Attitudes of private general practitioners towards health care in South Africa

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Abstract **The need for health care reform in South Africa is acknowledged by the government as well as by the non-governmental health sector. There is, however, no unanimity regarding the nature of the envisaged reform. A country-wide postal survey of 700 private sector general practitioners (GPs) from a commercial database of 5 000 was conducted to explore attitudes towards health care. A response rate of 67,4% was obtained. Respondents were mostly male (92%) and urban-based (64%). The median age was 42 years. Most respondents: (*i*) believed health care to be a right for all citizens; (*ii*) favoured private or a combination of private and public funding mechanisms with fee-for-service arrangements; (*iii*) opposed cost-containment measures imposed by funders, e.g. medical aids; and (*iv*) believed doctors should be responsible for primary care in under-served areas. After sex, age, location (urban versus rural) and GP postgraduate qualification had been controlled for by means of logistic regression techniques, the university at which a respondent's basic degree was obtained emerged as the only independent predictor of attitudes to the following: (*i*) comprehensive care as a right; (*ii*) integration of the public and private sectors; (*iii*) preferred funding source for a future health system; and (*iv*) preference for fee-for-service remuneration. Both university and gender independently predicted attitudes on GPs' income. Graduates of white, Afrikaans-medium universities were strongly in favour of a privately funded and fee-for-service orientated system. Those who qualified at black universities, on the other hand, favoured public funding with less emphasis on fee-for-service. White, English university graduates, while expressing a preference for fee-for-service remuneration, were less enthusiastic about private funding, favouring a mixed funding approach (private and public) instead. This is the first systematic study of GP attitudes to health care in South Africa. Further research is recommended to understand the significance of the attitudes expressed and to investigate the role of the university medical school and other factors in practitioners' attitudes to health care.**

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Despite the availability of an impressive standard of tertiary medical care in South Africa, there are still large sections of our population without access to the most rudimentary health services. Recent developments in the country, *inter alia* the crisis in academic medicine,[1] escalating costs of health care,[2] dissatisfaction with the medical aid system[3-5] and, since 2 February 1990, moves towards a more egalitarian sociopolitical order, have given impetus to the establishment of a more equitable, co-ordinated, cost-efficient and affordable health care system. Health care reform, long overdue in South Africa, should be directed at: (*i*) the improvement of access to services for the underprivileged; (*ii*) the improvement of quality of care at primary level; (*iii*) control of escalating costs through efficiency; and (*iv*) prioritisation of services known to be cost-effective.

In planning the restructuring of the health care system, it is important to consult across a wide spectrum of interest groups, including communities, organisations and service providers. Klopper[6] has observed that there is a poor record of consultation with doctors, nurses, community health workers and others at the forefront of primary health care delivery in this country. Private general practitioners constitute a large and important community-based primary care resource whose views must be heard and whose services must be harnessed in a new health dispensation. Failure to consult with general practitioners (GPs) may lead to their resisting change (as in the Gluckman era).[7,8] This nationwide survey was conducted to explore the attitudes of private sector GPs towards the provision of health care in South Africa, and to look for demographic and other factors influencing attitudes to health care.

Subjects and methods

A computerised database containing the name, practice address and preferred official language (according to drug representatives) of 5 000 GPs in private practice in South Africa was provided by a pharmaceutical company. This database was chosen as there is currently no official list of GPs in private practice. The South African Medical and Dental Council register of GPs is not adequate for sampling purposes as it does not identify those doctors in private practice and also contains names of inactive doctors and those living overseas. The database used in this study is regularly updated by drug representatives and is considered to be a complete and accurate record of GPs in active private practice in South Africa. During 1991 a short, structured questionnaire was mailed to a random sample of 700 practitioners drawn from this list. A section of the questionnaire elicited information on demographic and other background characteristics. The rest of the questions were designed to obtain data on how GPs perceive their role in the health care delivery system, their future career goals and their opinions on selected aspects of health care (philosophy, funding, cost-containment and delivery). In addition to the structured questions space was provided on the questionnaire for comments. (The appendix to this article is an extract from the questionnaire used.)

The questionnaire was piloted in two stages. Firstly, a group of academically orientated GPs were asked to provide comments on the questions. A preliminary version of the questionnaire was then mailed to 120 GPs in the western Cape following which further adjustments were made to the questions in order to maximise clarity. In view of poor response rates obtained in previous postal surveys involving GPs[9,10] and our pilot study in the western Cape, a lottery incentive was used in the main study. This involved a draw of eight gold Krugerrands. Each doctor was informed of the possibility of winning a whole or portion of a Krugerrand in exchange for returning the completed questionnaire in an accompanying free-post envelope. Confidentiality of the information provided was assured.

The university at which a respondent's basic degree (M.B. Ch.B or equivalent) was obtained was classified into one of four categories: (*i*) white, Afrikaans-medium; (*ii*) white, English-medium; (*iii*) black; and (*iv*) foreign. This classification is based on the historical designation of universities under apartheid. While overall numbers remain small, increasing proportions of graduates from previously white universities are black. The University of Natal Medical School was created to provide medical education for blacks, despite its link with a historically white university. Respondents who obtained their basic degree from a non-South African institution were classified as foreign. The basis on which respondents were assigned to urban or rural categories was similar to that of previous studies.[11,12] Those practising in metropolitan areas and major towns were classified as urban.

Analysis was undertaken with SAS software. The χ^2-test was used to determine whether differences in responses between subgroups on bivariate analysis were statistically significant. Predictors of GP attitudes on selected issues were estimated using logistic regression techniques.

Results

After 3 mailings, 489 questionnaires were received. Of these, 52 were returned unanswered because of doctors having left the practice. The final response rate attained was thus 67,4%. A comparison between the respondents and non-respondents based on available information (language preference and geographical location) revealed no statistically significant differences between the two groups.

Profile of respondents

Table I summarises the characteristics of the study sample. Respondents were predominantly male with a median age of 42 years (range of 25 - 79 years). The majority practised in urban areas and were either in partnership or solo practice. The likelihood of practising in a rural area was inversely related to age ($P = 0,019$).

More than half of the sample obtained their degree at white, Afrikaans-medium universities (Fig. 1). Forty per cent reported having qualifications in addition to their medical degree. Of these, most common were a degree or diploma in general/family practice (28,2%), a B.Sc. (24,7%) or a diploma in anaesthetics (7,5%).

Approximately half of those who responded had other employment in addition to private general practice. While 36% of respondents worked in the public sector this phenomenon was significantly more common in rural compared with urban areas (61,5% v. 21,3%; $P < 0,001$).

TABLE I.
Characteristics of 437 GPs who completed the questionnaire (%)

Sex	
Male	91,4
Female	8,6
Age (years)	
25 - 34	20,6
35 - 44	38,0
45 - 54	24,9
55 - 64	10,5
65+	5,9
Geographical location	
Urban	64,3
Rural	35,7
Practice type	
Solo	42,6
Partnership	49,2
Other	8,2
University at which basic medical degree was obtained	
White, Afrikaans-medium	53,6
White, English-medium	25,0
Black	11,5
Foreign	9,9
Additional qualifications	39,8
Family/general practice	11,2
Bachelor of Science	9,8
Diploma in Anaesthetics	3,0
Employment in addition to private practice	49,4

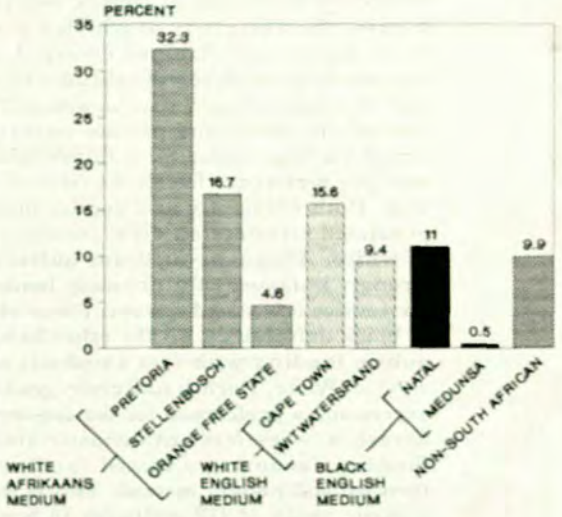

FIG. 1.
University at which basic medical degree obtained (436 respondents).

Roles and goals

Practitioners were asked how they perceived their role in the health care system. Ninety-six per cent agreed or strongly agreed that they were responsible for caring and curing and 94,2% agreed or strongly agreed that GPs should play an active role in disease prevention and health promotion.

In response to a question on future career plans 81,1% stated that they intended remaining in private general practice, while 6,5% were considering specialisation.

Opinions on the health care system

GPs' responses to a number of questions regarding health care in South Africa are shown in Table II. There

was strong support for the notion of health care as a right for all, with most in favour of access to some basic level of health care for all and two-thirds supporting comprehensive health care for all citizens.

TABLE II.
Attitudes towards health care (%)

Health care philosophy	
Basic health care is a right	95,8
Comprehensive health care is a right	65,2
Public sector services should be integrated	85,0
Public and private sectors should be integrated	37,5
Health care funding	
Funding should be predominantly from private sources	41,0
GPs should be remunerated on a fee-for-service basis	83,9
GPs' current income is too low	72,8
Cost-containment	
Funders should not be allowed to influence treatment	86,3
Limits on the number of consultations paid for per year are not acceptable	78,0
Refusal to pay for 'unnecessary services' is not acceptable	73,3
Limits on medication payments are not acceptable	60,2
PHC delivery	
PHC is best provided by a team of HCWs	86,4
The team approach is feasible in South Africa	82,2
Doctors should be responsible for health care in under-served areas	65,4
Nurses should be responsible for health care in under-served areas	25,4

Most respondents were in favour of a more integrated (less fragmented) public sector health service. However, there was less unanimity regarding integration of the public and private sectors: 49,6% were opposed to and 37,5% in favour of a unified health care system, while the remainder were neutral on this issue.

On the question of what the major source of funding for a future health care system should be, opinions were divided as shown in Fig. 2. Only 20% favoured public (centralised, state) funding. The majority opted either for private funding only (private health insurance and/or out-of-pocket payments), or a combination of private and public funding. Fee-for-service was by far the most popular choice for remuneration of GP services (Fig. 3) with 83,9% selecting this mode, either alone or in combination with other options. Most respondents felt that GPs' present income level was inadequate.

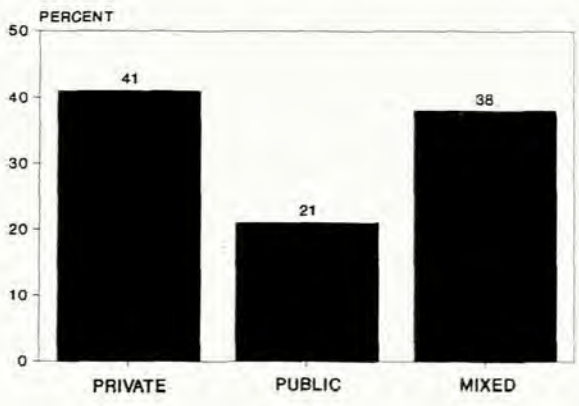

FIG. 2.
Preferred funding mechanisms for a future health care system (%) (393 respondents).

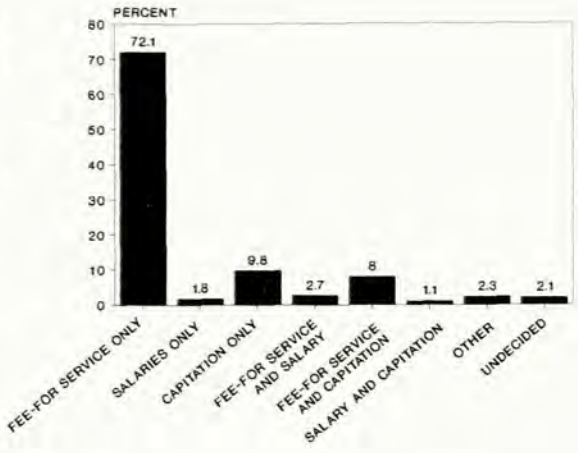

FIG. 3.
Preferred form of remuneration for GP services (436 respondents).

The questionnaire asked respondents to consider various forms of cost-containment strategies used by funders of health care. Most were opposed (61,5% strongly so) to funders of health care (e.g. medical aid schemes) influencing the treatment given by doctors, even if this would reduce costs. Specifically, they were against the imposition of limits on the number of consultations paid for per year and refusal to pay for services considered by the funder 'unnecessary' or 'of no benefit'. There was less resistance to the setting of limits on annual payments for medication, with 60,2% against and 31,3% in favour of such measures.

Practitioners were asked their opinion on doctors, nurses and other health workers working together in primary health care teams. The majority of respondents favoured this approach and thought that it was feasible in the South African context.

With regard to who should deliver primary care in medically under-served areas (rural and peri-urban), two-thirds of respondents thought that doctors, either together with other health workers or alone, should be mainly responsible. Only one-quarter of respondents thought that nurses, either together with lower-level workers or alone, should be mainly responsible. The distribution of responses to this question is shown in Fig. 4.

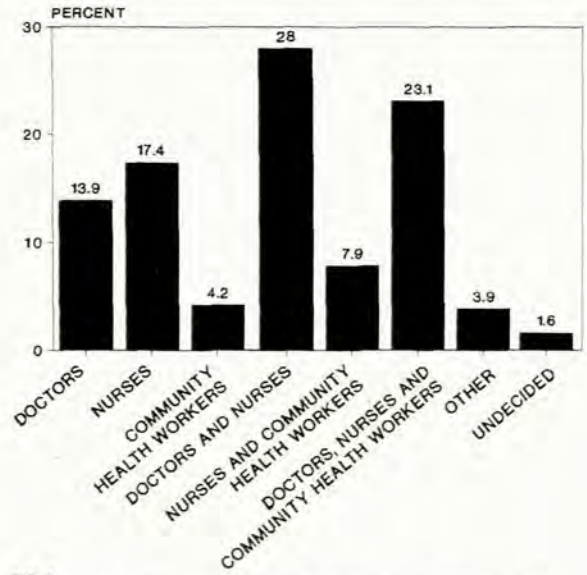

FIG. 4.
Health workers who should be mainly responsible for care in under-served areas (432 respondents).

Determinants of attitudes

Sub-group analysis was undertaken to explore the relationship between background characteristics of respondents and attitudes towards the health care system. Attitudes expressed by graduates of white, Afrikaans-medium universities differed most markedly from those of graduates of black universities; white, English-medium university graduates' views mostly occupied a middle position (Table III). Statistically significant differences ($P < 0,05$) were found for responses on the following items: comprehensive health care is a right, integration of public and private sectors, preferred funding mechanism, preference for fee-for-service, GPs' income, funder influence on treatment and feasibility of team approach.

The only opinion affected by respondents' geographical location was that regarding health care funding, with rural respondents more in favour of private funding and less supportive of public funding than their urban counterparts ($P = 0,016$). Compared with men, female respondents were less likely to think a GP's income too low ($P = 0,036$). The younger respondents were less likely to consider comprehensive health care a right ($P = 0,017$) and find limitations on medicine payments unacceptable ($P = 0,048$).

A postgraduate qualification in general or family practice appeared to influence opinions on two items. Only 51% of respondents with the qualification compared with 67% of those without considered comprehensive health care a right ($P = 0,027$). In addition, those with a specific GP qualification were more likely to reject non-payment for 'unnecessary' services (85,4% v. 71,8%; $P = 0,044$).

Logistic regression analysis was carried out on selected questions to control for confounding and to determine which background characteristics independently predicted attitudes to health care. As shown in Table IV, the university at which a respondent's basic medical degree had been obtained emerged as the only independent predictor of opinions on comprehensive care as a right, integration of the public and private sectors, preferred funding source (public versus other and private versus other) for a future health system and preference for fee-for-service remuneration. Both university and gender independently predicted attitudes on GPs' income.

TABLE III.
Relationship between university at which basic medical degree was obtained and attitudes to health care (%)

	University			
	White, Afrikaans-medium ($N = 233$)	White, English-medium ($N = 105$)	Black ($N = 50$)	*P*-value
Basic health care is a right	93,9	98,1	100,0	0,062
Comprehensive health care is a right	54,1	72,9	86,0	< 0,001
Public sector should be integrated	82,8	87,0	88,0	0,463
Public and private sectors should be integrated	29,1	41,7	50,0	0,005
Preferred funding mechanism				
Private	57,1	29,2	12,2	
Public	10,1	23,6	44,9	< 0,001
Mixed	32,9	47,2	42,9	
Fee-for-service preferred	81,1	70,6	44,0	< 0,001
GPs' income too low	78,9	73,2	56,0	0,003
Funder influencing treatment not acceptable	88,4	78,0	88,0	0,033
Team approach favoured	83,7	87,2	93,9	0,160
Team approach feasible	77,7	84,0	94,0	0,020
Doctors should be responsible for under-served areas	63,4	66,4	75,5	0,262

TABLE IV.
Simultaneous relationships between predictors of responses and selected questions based on the odds ratios (OR) estimated by logistic regression analysis

	Comprehensive care is a right		Public and private sectors should be integrated		Health care should be privately funded		Health care should be publically funded		Fee-for-service preferred		GPs' income is too low	
Predictors	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
University												
WA	1		1		1		1		1		1	
WE	2,5	1,7 - 3,3	1,7	1,2 - 2,5	0,3	0,2 - 0,4	2,5	1,7 - 3,6	0,4	0,3 - 0,6	0,6	0,4 - 0,8
B	5,0	2,5 - 10,0	2,5	1,4 - 5,0	0,1	0,0 - 0,2	6,3	3,0 - 13,0	0,2	0,1 - 0,4	0,3	0,2 - 0,6
Sex												
Male	1		1		1		1		1		1	
Female	1,3	0,6 - 2,8	1,1	0,5 - 2,3	0,9	0,4 - 2,0	1,0	0,4 - 2,4	0,8	0,3 - 1,7	2,5	1,2 - 5,2
Age (yrs)												
45 +	1		1		1		1		1		1	
35 - 44	0,8	0,6 - 1,0	1,0	0,8 - 1,3	1,1	0,9 - 1,4	0,9	0,7 - 1,3	1,0	0,8 - 1,3	1,2	0,9 - 1,5
25 - 34	0,6	0,4 - 1,0	1,0	0,6 - 1,6	1,1	0,8 - 2,1	0,8	0,4 - 1,6	1,1	0,6 - 1,4	1,3	0,8 - 2,3
GP qualification												
No	1		1		1		1		1		1	
Yes	0,6	0,3 - 1,1	1,1	0,6 - 2,5	1,1	0,6 - 2,2	0,2	0,1 - 1,0	1,5	0,7 - 3,0	1,0	0,5 - 2,2
Location												
Urban	1		1		1		1		1		1	
Rural	0,8	0,5 - 1,25	1,2	0,8 - 1,9	0,9	0,6 - 1,4	0,7	0,4 - 1,4	1,1	0,7 - 1,9	1,4	0,9 - 2,4

WA = white, Afrikaans medium; WE = white, English medium; B = black.

Discussion

Compared with previous postal surveys of South African doctors our study achieved a relatively high response rate of 67%.[9,10,13,14] This was probably due to a combination of factors, including a reliable address list, careful piloting and the use of an incentive. Several possible reasons may account for the high percentage of respondents from Afrikaans-language faculties. These include: a greater tendency to respond to surveys (as found in a recent study),[13] a greater response to the incentive, a preference for a career in private, general practice or a relatively lower tendency to emigrate. In a study by Zwarenstein *et al.*[12] 17% of all non-specialist doctors were women. By comparison in our study only 8,6% of respondents were women. This finding is consistent with results of Canadian studies which have found female doctors more likely than men to work in public-sector, salaried practice as opposed to fee-for-service settings.[15,16] We know from a previous report[11] that only 22% of non-specialist doctors registered in 1980 resided in rural areas and that this figure may in fact be an overestimate of generalists working in rural areas.[12] The finding that 36% of our sample practised in rural parts of the country and that this tendency was more common among younger doctors, suggests that private GPs are increasingly likely to practise in rural areas. This may reflect the saturation of the urban private market where ratios of doctors to patients are high.[11] Rural practice does not necessarily mean that GP services are available to the rural and 'homeland' poor.

Surprisingly few private GPs (11%) had a postgraduate qualification in general or family practice. This situation is likely to improve following the recent announcement that the South African Medical and Dental Council is to introduce a family physician registration category.[17] Up until 1994, those with an approved GP qualification will be eligible for registration. Thereafter a period of vocational training in addition to the qualification will be required. A surge of interest in obtaining a GP qualification is thus expected, particularly before 1994. Another interesting finding is that half the respondents worked in at least one other job in addition to private general practice. Currently most private GPs in rural areas (62%) have district surgeon or hospital appointments in the public sector compared with only 21% of urban GPs. The potential for involvement of private GPs in the public sector in urban areas should be explored. GPs in our study were virtually unanimous regarding the acceptance of their role in prevention. Evidence does however suggest that this role is not optimally performed.[18-20] This area therefore deserves further study. The high percentage of respondents indicating an intention to remain in private general practice in future (81%) probably indicates a substantial degree of satisfaction with their career choice.

Equity is generally accepted as an important goal of social and economic policy.[21] A commitment to equity in health implies, as a minimum, equal access to appropriate health services for all individuals.[22] Today a large number of nations include the right to health care in their constitutions[23] and all industrialised nations, with the exception of the USA and South Africa, have a national health system which guarantees their citizens access to health care.[24] The concept of health care access is, however, complex; opinions on the subject range from the view that individuals should have access to a decent basic minimum of health care, to the notion of ideal access in which individuals can receive the highest quality of care needed.[25] Our study found that private GPs in South Africa almost universally agree that basic health care is a right for all citizens and two-thirds of the respondents also support the notion that comprehensive (adequate) health care is a right. These views are consistent with those expressed in the credo of the College of Medicine of South Africa which states that 'equitable access to health care is a right and not a privilege'.[26]

A number of factors have been identified as important obstacles to health care for all South Africans. One of these is the confusing plethora of authorities and systems responsible for the provision of different aspects of health care. Fragmentation of health services has led to 'ineffective, wasteful and unjust delivery of health care'.[27] There have consequently been numerous calls in recent years for the establishment of a unitary, co-ordinated and rationally decentralised health system.[28-32] In the present study most respondents favoured unification of public sector services under a single authority. However, there was significant resistance, especially from graduates of Afrikaans-medium universities, to the idea of integrating public and private sectors in a unified system. A number of respondents belonging to this group regarded such integration as tantamount to a 'national health service' and rejected the idea out of hand. As one GP stated, 'Like communism, national health does not work anywhere in the world!' A common view was that there should be a two-tier system consisting of private health care for those who can afford it and state services for the less privileged.

The question of financing of a future health care system is a vexing one.[33-35] After controlling for sex, age, location and GP qualification we found that the university at which a respondent's basic degree was obtained was the only independent predictor of attitudes to the funding of health care. Considerable divergence was evident in the views of graduates of white, Afrikaans universities on the one hand, who favoured a privately funded and fee-for-service orientated system, and those of graduates from black universities who preferred public funding with less emphasis on fee-for-service. Graduates of white, English-medium faculties, while expressing a preference for fee-for-service remuneration, tended to be less enthusiastic about private funding, favouring a mixed funding approach (private and public) instead. One can speculate that black graduates are more in touch with the reality of underprivileged communities than the other two groups. This may account for the fact that their attitudes were more sympathetic to majority needs than those of the rest of the sample. The finding that graduates of black universities and female respondents were less likely to regard a GP's income as too low possibly reflects lower economic expectations.

There has recently been an increasingly acrimonious exchange between GPs and medical aid societies over tariffs and unpopular cost-containment strategies imposed by the latter.[36-39] This may account for the high level of resistance to funder interference found in our study. Most respondents rejected the idea that a medical aid or any other health care financing agency should have an influence on their practice style or choice of therapies, even if this would reduce costs. However, it appears that GPs are not, in principle, opposed to practice audit. Some respondents indicated that they rejected regulation by non-medical administrators who were interested only in cost savings but were willing to submit to peer review.

Other important factors impacting upon equitable health care provision are the non-availability of doctors in rural and peri-urban areas, and the co-operation of health workers in the delivery of primary health care. Most respondents believed that doctors rather than nurses or other workers should have the major responsibility for primary health care provision in under-served areas. This view is apparently not shared by the State, which sees the nurse practitioner as the key primary health care provider of the future.[40] Respondents also believed that care would be most effectively provided by

a team consisting of doctors, nurses, community health workers and others and that this was possible in South Africa.

Conclusion and recommendations

This is the first large-scale, systematic study of GP attitudes to health care in South Africa. While its main findings require further elucidation, they are presented here as a contribution to future health care policy. Substantial agreement was found among respondents on key aspects of health care, but important differences associated with the respondents' *alma maters* were also found.

Most respondents acknowledged that access to health care is a right. However, the meaning attaching to this right is unclear. The prevailing two-tier health system, with private, fee-for-service care for the affluent, and state services for the majority, seems to be the favoured option of most Afrikaans graduates, many English graduates and some black graduates. This two-tier approach is not tenable in the current sociopolitical milieu and will not be acceptable to the majority who will continue to view state services as second rate until there is a substantial improvement in these services.

Quantitative research as reported in this study estimates the presence and extent of a phenomenon. We recommend further qualitative research to understand the meaning of the attitudes expressed by respondents in the study. Further work is also needed to investigate the role of the university medical school and other factors in the determination of practitioners' attitudes to health care.

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Appendix. Extract from actual questionnaire used in survey

The structure of a future health care system in South Africa

Please give your opinion about how you think the health care system in South Africa should be structured by circling the number that applies best. *There are no 'correct' or 'incorrect' answers.*

8. Access to some *basic* level of health care is a right for all citizens.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

9. Access to *comprehensive* health care is a right for all citizens.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

There have been calls for less fragmentation of the health care delivery system in South Africa.

10. How would you feel about the public sector health services being integrated (e.g. a single health department which included all national, provincial, rural and local authorities)?

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

11. How would you feel about the public and private sectors being integrated into a more unified health care system (i.e. as in 10 above but including the private health sector)?

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

Funding of health care in South Africa

There have been calls for changes in the way in which health care is paid for.

12. What do you think the *major source(s)* of health care funding should be in South Africa?
(Tick one or more)

Individual out-of-pocket payments	
Private health insurance (e.g. medical aid)	
Some form of centralised state funding	
Other	
Undecided	

If other please specify: _____

13. How do you feel about the present income of GPs?

(Tick one) [Too low] [Adequate] [Too high] [Other]

14. In an 'ideal' health care system how do you think that GPs should be paid for their services?
(Tick one or more)

Fee for service (as at present)	
Per capita fee for every patient under his/her care	
Undecided	
Other	

If other please specify: _____

Do you have any further comments on these questions? _____

Cost control

Cost control is an important consideration in any health care system.

15. Do you believe that the funder of health care (e.g. medical aid) should be permitted to influence treatment given by a doctor, if this will reduce costs?

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

How would you feel about each of the following measures (16 - 18) being instituted by health care funders to limit costs?

16. Limits on number of consultations with GPs.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

17. Limits on total annual payments for medication.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

18. Refusal to pay for services which are considered by the funder to be unnecessary and/or of no benefit.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

Do you have any further comments on these questions? _____

_____