is some evidence that where patients have a choice they use the two categories of provider for different reasons and in different ways. Several studies[35,37,40] have shown that nurse practitioners are primarily involved in listening, explaining, practical care, advice giving and counselling. Their major contribution may thus be in the areas of health promotion, disease prevention and chronic disease management.

> Patients use doctors and nurses for different reasons

In conclusion then, I believe it is a mistake to regard nurse practitioners as a cheap substitute for appropriately trained family practitioners. Rather, this category of worker should exist with the family practitioner as part of the *primary*

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health care team. It is widely recognised that such a team, in which objectives are agreed upon and the respective roles of members are defined, is in the best position to offer an integrated, coordinated and comprehensive service comprising preventive, promotive, curative and rehabilitative functions.

The Family Practitioner – Is redistribution possible?

It is my opinion that every community in South Africa should have access to a family practitioner. The question is: how can this be achieved? I propose four levels of intervention which merit serious consideration:

Selection of Medical Students

It has been shown that the single most important personal characteristic predicting whether a doctor will end up practising in the rural areas of the country is a rural background.[41,43] None of our medical schools presently have a policy which favours the selection of students from medically underserved communities. (Dean's office, University of Cape Town Medical School - Personal Communication). If medical schools are at all interested in meeting their responsibility of providing for the manpower needs of South Africa, then greater emphasis should be given to increasing the enrolment of students from rural and other under-doctored areas. If necessary more weight should be given to non-academic criteria to increase the chances of students from educationally disadvantaged backgrounds being accepted. Students selected in this manner could then be offered bridging courses to offset disadvantages imposed on them by inferior education.

> Greater emphasis given to increasing enrolment of students from rural areas

Training of Medical Students

It is well known that medical school has a major influence not only on knowledge but also ideas and values held by students. During the period at medical school the student also begins to decide on career priorities. It is unfortunate therefore that the socialisation of medical students during these formative years is so heavily skewed towards urban, tertiary and high technology medicine. Also, most of the teaching is done by specialists many of whom have never practised outside of a teaching hospital and have had no experience of the difficulties of practising medicine in underprivileged communities. These mentors often hold family practice in low esteem and are excessively critical of the management of patients by referring general practitioners working in outlying areas. Doctors emerging from medical school have moreover been exposed mainly to rare and life-threatening conditions and they have been well instructed by their specialist teachers concerning their limitations and what to *avoid* doing. They leave medical school therefore with a marked sense of dependence on specialists and come to believe they can only function in close proximity to, or under the supervision of, their specialist colleagues. By definition this means urban practice.

We need a new approach to the teaching of medical undergraduates. Medical students need more exposure to medical care outside of the teaching hospital and in rural and peri-urban impoverished communities. They need to learn about common conditions seen in the community in addition to those seen in the academic hospitals. They need to experience continuity of care and gain insight into the behavioural, cultural and epidemiological aspects of medical practice. It is also important for them to work closely with providers at the coal-face of primary care delivery. Students need to see their value and learn to respect and emulate them. There is now some evidence that medical schools offering *community-based programmes* are able to positively influence the redistribution of physicians to underserved areas.[41,44]

> Medical students are being influenced towards urban, tertiary and high technology medicine

Vocational training for family practice

It is inconceivable that a doctor would be allowed to practice as a paediatrician, surgeon or other specialist without specific and extensive training in his/her field of choice. Similarly, at least one year of vocational training over and above a university degree is required for

practising as a school teacher. Yet it is still possible for an individual in this country to enter family practice armed only with an MBChB degree and a hospital-based internship experience. In this regard the recent decision of the South African Medical and Dental Council to recognise the category of "family physician" and to make vocational training for registration in this category compulsory as from 1994, is indeed welcome.

Vocational training programmes for family practice have been established in a number of countries during the last decade. They are aimed at equipping the family practitioner with the necessary knowledge and skills to practice safely, efficiently and effectively under conditions encountered in primary care. In addition to teaching in the traditional clinical disciplines they cover aspects of preventive medicine, public health, psychology and sociology, all of which are crucial for being a competent family physician.

Vocational training is particularly useful when conducted in the area and setting in which the doctor wishes to establish practice. Creating facilities for vocational training in underserved areas will therefore help to address the problem of maldistribution as doctors who train in these areas are more likely to practice there on completion of their training. The South African Academy of Family Practice/Primary Care through its Family Health Foundation has already begun vocational training in rural KwaZulu and the Border area. This is to be commended and such efforts should be expanded and receive support from the State and the private sector.

Funding of Health Care

Private health insurance is beyond the means of about 80% of our population. Furthermore, most people cannot afford out-of-pocket payments to private general practitioners. As mentioned above, this has contributed to practitioners preferring to work in more affluent, urban locations. A restructuring of health care financing is thus called for. A unitary health care system with central funding and incentive payments for work in peri-urban slum and rural areas should help to alleviate the maldistribution of doctors presently in existence. I would like to stress that such a system would not necessarily imply the abolition of private practice. What is at issue here are the financing mechanisms enabling access to health care. If finances from private and public sources were to be pooled and used to pay for health care for all citizens (known as National Health Insurance), as is the case in countries such as Canada, a much greater degree of equity in health provision could be achieved. Both public and private health care providers could be accommodated within a system of this nature.

Vocational training for a "Family Physician" compulsory as from 1994

Conclusion

Who will care for the medically underserved? I have indicated that there is a need for collaborative teamwork between different kinds of primary care provider. The family practitioner however, has a unique role. She/he cannot be abrogated of the responsibility to provide health care for all citizens of our country. To the extent that we shirk that responsibility we do our discipline incalculable harm.

The conclusions reached at the Second Advanced Forum in Family Medicine held at Keystone, Colorado in 1988[45] hold equally true for South Africa today. Delegates at this conference noted that family medicine organisations in many countries have a poor record of national advocacy on behalf of those denied access to health care and that a demonstrated willingness to take on the problems of care of the disadvantaged is likely to promote the interests of our discipline far more than any academic initiatives would.

The focus up to now has been on the right of the family practitioner to determine where she/he will practice. The exercise of this right had led to oversupply of doctors in some areas (mainly affluent and urban) while the majority of the population (mainly poor, rural or peri-urban) are denied access to personal, continuous and comprehensive care from a family physician. In the "new" South Africa individual rights of professionals will have to be balanced against community rights to decent health care. Maldistribution of doctors remains one of the obstacles to providing "equal access to care for equal need". We, as family practitioners in our personal capacities, as well as through our professional organisations, should be engaging with medical schools and other institutions and organisations to address this issue. In this way we will find ourselves in a stronger

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position to negotiate a future health care system which will be both user and provider friendly.

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am a registered medical practitioner on the Register on the South African Medical & Dental Council and practice in the field of general practice/primary care. I hereby apply to become a member of the South African Academy of Family Practice/ Primary Care. I support the objectives of the Academy and agree to pay the subscription fees and to abide by the Constitution of Academy.

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