SAMJ
ARTICLES

Informed consent — a survey of doctors' practices in South Africa

L. Henley, S. R. Benatar, B. A. Robertson, K. Ensink

Objective. To examine doctors' practices with regard to informed consent.

Design. Cross-sectional, descriptive survey.

Participants and setting. All full-time consultants and registrars in the Departments of Medicine, Obstetrics and Gynaecology, Paediatrics and Child Health, Paediatric Surgery and Surgery at the University of Cape Town were included. The overall response rate was 63% (160/254).

Measurement. Data were collected by means of self-administered, semi-structured questionnaires.

Results. Most doctors (79%) felt it was their responsibility to ensure that patients and parents were fully informed about diagnostic and therapeutic interventions. Many (62%) supported a patient-centred standard for determining the type and amount of information to disclose. Doctors disclose most of the legally required information except for information about alternative forms of treatment and remote serious risks. They almost never provide information on medical costs. The most common reasons for not obtaining informed consent were the doctors' tendency to 'tell' patients/parents what they intend doing and their belief that patients/parents expect doctors to know what is medically best for them. Language, inadequate communication skills and lack of time were, surprisingly, seldom viewed as obstacles to the obtaining of informed consent. Findings were independent of discipline (medical or surgical) and doctors' status (consultant or registrar). Doctors who treat children were significantly less likely to obtain consent for certain interventions.

Conclusion. Doctors meet many, but not all, of the legal requirements for informed consent. The findings question whether informed consent as envisioned by the law exists in reality. Cross-cultural research is needed to clarify patients' and parents' expectations of informed consent.

S Afr Med J 1995; **85:** 1273-1278.

Department of Paediatrics and Child Health, Bioethics Centre, Department of Medicine and Department of Psychiatry, University of Cape Town

L. Henley, PH.D.

S. R. Benatar, F.R.C.P.

B. A. Robertson, M.D.

K. Ensink, M.A. (CLIN. PSYCH.)

Because doctors are granted privileges not allowed other professionals (for instance, they can touch, cut, undress and give drugs to patients), it is inevitable that medical practice will be subject to law. Although the law should not be the first or most important mechanism regulating what doctors do (professional and ethical sensitivity being primary), it does hold doctors accountable.[1] Since most developed countries,[2] including South Africa,[3] recognise the patient's right to self-determination, informed consent and informed refusal have become the means whereby the law protects a patient's autonomy and freedom of choice.

In less developed countries[4,5] and in certain subcultures in developed societies,[6,7] where patients may hold different views about autonomy and individual choice and about the role of healers and patients, opinion is divided regarding the feasibility of, and need for, informed consent. Illiteracy,[8] language barriers,[4,7] different explanatory models of disease,[4] presumed cultural differences in personhood,[9] and limited resources are identified as potential obstacles to the obtaining of truly informed consent.

Even societies that champion the right of patients to be adequately informed find discrepancies between theory and practice. A series of sociological studies,[10,11] which used qualitative methods to explore the reality of how informed consent actually operates in routine everyday treatment settings, concluded that the rational, linear model of informed consent as envisioned in law and bioethics does not exist. What patients are told depends on a combination of social, ethical and medical factors. These include the context and tradition of medical care, the attitudes, values and mutual expectations of the patients and health professionals, the duration of the doctor-patient relationship and the nature of a patient's condition and treatment. The AIDS epidemic has further highlighted the practical difficulties inherent in the concept of informed consent.[12]

South Africa is no exception, and there are many potential obstacles to the obtaining of informed consent in this multicultural and multilingual society. The present study examined the informed consent-related practices of consultants and registrars working in the teaching hospitals attached to the medical school of the University of Cape Town.

Methods

Study design and population

A cross-sectional, descriptive survey was conducted among all full-time consultants and registrars in the Departments of Medicine, Obstetrics and Gynaecology, Paediatrics and Child Health, Paediatric Surgery, and Surgery at the University of Cape Town between July and November 1992.

Questionnaire

Data were collected anonymously by means of self-administered, semi-structured questionnaires. To increase the response rate reminders were sent to all participants 4 weeks after the initial mailing. Questionnaires assessed the following aspects of informed consent: definition and meaning, responsibility and legal standards for information

disclosure, type of consent (oral, written, both or none) for selected routine and non-routine procedures, nature and frequency of information disclosed and reasons for not obtaining informed consent. When answering the questionnaire, doctors were asked to keep in mind the context in which they practised most of their medicine. Where they did not have direct clinical experience of a situation they were asked to answer according to how they thought they would react in a similar situation.

During the design phase, many revisions were made to item wording and response options to remove ambiguity. Minor changes were made to the wording of questionnaires distributed to doctors who treated children. For example, the word 'patient' was replaced by 'parent' where applicable.

Statistical analysis

Data were analysed on a personal computer using Epi Info version 5. Groups were compared by means of the χ^2-test, the χ^2-test for trend and Fisher's exact test. All percentages were rounded to the nearest whole number in the tables.

Results

One hundred and sixty questionnaires were returned, reflecting an overall response rate of 63% (Table I). The response rates from the Departments of Paediatrics and Child Health, Medicine and Paediatric Surgery were satisfactory (79%, 72% and 71% respectively), whereas those from the Departments of Surgery and Obstetrics and Gynaecology were much lower (40% and 34% respectively).

Table I. Sample composition and response rate

	Questionnaires		Response rate (%)
	Sent	Returned	
Adult medicine	165	91	55
Department of Medicine	85	61	72
Consultants	35	31	89
Registrars	50	30	60
Department of Obstetrics and Gynaecology	38	13	34
Consultants	14	7	50
Registrars	24	6	25
Department of Surgery	42	17	40
Consultants	9	5	56
Registrars	33	12	36
Paediatric medicine	89	69	78
Department of Paediatrics and Child Health	72	57	79
Consultants	38	32	84
Registrars	34	25	74
Department of Paediatric Surgery	17	12	71
Consultants	12	8	67
Registrars	5	4	80
Grand total	254	160	63

A systematic analysis of findings was undertaken to establish if differences existed in doctors' practices depending on their status (consultant or registrar), the nature of their practice (medical or surgical) or whether they treated adults or children. At each stage, if no statistically significant results were obtained, groupings were combined for further comparisons.

Comparisons within departments (i.e. between consultants and registrars) and between departments yielded no significant differences. The findings of the departments of Medicine, Obstetrics and Gynaecology, and Surgery (i.e. 'adult' medicine) and those of the Departments of Paediatrics and Paediatric Surgery (i.e. 'paediatric' medicine) were combined for the final series of comparisons ($N = 91$ and $N = 69$ respectively). These combinations seemed intuitively correct, as doctors treating children might approach informed consent differently because parents were not always present. Unless statistically significant differences were found between the 'adult' and 'paediatric' groupings, final results are presented for the total sample ($N = 160$).

Meaning of 'informed consent'

Doctors were asked to explain in their own words what they understood by the term 'informed consent'. Most doctors (83%) described informed consent as informing patients/parents about the nature of their condition and the recommended treatment. Most doctors (81%) included an explanation of treatment risks but only 11% included treatment alternatives or the option of no treatment. Approximately half the doctors (53%) mentioned that patients/parents must understand the information being provided and 39% indicated that patients/parents must give their 'permission' (consent) before a procedure or treatment can take place. A minority of doctors (14%) believed that patients/parents should decide whether they wanted treatment. Only 9% of doctors associated informed consent with written consent and a mere 3% stated that it was a legal requirement.

Responsibility for disclosure

Doctors were asked whose responsibility it was to ensure that patients/parents were fully informed about their condition and treatment. Most doctors (79%) believed it was their responsibility and the remainder (21%) felt that doctors and patients/parents were equally responsible for ensuring adequate disclosure. No doctors felt that it was primarily the patients'/parents' responsibility.

Legal standards for disclosure

Three general standards have been proposed to define a doctor's legal responsibility to disclose information to patients/parents. Respondents were asked which standard they generally followed when judging the kind and amount of information to give to patients/parents. Many doctors (62%) disclosed information according to what the particular patient/parent might want in reaching a decision (Table II). However, doctors in paediatric medicine were significantly more likely to choose the particular patient/parent standard. Conversely, doctors in adult medicine were more reliant on the average, reasonable doctor standard (30% v. 12%).

Table II. Legal standards for disclosure

	Adult medicine (*N* = 90)		Paediatric medicine (*N* = 69)		Total (*N* = 159)	
	No.	%	No.	%	No.	%
Average, reasonable doctor	27	30	8	12	35	22
Average, reasonable patient/parent	12	13	12	17	24	15
Particular patient/parent	51	57	49	71	100	62

$\chi^2 = 7,72$; $P = 0,02$.

Type and frequency of information disclosure

Doctors had to rate the frequency with which they discussed various categories of information with patients/parents when they sought informed consent. The scale of responses ranged from 100 = always to 0 = never (100, 90, 80 . . . 20, 10, 0). For purposes of analysis, responses were grouped into five categories according to frequency of disclosure: always (100), most times (90 - 80), often (70 - 60), occasionally (50 - 30) and seldom (20 - 0). Responses in the categories labelled 'always' and 'most times' were treated as evidence that information was 'commonly' disclosed by doctors. This follows the convention used in a previous study[13] and enabled comparison of findings.

The vast majority of doctors commonly provided information on the nature and purpose of a procedure and on the benefits of the recommended intervention (99% and 94% respectively) (Table III). A high proportion of doctors also commonly volunteered information about their recommendations as to the best course of action (83%), side-effects that are highly likely to accompany an intervention (77%) and the consequences of no treatment (70%). A reasonable proportion (59%) of doctors commonly tell patients/parents that the decision to accept or refuse the suggested intervention is their own. In contrast, fewer than half the sample commonly gave information on alternative forms of treatment, or on risks of death or disability which were rare (45% and 27% respectively). A modest 5% of doctors regularly provided information on the costs of a recommended intervention.

Reasons for not obtaining informed consent

Doctors were given a list of possible reasons for not obtaining informed consent which they had to rate on an 11-point ordinal scale (from 100 = total agreement to 0 = total disagreement). Responses were then categorised as follows: total/strong agreement (100 - 90), agreement (80 - 60), neutral (50), disagreement (40 - 20) and total/strong disagreement (10 - 0). The most frequently cited

Table III. What doctors disclose when they obtain informed consent (% distribution)*

	Always (100)†	Most times (90 - 80)	Often (70 - 60)	Occasionally (50 - 30)	Seldom/never (20 - 0)
Nature and purpose of procedure	85	14	1		
Benefits of intervention	64	30	3	2	1
Your recommendations as to best course of action	55	28	7	8	2
Highly likely side-effects	47	30	12	9	2
Consequences of no treatment	42	28	14	10	6
Advise parents/patients that it is their decision to accept or refuse recommended intervention	36	23	14	16	11
Alternative interventions and their pros and cons	14	31	16	23	16
Remote risks of death/serious disability	14	13	11	26	36
Cost of recommended intervention	2	3	2	18	75

* *N* = 159.
† 11-point scale (100, 90, 80 . . . 20, 10, 0).

Table IV. Reasons for not routinely obtaining informed consent (% distribution)

	Total/strong agreement (100 - 90)†	Agreement (80 - 60)	Neutral (50)	Disagreement (40 - 20)	Total/strong disagreement (10 - 0)
You generally 'tell' parents/patients what you intend to do	44	24	4	11	16
Patients/parents expect doctor to know best	16	27	8	20	29
Not 'accepted' medical practice	14	11	4	13	58
Lack of language skills	7	17	9	20	47
Too busy attending to patients' needs	4	16	7	16	57
Unlikely to understand the medical and technical details	7	12	8	21	52
Don't want to burden patients/parents with too many frightening details	3	14	12	22	49
Patients/parents will ask for more information	4	12	18	20	46
Totally impractical in developing country	2	12	5	18	63
Parents/patients will forget most information	4	9	5	19	63
Lack of communication skills		6	4	16	74

* *N* = 160.
† 11-point scale (100, 90, 80 . . . 20, 10, 0).

reasons for not obtaining informed consent were the inclination of doctors to 'tell' patients/parents what they intend doing and their belief that patients/parents expected the doctors to know what was medically best for them (Table IV). A surprisingly small proportion of doctors believed language and inadequate communication skills interfered with the process of obtaining consent (6% and 24% respectively). It is noteworthy that significantly more doctors in adult medicine agreed with the contention that patients/parents were unlikely to understand the medical and technical details of an intervention (χ^2 for linear trend = 7,52; P = 0,0060). Nonetheless, the majority of doctors in both groups rejected this explanation.

Type of consent

Doctors had to indicate the type of consent they obtained (written, oral, both or none) for a selection of procedures and treatments. Responses in the 'written' and 'both' categories were combined in the analyses.

There was a high degree of consensus on the need for written consent for a general anaesthetic, cardiac catheterisation and a biopsy of an internal organ (Table V). A high percentage of doctors also obtained written consent for gastro-intestinal endoscopy. A minority of doctors (< 30%) obtained written consent for a local anaesthetic, chemotherapy, HIV testing and pleural drainage.

Table V. Type of consent (% distribution)*

Procedure	Written	Oral	No consent
General anaesthetic	97	3	
Cardiac catheterisation	96	4	
Biopsy of internal organ	91	8	1
GIT endoscopy	75	22	3
Local anaesthetic	28	55	17
Chemotherapy	27	63	10
HIV antibody test†	23	55	22
Pleural drainage†	20	66	14
CT scan of head	8	50	42
Lumbar puncture†	6	75	19
Blood transfusion†	4	65	31
Bone scan	2	48	50
Ventilation	2	40	58
Barium swallow	1	51	48
Venepuncture†		44	56
Intramuscular injection		40	60
Intravenous therapy		37	63
Diagnostic ultrasound		35	65
Electrocardiogram		25	75
Nebulisation		23	77
Electro-encephalogram		46	54
Oxygen therapy		21	79

* N = 158.
† Significant differences between the practices of adult and paediatric groups are detailed in Table VI.

Over three-quarters of doctors obtained no consent when administering oxygen therapy, nebulisation and an electrocardiogram. A meaningful proportion (> 60%) also fail to obtain any consent when performing diagnostic ultrasound or when administering intravenous therapy and intramuscular injections; neither is informed consent always obtained before electro-encephalography, a bone scan, a barium swallow or computed tomography of the head are undertaken.

Doctors in paediatric medicine were significantly less likely to obtain any consent when testing for HIV or performing a lumbar puncture, pleural drainage, blood transfusion or venepuncture (Table VI).

Table VI. Type of consent according to status of patient*

	Written		Oral		No consent		
Procedure	No.	%	No.	%	No.	%	P-value
HIV antibody test							
Adult	25	28	60	67	4	4	0,0000
Paediatric	12	17	27	39	30	43	
Lumbar puncture							
Adult	6	7	76	85	7	8	0,0002
Paediatric	4	6	42	61	23	33	
Pleural drainage							
Adult	23	26	61	68	5	6	0,0004
Paediatric	8	12	43	62	18	26	
Blood transfusion							
Adult	3	3	66	74	20	22	0,0164
Paediatric	4	6	36	52	29	42	
Venepuncture							
Adult			46	52	43	48	0,0319
Paediatric			23	33	46	67	

* Adult group (N = 89), paediatric group (N = 69).

Many doctors elaborated on what they meant by 'no consent'. Doctors 'tell' or 'explain' to patients/parents what they intend doing and patients' acquiescence is interpreted as implied consent. In the words of one doctor, '. . . "no consent" implies the procedure is discussed with the patient but consent is not explicitly sought'. Doctors acknowledged that this is not informed consent in its purest form inasmuch as it does not reflect a formal request for permission to proceed.

Sources of influence on medical practice

Sources of influence on the way doctors practise medicine were rated on a 4-point scale: a great deal, quite a lot, not much and none. The latter two categories were combined in the final analysis. Clinical experience, medical education and training, and doctors' personal values and beliefs had the greatest influence on medical practice (Table VII). In over half the sample, South African medical law, the South African Medical and Dental Council (SAMDC)'s rules and guidelines and malpractice liability played only a minor role, and a formal education in ethics had the least influence.

Table VII. Sources of influence on medical practice (% distribution)

	A great deal	Quite a lot	Not much/none
Clinical experience*	71	29	
Medical education and training*	69	29	2
Personal values and beliefs*	67	29	4
Resource constraints†	13	52	35
South African medical law†	14	34	52
SAMDC rules/guidelines†	11	29	60
Malpractice liability†	12	25	63
Formal education in ethics*	9	19	72

* N = 160.
† N = 159.

Discussion

Informed consent can be sought and obtained in two different senses, each with different implications.[14] The first is the legal sense in which authorisation for the professional to act implies that the patient has a reasonable understanding of the procedure and its consequences. It focuses on the requirement for intentional consent without undue influence of others and on the fact that the consent procedure meets with legal and institutional policy requirements. The second and more important moral sense of informed consent is based on a true commitment to patient autonomy and the need for shared decision-making.

For patient protection, the doctor is legally obliged to obtain informed consent from the patient or, in the case of a child, the parent, before any medical intervention (be it diagnostic, therapeutic, prophylactic, experimental, cosmetic or medicinal).[3] However, there is convincing evidence that informed consent as envisioned by law does not exist in reality, even in highly developed countries, and that medical care is governed far more 'by the logic, logistics, and the ethos of medical practice than by the legal ideal of individual autonomy'.[10] Our findings in South Africa similarly show that legal guidelines and sanctions have a relatively modest influence on medical practice compared with clinical experience, training and personal values.

The minor effect of the law is further underscored by findings which reflect varying levels of conformity with the legal requirements for informed consent. In accordance with legally recommended practice,[3] most doctors acknowledged that it was their responsibility to obtain informed consent. Furthermore, a substantial proportion of doctors supported a patient-centred standard for determining the kind and amount of information to disclose. This is in line with recommended ethical[2] and legal[3] practice and previous findings.[13] Moreover, it suggests that doctors do recognise the highly individual nature of patients'/parents' information needs and expectations about the doctor-patient encounter.

However, a note of caution is necessary. Empirical data[15] suggest that, regardless of the practice standard they select, doctors still disclose what they think their patients/parents want to know and that this usually falls far short of stated preferences. In addition, qualitative evidence[10] suggests that what patients and parents *learn* about their condition has as much to do with 'situational etiquette' and *ad hoc* encounters between medical and nursing staff and other patients as with legal standards.

Legal requirements also determine the kind of information the doctor must give the patient/parent.[16] In keeping with previous research in the USA,[13] current findings in South Africa show a reasonable to high level of agreement (70% or better) between many items of information doctors claim they commonly disclose and what the law requires they disclose. The low likelihood of disclosing alternative interventions has been noted in a previous field study.[10] Lidz *et al.*[10] believe it is seldom possible to present a patient/parent with a simultaneous set of alternative choices since much medical practice is complex, uncertain and unknowable in advance, except in the broadest terms. Instead, doctors present what they believe to be the best option.

The low rate (< 30%) of disclosure of unlikely risks of death and disability could render doctors legally liable for non-disclosure since they have a duty to disclose serious risk, even if it is remote.[3] Doctors may well be faced with the dilemma of whether to provide too much information, which may cause anxiety and distress to their patients/parents, or too little information, which is in breach of the informed consent requisite. To this end a set of workable guidelines[17] has been proposed that protects the doctor from liability for excessive disclosure *and* the patient's/parent's right to self-determination. Moreover, past research[18] suggests that patients expect this information.

Given escalating medical costs, doctors and the public will have to become more knowledgeable about the financial implications of their medical decisions. Although doctors do not have a legal duty to disclose information on costs, American data[13] show that a high percentage of the public desires this information.

According to South African law,[3] doctors do not have a professional right to heal on the grounds that 'the doctor knows best' or that it is 'in the patient's best interest'. Yet a significant proportion of doctors claim not to obtain informed consent for a variety of procedures and treatments on the basis that they 'tell' patients/parents what they are going to do and patients expect them to know best (68% and 43% respectively). It is noteworthy that studies[10] which used direct observation of the informed consent process yielded almost identical findings. The finding that a number of doctors interpreted acquiescence as evidence of implied consent is also supported by the fieldwork of Lidz *et al.*[10] They offered a sociological explanation for their findings, which is relevant to this study. These authors noted that acutely ill, hospitalised patients readily adopted a passive sick role in which they entrusted themselves to the care of the doctors whom they believed had the necessary technical expertise and were committed to delivering the best possible care. The doctors, in turn, had been socialised into a dominant role in which they had been taught to 'do' what was best for their patients. Further research is needed to confirm the validity of this explanation locally.

Unexpectedly, doctors dismissed most of the customary reasons for not obtaining informed consent. Even more surprisingly, only 25% of doctors perceived language as an obstacle to the obtaining of consent, despite recent anthropological evidence[7] which suggests that language poses a major barrier to informed clinical communication and adequate patient understanding. It seems too as though interpreters do not necessarily facilitate the process, inasmuch as selective translation and personal agendas, values and interpretations all combine to influence what patients are eventually told.[7] The role of interpreters in obtaining informed consent needs investigation in the South African context.

In keeping with a previous finding,[19] almost 50% of doctors dealing with children do not obtain informed consent for an HIV antibody test. From their comments, doctors felt an HIV test should be treated like any blood test, i.e. oral consent is needed for the blood test but it is unnecessary to give a lengthy explanation of all potential diagnostic tests to be performed. Legal opinion is divided on this issue.[20] However, the SAMDC[21] supports a policy of informed consent before HIV testing and Strauss[20] believes

their guidelines to be indicative of how the reasonable doctor would be expected to behave.

It is notable that Van Oosten[3] recommends that there be no duty on the doctor to disclose in circumstances where it is physically impossible to obtain consent, e.g. in situations where minor patients are left in hospital for diagnosis and treatment and their parents cannot be contacted.

Limitations of the study

The study findings must be viewed in the light of the following limitations. The low response rate in the Departments of Obstetrics and Gynaecology and Surgery limits generalisation of findings to these disciplines. However, systematic analysis within and between all departments yielded no statistically significant differences according to discipline, nature of practice and, with few exceptions, status of the patient. It is therefore reasonable to assume that doctors are fairly homogeneous in their reported attitudes and practices with regard to informed consent.

The survey was undertaken in university-affiliated hospitals and the findings may not reflect practices in other settings.

The study relied exclusively on doctors' self-reports of their behaviour in hypothetical situations. For reasons of social acceptability doctors may have underreported instances when they fail to obtain consent. Similarly they may have overreported the amount of information they disclose. However, the large proportion of doctors who admitted not always asking for consent favours a high measure of honest reporting. Moreover, in many areas the findings were substantiated by previous research which used direct observation for data collection.

Conclusions and recommendations

This study was limited to doctors' perceptions and practices. The concept of informed consent in Africa should be addressed,[22] and cross-cultural research should be undertaken to clarify the information preferences and expectations concerning shared decision-making of patients and parents.

Despite its limitations, the study provides valuable insight into how doctors approach informed consent in over-burdened teaching hospitals. It seems that doctors meet many, but not all, of the legal requirements for informed consent. Professional training and socialisation of doctors together with patients' traditionally dependent (sick role) behaviour seem partly responsible for failure to implement the requirements of informed consent more fully.

Medical education and training are skewed toward scientific and technological aspects of medicine. The need for greater emphasis on the humanities is now acknowledged.[23] Improvement in communication skills and the incorporation into medical education of broader sociological[24] and anthropological[25] perspectives are imperative. Formal courses in bioethics are relatively new in South African medical schools and their impact on future medical practice requires ongoing evaluation.

We thank Lynore Heuer for preparation of the manuscript.

REFERENCES

1. Kennedy I. Consent to treatment: the capable person. In: Dyer C, ed. *Doctors, Patients and the Law.* Oxford: Blackwell Scientific Publications, 1992: 44-71.
2. Beauchamp TL, Childress JF. *Principles of Biomedical Ethics.* 3rd ed. New York: Oxford University Press, 1989: 67-119.
3. Van Oosten FFW. The doctrine of informed consent in medical law. Unpublished LL. D. thesis, University of South Africa, 1989.
4. Ekunwe EO, Kessel R. Informed consent in a developing country. *Hastings Cent Rep* 1984; **14:** 22-24.
5. Adityanjee. Informed consent: issues involved in developing countries. *Med Sci Law* 1986; **26:** 305-307.
6. Hahn RA. Culture and informed consent: An anthropological perspective. In: *President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Bahavioral Research. Making Health Care Decisions: The Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Vol. 3. Appendices: Studies on the Foundations of Informed Consent.* Washington, DC: US Government Printing Office, 1982: 37-62.
7. Kaufert JM, O'Neil JD. Biomedical rituals and informed consent: Native Canadians and the negotiation of clinical trust. In: Weisz G, ed. *Social Science Perspectives on Medical Ethics.* Netherlands: Kluwer Academic Publishers, 1990: 41-63.
8. Sriram TG, Kishore Kumar KV, Jayaprakash MR, Sriram R, Shanmugham V. Informed consent: a study of the experiences and opinion of utilizers of health services from India. *Soc Sci Med* 1991; **32:** 1389-1392.
9. Schoepf BG. Ethical, methodological and political issues of AIDS research in central Africa. *Soc Sci Med* 1991; **33:** 749-763.
10. Lidz CW, Meisel A, Holden JL, Marx JH, Munetz MR. Informed consent and the structure of medical care. In: *President's Commission for the Study of Ethical Problems in Medicine and Behavioral Research. Making Health Care Decisions: The Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Vol. 2. Appendix C: Empirical Studies of Informed Consent.* Washington, DC: US Government Printing Office, 1982: 317-410.
11. Lidz CW, Meisel A, Zerubavel E, Carter M, Sestak RM, Roth LH. *Informed Consent. A Study of Decision Making in Psychiatry.* New York: Guilford Press, 1984.
12. Friedland IR, Karstaedt AS. HIV-related ethics — who should decide? *S Afr Med J* 1991; **79:** 527-528.
13. Harris L, Boyle JM, Bronstein PJ. Views of informed consent and decisionmaking: Parallel surveys of physicians and the public. In: *President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Bahavioral Research. Making Health Care Decisions: The Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Vol. 2. Appendix B: Empirical Studies of Informed Consent.* Washington, DC: US Government Printing Office, 1982: 17-316.
14. Faden RR, Beauchamp TL. *A History and Theory of Informed Consent.* New York: Oxford University Press,1986.
15. Faden RR, Lewis C, Becker C, Faden AI, Freeman J. Disclosure standards and informed consent. *J Health Polit Policy Law* 1981; **6:** 255-284.
16. Van Oosten FFW. The legal liability of doctors and hospitals for medical malpractice. *S Afr Med J* 1991; **80:** 23-27.
17. Van Oosten FFW. The doctor's duty of disclosure and excessive information liability. *Med Law* 1992; **11:** 633-639.
18. Faden RR, Becker C, Lewis C, Freeman J, Faden A. Disclosure of information to patients in medical care. *Med Care* 1981; **19:** 718-733.
19. Friedland IR. HIV-related practices and ethics — survey of opinions in a paediatric department. *S Afr Med J* 1991; **79:** 529-532.
20. Strauss SA. *Doctor, Patient and the Law.* 3rd ed. Pretoria: Van Schaik, 1991.
21. South African Medical and Dental Council. The management of patients with HIV infection or AIDS. Document approved by the Executive Committee of SAMDC, November 1992.
22. Benatar SR. Informed consent in Africa (Editorial). *S Afr Med J* 1992; **81:** 489-490.
23. Benatar S. Flexner revisited — the challenge ahead (Editorial). *S Afr Med J* 1987; **72:** 731-733.
24. Fox RC. *The Sociology of Medicine.* New Jersey: Prentice Hall, 1989: 246-252.
25. Marshall PA. Anthropology and bioethics. *Med Anthrop Q* 1992; **6:** 49-73.

Accepted 24 May 1994.