

Utilisation of primary curative services in Diepkloof, Soweto

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A study was undertaken to compare characteristics of attenders at primary curative services in Diepkloof, Soweto, and their reasons for the utilisation thereof. A structured questionnaire was administered to a sample of patients attending a provincial clinic and two general practitioners (GPs) in the Diepkloof area. The demographic characteristics, utilisation characteristics and reasons for choosing the service are compared.

The most important characteristic determining choice of primary care was an individual's access to medical aid: 14% of clinic attenders compared with 67% of GP attenders. Other significant differences between the service users were employment and income. Perceived quality of care, attitude of health workers, distance to the service, availability of credit, waiting time, and the type of illness were also important determinants of choice of service.

Methodological issues with regard to the heterogeneity of GP practices and ways of dealing with attitudinal data from a facility-based survey are illustrated.

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The early 1990s have been a time of political change in South Africa. These changes have also heralded changes in health care plans. The Department of National Health has committed itself to a primary health care plan^{1,2} which follows the principles of the Alma-Ata declaration.³ The principles of accessibility, affordability and acceptability are mentioned, but in terms of primary care in South Africa we do not have standards for these ideals, neither do we know what is acceptable or affordable.

Curative primary health care services in Soweto are provided by four main sources: the Transvaal Provincial Administration (TPA) through a network of clinics (the Soweto Community Health Centres); increasing numbers of private general practitioners (GPs); traditional healers; and Baragwanath Hospital, whose outpatient service is often utilised as a primary care facility.⁴ They differ in their accessibility, acceptability and affordability to the Soweto population.⁵ This study looks at these issues by examining what determines patients' choice between two of these providers, viz. GPs and community health centres.

The Soweto Community Health Centres were started in the early 1930s by the local authority but are currently run by the TPA. After the political unrest in 1976, primary health care sisters were trained and introduced into the clinics. These sisters now handle the bulk of consultations at the clinics in Soweto, while doctors are used mainly for difficult or referred cases.

Over the last few years the numbers of people attending the clinics have dropped, from 1,2 million in 1988 to 974 900 in 1990.⁶ There may be a number of reasons for this. One postulated reason is the increase in the number of GPs drawing people away.⁷ A second is the increase in the number of people on medical aid, who are now more easily able to use the private sector. A third may be the increase in clinic fees which places the service out of reach of the very poor.⁸

Other postulated factors influencing the choice of primary care provider are that people prefer doctors as primary practitioners, that people have certain treatment expectations of GPs, especially the expectation of receiving injections which they would not get routinely at the clinic, and that the type of illness would influence the utilisation pattern, as the expense associated with certain illnesses would favour their treatment at clinics.

Methods

Diepkloof was chosen because it is an area of mixed socio-economic status, with middle-class zones, working-class zones and fairly large informal settlements. Approximately 200 000 people live in Diepkloof. The primary curative services consist of one TPA clinic, and seven GPs. The scope of ambulatory services offered by the clinic and the GPs is very similar. The TPA clinic does not offer preventive services. A structured interview was administered to a sample of 102 people attending Diepkloof Community Health Centre, and to a sample of 94 people attending two randomly selected GPs in the Diepkloof area.

The respondents were systematically sampled at each service. The interviews took place prior to their consultation with the doctor or sister. At the GPs' rooms, every patient of GP1 and every second patient of GP2 was interviewed.

The interview schedule in English was pretested and modified prior to the study. The interviewers were two trained nursing assistants, not in uniform, who did not normally work in the Diepkloof area. Both interviewers performed interviews at all venues. The interviews took place in the respondent's language of choice.

The results were analysed by means of Epi-Info version 5 and SAS. We used chi-squared and *t*-test analyses to determine if there were significant differences between clinic and GP variables. Logistic regression analysis was used with a stepwise selection procedure for the different possible determinants of utilisation.

Results

Results are reported for the two services, i.e. clinic and GP, unless the two GPs' findings differed significantly, in which case the results are reported separately for the two GPs, i.e. clinic, GP1 and GP2. The response rate was 98%.

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Demographic features

The age, sex and educational profiles of the clinic and combined GP attenders were similar and are presented in Table I. There were, however, differences between GP1 and GP2 in that GP2 had only 1 child in the sample (2%) and only 1 respondent (2%) with tertiary education, compared with 9 children (17%) and 11 respondents with tertiary education (21%) for GP1.

Table I. Demographic characteristics of attenders of clinic and GP services in Diepkloof

	Clinic		GP (total)		GP1		GP2	
	No.	%	No.	%	No.	%	No.	%
Gender								
Male	31	31	37	39*	21	41	16	36*
Female	70	69	58	61	30	59	28	64
Age (yrs)								
Adult (>15)	89	89	86	90*	43	83	43	97†
Child (≤15)	11	11	10	10	9	17	1	3
Schooling								
< Std 5	18	18	8	8‡	6	12	2	5¶
Std 6 - 9	60	59	54	56	28	54	26	59
Matric	21	20	22	23	7	13	15	34
Post-matric	3	3	12	13	11	21	1	2
Employed								
Yes	41	40	67	71‡	30	68	37	73*
No	61	60	28	30	14	32	14	27
Income†								
Low (<R700)	38	38	23	29‡	11	24	12	35*
Medium (R700-1 499)	39	39	40	51	20	44	20	59
High (R1 500+)	3	4	16	20	14	31	2	6
Medical aid								
Yes	14	14	64	67‡	39	75	25	57*
No	88	86	32	33	13	25	19	43

* Not significant.

† Per family per month.

‡ $P < 0,001$.

¶ $P < 0,05$.

There were differences in the employment status, income and access to medical aid between the services (Table I), with significantly more unemployed people attending the clinic.

Patient characteristics

The presenting illness, as defined by the patient, differed between the two services. The most common illness encountered by the GPs was 'flu' (30%) while the most common illness category at the clinic was 'chronic diseases' (24%) (Fig. 1).

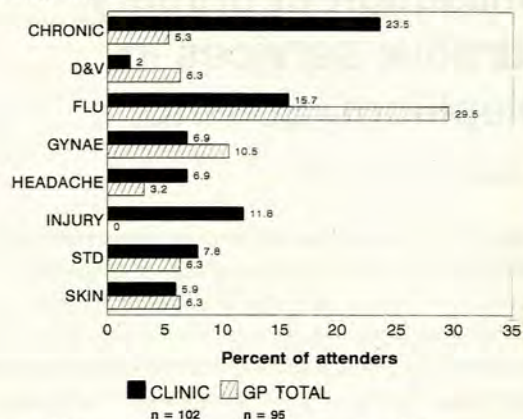
The duration of illness was similar at both services with 69% of patients having been ill for less than 7 days, 29% ill for more than 30 days and 2% ill for 8 - 30 days. The time taken to get to the service differed significantly, with clinic attenders coming from further away than GP attenders (Table II).

Table II. Distribution of time taken by patients to travel to providers

	Clinic		GP (total)	
	No.	%	No.	%
Short: < 15 min	22	22	45	47
Average: 15 - 30 min	41	42	29	30
Long: > 30 min	35	36	22	23

Distribution of time at different services is statistically significant, $P < 0,05$.

Illness Categories



Only 8 most common illness categories shown. Total less than 100%

Fig. 1. Main categories of self-reported illness among patients presenting to the clinic and the GPs.

Reasons for utilisation

The respondents were given a list of factors that might influence their choice and asked whether these were important in their selection of a service. Interestingly, both groups ranked the service attributes in exactly the same order as follows: attitudes of health workers, the kind of treatment, the waiting time, continuity of treatment by the same person and distance to the service. The 'extension of credit' was exceptional in that it was important to 70% of clinic attenders and 84% of GP2 attenders, but only to 48% of GP1 attenders. Respondents were then asked to rank both services on the basis of these attributes. For both GP and clinic attenders, the vast majority thought the service they were attending was better in respect of each of the attributes. However, there were more people in the clinic group who thought that a GP was better than there were people attending a GP who thought the clinic was better. This applied for every attribute except 'obtaining credit' (Table III). This approach to the presentation and analysis of the data is described in more detail below.

Table III. Rating of service according to attribute

Attribute	Rating		A - B
	A Clinic respondents who think the GP is better (%)	B GP respondents who think the clinic is better (%)	
Credit availability	7	49	-42
Waiting time	34	6	28
Attitude of health workers	26	9	17
Ability to consult the same person	25	12	13
Amount of treatment	23	10	13
Kind of treatment	23	13	10
Distance	15	13	2

Respondents were asked, 'Where would you go if you did not have to worry about money?' Forty per cent of clinic attenders and 57% of GP attenders said they would still

come to the same service. The rest would go to GPs, specialists and traditional healers. When asked to give reasons for the above choice, both groups gave similar answers. The most common related to the quality of the service: 'the treatment is best'; 'I get a better examination and/or investigations'; 'the practitioner has more knowledge'; 'waiting time is better'; and 'I like or trust the practitioner'.

Respondents were asked whether they would prefer to see a doctor or a specially trained sister. Although most preferred to see a doctor (clinic attenders 61%, GP attenders 97%), a substantial proportion of the clinic respondents (39%) preferred to see a sister.

Expectations of treatment were similar in the two groups, with 23% of clinic attenders and 30% of GP attenders expecting an injection. The proportion that had attended a different primary care service in the previous 2 months was similar in both groups (24% of clinic patients, 20% of GP patients).

Predictors of service choice

Stepwise multiple regression analysis was performed to identify the interdependent effects of various factors on choice of provider (since the many possible determinants are themselves correlated, e.g. medical aid, income, employment and education). Not having access to a medical aid or having an injury is most strongly predictive of whether a person will go to the clinic (Table IV). Also, people with a chronic illness and people who are unemployed are more likely to go to the clinic. Other predictors which were positive for clinic attendance, but not significant, are also shown in Table IV.

Table IV. Regression analysis: predictors of clinic utilisation

	Odds ratio	95% confidence intervals	P-value
No medical aid	2,04	1,47 - 2,84	< 0,001
No employment	1,42	1,03 - 1,99	0,034
Income			
R700 v. R1 500+	1,81	0,58 - 5,64	0,308
R700 - R1 499 v. R1 500+	1,81	0,64 - 5,09	0,257
Presenting problem			
Injury	2,27	1,22 - 4,24	0,009
Chronic disease	1,57	1,05 - 2,34	0,027
Education			
< Std 5 v. post-matric	1,60	0,64 - 3,97	0,491
Std 6 - 9 v. post-matric	1,51	0,77 - 2,94	0,513

Discussion of utilisation choices

The most striking difference between the two service populations was their access to medical aid. In this study, it was the major determinant of where a person will go for primary curative care. Medical aid membership among blacks has been increasing over the last decade,⁹ and this may well be contributing to the declining number of people attending the TPA clinics in the Soweto area.

Surprisingly, while one might have expected more women and children to attend the clinic, and more adults and men to attend the GP, there were no differences in the age and gender profiles of the respective services.

The distance a person has to travel to a service is generally seen as important in determining utilisation,^{10,11} and one might have expected attendance to decline with increasing distance, particularly for the less-favoured services. This is the reverse of what this study found, viz. that the GP attenders tended to be closer to their source of care than clinic attenders. The most likely explanation is that the pool of GP attenders can choose between seven GPs and the clinic, and will therefore usually be able to choose a provider who is near. On the other hand, clinic attenders tend to use clinics because they cannot afford to use GPs, and are therefore restricted to choosing between clinics. Since there is only one clinic in Diepkloof, a high proportion of clinic attenders will come from farther away. Dutton found the same patterns in Washington, DC.¹⁰ Since the present study was facility-based and did not look at community patterns of attendance, we do not know to what extent people were unable to attend the clinic because of distance.¹⁰

The use of several curative services by the same households has previously been shown in Soweto⁴ and was confirmed in this study. This is important because it indicates that households cannot be classified as users of either clinic or GP services. Most use both: this suggests that demographic and even economic characteristics do not adequately predict choice of provider. This requires the search for other factors such as expectations, nature of presenting illness and perceptions of quality of care.

The presenting illness is clearly associated with the service chosen, and predictably, people with chronic illness and injury attend the clinic. Both these conditions entail much higher costs than the average illness, and will thus be affordable to few non-medical aid members. In addition, the facilities of the clinic, such as radiography facilities and ambulances, may be viewed as more appropriate for injuries.

The hypothesis that the type of treatment, especially the desire for injections, influences the service chosen, was not borne out by our findings. An interesting finding was that 39% of clinic attenders would prefer to see a primary health care sister than a doctor. This could mean that people who prefer to see a doctor choose to go to a GP, or it could mean that clinic attenders, who have some experience of care by sisters, prefer them to doctors. This needs further research.

Discussion of methodological issues

The major methodological concern in facility-based studies is the potential for bias in favour of the facility. This arises from respondents' anxiety not to displease the service providers upon whom they are dependent. The potential for bias is high, even where the researchers indicate their independence of the service providers, as was the case in this study. This bias might explain why most patients rated the service which they were attending as better than the alternative, although it is, of course, possible that services attract those patients who prefer them. The simple analysis of patient preferences is unable to distinguish whether this is a genuine rating, a rationalisation for attending the service or a bias caused by the survey's taking place within the service.

In an attempt to overcome this potential bias we have presented the data in a way which emphasises the numbers of those rating the opposite service to be better, i.e. 31% of those attending the clinic rated the GP better, while only

10% of those attending the GP rated the clinic better (Table III). We believe this might give a better picture of preferences, since the bias functions equally at all facilities studied, and those patients willing to indicate a preference for a different facility are likely to be expressing a real preference.

Although there were differences between the GP attenders and the clinic attenders, there were also some differences between the attenders of the two GPs. GP1 had more high earners, more people with tertiary education and more people with access to medical aid (Table I). This is probably a consequence of the difference in the character of the GP practices, which may be attracting slightly different populations. GP1 was a cash-type practice in a busy shopping centre, while GP2 was a family-type practice in a suburban house. The differences may also include different approaches to credit. This emphasises the fact that GPs are not a homogeneous group, and for studies to be generalisable they will need to take into account the different types of practices and may need to stratify the sampling and/or analysis of the GP services.

Conclusion

This study highlights the fact that the use of private GPs is strongly influenced by access to medical aid. The rising costs of medical aid have resulted in minimal further growth in membership in recent years. However, with new managed care options this may well change and allow additional large numbers of people access to the private sector. It also shows that while most patients would prefer access to a GP, the service provided by Diepkloof Clinic is acceptable to many people, except in respect of waiting time.

Finally the study illustrates two methodological points with regard to the heterogeneity of GP practices and the presentation of facility-based attitude data.

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