

# Medical students' financial dilemma

## A study conducted at the University of Cape Town

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### Summary

The financial position of 5th- and 6th-year medical students at the University of Cape Town was analysed. The median annual expenditure for a 6th-year student in private accommodation is R13790. The trend in applicants to medical school has changed, with proportionally more now coming from educationally and economically disadvantaged backgrounds. The accumulated debt of 74 5th-year students and 76 6th-year students, who completed a questionnaire, amounts to R2 757 415 of which R1 596 670 must be repaid as cash and the balance as bursary commitments. The burden of meeting these loan commitments is considerable. It is clear that middle-class families can no longer support a student at medical school and that the position for children from poor homes is untenable.

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The present economic climate, with the appreciable escalation in the cost of living, university fees and books, prompted the evaluation of the financial position of medical students. Many senior clinical students are accumulating large bank loans. Because of high interest rates, relatively poor salaries in the public sector and the army commitments of white men, the ability of the newly graduated doctor to service and repay these loans is a cause for concern.

A number of matriculants enter the M.B. Ch.B. degree programme without being aware of the financial implications (this ignorance often also applies to their families). Others hope that they will be able to acquire bursaries or other financial support at some stage of their studies.

The annual fees payable for tuition in the M.B. Ch.B. course at the University of Cape Town have risen steadily (at 20,7% per annum) over the last 5 years (Fig. 1); this is in excess of the consumer price index (CPI).<sup>1</sup> Since the largest proportion of the budget of the university is from state subsidies, the decline in income from this source over the past few years has contributed to the substantial increase in the fees payable by students.

This increase in the cost of medical education makes it more difficult for a family to afford to send a child to medical school. It is therefore pertinent to note which matriculants are applying to enter the M.B. Ch.B. programme at the University of Cape Town. Over the 6-year period 1986 - 1991 inclusive, the number applying has risen from 1096 to 1424. White applicants have decreased, whereas black applicants have markedly increased in number (Fig. 2). Coloured and Indian matriculants have consistently represented approximately 20% of applicants. This trend indicates a rapidly increasing demand for a medical education from the less affluent sector of the

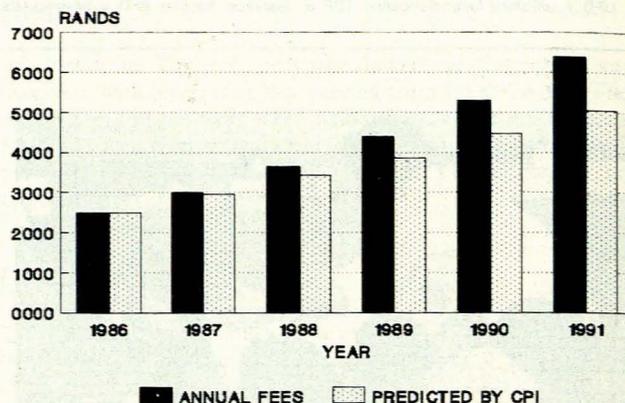


Fig. 1. Student fees for the degree M.B. Ch.B. at the University of Cape Town.

population. The decrease in applicants from the more affluent sector of society may represent a rational decision that medical education is no longer affordable or may reflect a decline in the popularity of medicine as a profession.

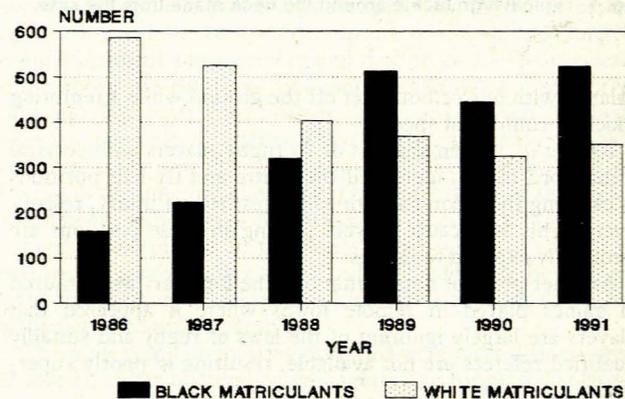


Fig. 2. Trends in M.B. Ch.B. applicants, University of Cape Town.

Student indebtedness, and concern over their ability to repay loans, is not unique to South Africa, or to the medical profession. From 1981 to 1986 the percentage of medical students in the USA with no debt at graduation decreased from 23,0% to 17,9%. Over this period the percentage of students with debts in excess of \$30 000 increased from 14,5% to 41,4%.<sup>2</sup> A separate study<sup>3</sup> showed, however, that the total indebtedness of students was consistently some 35% of their anticipated future annual salary. Students therefore appeared to be limiting their loans to a level they felt they could reasonably repay. Concern over the ability to repay loans is deterring students in the USA from entering medical school.<sup>4,5</sup>

In the UK, fees and maintenance for first degrees have, in the past, been state-subsidised and tuition fees were kept low.

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Recent government proposals include a 5-fold increase in tuition fees at medical school, so that a graduate in another field entering medicine will be faced with a total cost, over 5 years, of £16 000 for tuition fees alone.<sup>6</sup> The proposed introduction of a loan scheme for and the withdrawal of grants and benefits from students could present a financial barrier to medical school for the talented, poorer student.<sup>7</sup>

Nursing students in the UK<sup>8,9</sup> and dental students in the USA and the UK<sup>10,11</sup> appear to have similar problems.

### Subjects and methods

In an attempt to determine the real financial status of senior medical students, a survey was held among the 140 5th-year and 142 6th-year M.B. Ch.B. students at the University of Cape Town Medical School in 1990. The survey was conducted in the strictest confidence with 74 and 76 satisfactorily completed questionnaires being received from each class, respectively. Five questionnaires had to be discarded because of incomplete information.

The results obtained from each of the two classes were analysed separately and according to accommodation arrangements (Table I).

TABLE I. STUDENTS RESPONDING TO SURVEY

Category	5th year	6th year
Private*	48	39
Parents	18	20
Residence	5	6
Married	3	11
<b>Total</b>	<b>74</b>	<b>76</b>

\* Private refers to individual students living in flats or houses, either alone or sharing.

### Results

#### Expenditure

The annual expenditure incurred by students is significantly influenced by accommodation arrangements and varies con-

siderably within each category. The expenditure in the category 'parents' is somewhat misleading in that it excludes the expenditure incurred by parents in having their child remain at home. The cost of accommodation, including rent, food and living expenses for each category, is given in Table II. Other items of expenditure incurred are given in Table III.

The maximum, minimum and median total annual expenditures incurred for the four different categories of accommodation arrangements and for each of the two academic years is given in Table IV.

Fig. 3 shows the median annual expenditure for 1990 of a 6th-year M.B. Ch.B. student staying in private accommodation. This clearly shows that fees represent the major expenditure, and, as shown in Fig. 1, they are increasing at a rate greater than the CPI. The relatively small amount spent on books, clothes and entertainment reflects limited resources, but also indicates the extent of the sacrifice made by medical students in order to complete their studies.

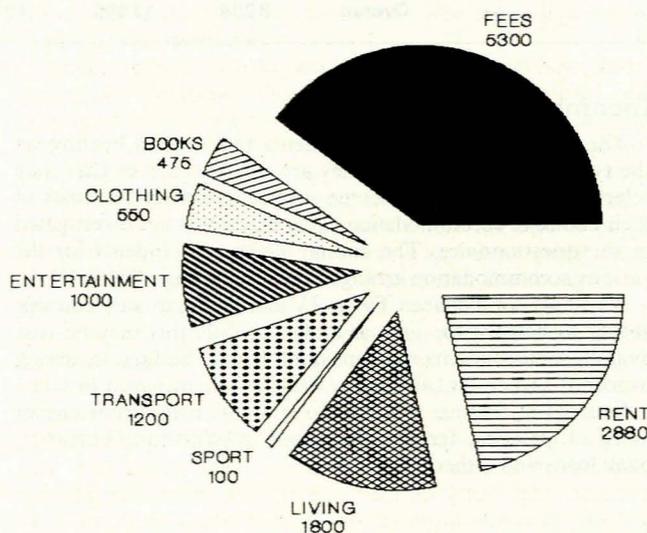


Fig. 3. Median annual expenditure in 1990 of a 6th-year M.B. Ch.B. student in private accommodation.

TABLE II. ANNUAL ACCOMMODATION COST (R)

Category	5th year			6th year		
	10th	Median	90th	10th	Median	90th
Private	2 880	4 880	6 000	3 600	4 680	6 600
Parents	0	0	1 800	0	0	1 200
Residence	5 980	6 400	6 600	4 200	4 770	6 005
Married	2 400	5 400	7 525	0	8 940	10 200

TABLE III. OTHER ITEMS OF EXPENDITURE (R)

Category	5th year			6th year		
	10th	Median	90th	10th	Median	90th
University fees		5 300			5 300	
Books	200	500	2 000	0	475	1 000
Clothing	0	550	1 000	0	550	1 200
Entertainment	300	1 200	2 400	240	1 000	1 810
Transport	480	1 200	2 000	480	1 200	2 400
Sport	0	120	600	0	100	600
Loan interest	0	0	1 454	0	0	2 064

**TABLE IV. TOTAL ANNUAL EXPENDITURE**

Category	5th year			6th year		
	10th	Median	90th	10th	Median	90th
Private	11 200	14 460	18 900	12 300	13 790	19 080
Parents	7 760	9 410	14 800	7 690	9 170	13 160
Residence	14 380	16 920	18 740	11 880	14 000	17 550
Married	13 160	15 770	18 157	5 800	17 970	33 700
Overall	8 800	13 720	17 670	5 800	13 300	33 700

**TABLE V. ANNUAL INCOME**

Category	5th year			6th year		
	10th	Median	90th	10th	Median	90th
Private	10 440	14 750	20 000	11 900	15 860	20 400
Parents	6 800	10 650	24 900	7 600	10 200	17 000
Residence	15 900	17 000	18 350	13 360	16 800	19 600
Married	12 796	15 670	15 860	2 400	22 800	38 400
Overall	8 900	13 900	19 800	2 400	14 900	38 400

**Income**

The income of individual students may have a bearing on the type of accommodation they are able to select or they may select various forms of income in order to meet the costs of their choice of accommodation. This aspect was not investigated in the questionnaire. The annual income of students for the various accommodation arrangements is shown in Table V.

A comparison between Tables IV and V reveals an admirable ability to balance the annual budget. While this may be true overall, some students ran considerably over budget, incurring overdraft and credit card debts, while others managed to save.

Sources of finance available to students come from one or more of: salaries, family allowances, scholarships, bursaries, bank loans and 'other' (Table VI).

**TABLE VI. SOURCES OF FINANCE**

Source	5th yr (N = 74)		6th yr (N = 76)	
	No.	Median (R)	No.	Median (R)
Salary	32	2 400	17	2 000
Family allowance	50	3 390	47	4 200
Scholarship	26	4 000	21	3 500
Bursary	34	6 100	29	6 900
Bank loan	35	4 000	36	5 000
Other amounts	29	5 725	26	5 300
Honorarium	0	nil	76	2 400

The total income of the group of 74 5th-year students was R1 041 971, while that for the group of 76 6th-year students was R1 194 313. Fig. 4 shows the individual contributions of the various sources to this total. The family make the largest contribution, while the students themselves make a substantial contribution by working while studying and by taking out bank loans. Bursaries and scholarships clearly offer significant financial assistance.

**Total liabilities**

The total liabilities accumulated by individual students during their years of study can be formidable and are predomi-

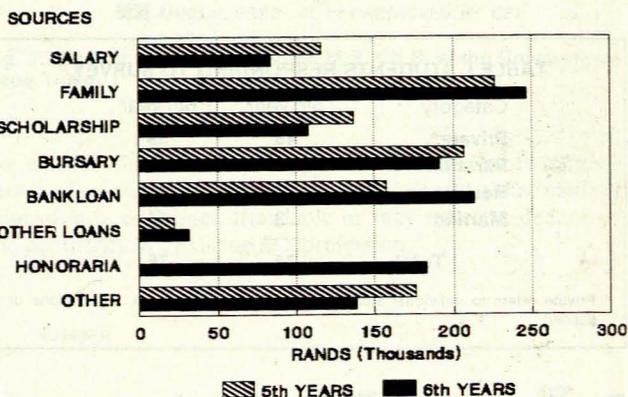


Fig. 4. Sources of income, 5th- and 6th-year students.

nantly in the form of bank loans (Table VII). Some accumulated bursary commitments are also substantial, but these can be redeemed by working, usually on the basis of 1 year's service for each year of the bursary.

The total liability accumulated by the 74 5th-year students was R1 206 699, of which R632 199 was repayable as cash and

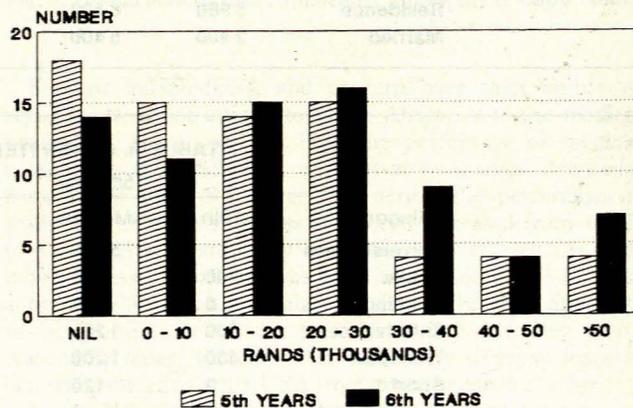


Fig. 5. Accumulated liabilities — cash and bursary commitments.

TABLE VII. ACCUMULATED LIABILITIES (R)

Category	5th yr (N = 74)			6th yr (N = 76)		
	No.	Median	Max.	No.	Median	Max.
Bank loans	45	10 000	29 000	44	12 500	53 000
Other loans	17	4 000	16 000	25	4 000	30 000
Other debts	6	1 550	8 500	8	9 000	60 000
Bursaries	23	24 000	60 000	27	21 000	33 000
Net liability	45	18 500	60 000	57	17 000	58 800

the balance of R574 500 as bursary commitments. The respective amounts for the 76 6th-year students were: total — R1 550 716; cash — R964 471; bursaries — R586 245.

Total liabilities of all students is shown in Fig. 5. This demonstrates that 21,3% have no debts, while a similar proportion have accumulated liabilities in excess of R30 000. Accumulated cash liabilities only of all students are shown in Fig. 6. Approximately 28,7% of the students had managed to avoid incurring cash liabilities, while 22,4% of the 6th-year students had cash debts in excess of R20 000. Forty-two of the 5th-year students indicated that they would need bank loans with a median value of R5 800 to complete their studies in 1991. These anticipated loans are not reflected in the data presented.

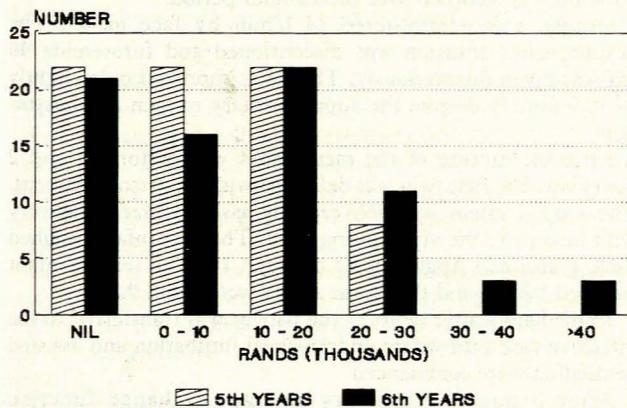


Fig. 6. Accumulated liabilities — cash only.

## Discussion

The cost of a medical school education is rapidly rising and the debts incurred by students represent a substantial financial burden, which is repayable after graduation.

The increase in the number of applicants from the socially and educationally disadvantaged group represents a major financial challenge. The students' families are likely to have inadequate resources and the students themselves, with a poor secondary school education, face an academic hurdle that may result in their failing one or more years, thereby prolonging their stay at university. Students from this group gain admission to medical school, but are able to attend only if they are provided with substantial financial assistance. Full financial assistance may not be desirable, since this can lead to com-

placency with concomitant poor academic performance. In any event, full financial assistance to an appreciable number of students is not possible due to lack of funds.

The decrease in the number of applicants from the socially and educationally advantaged group may represent a realisation that the cost of medical education places too great a burden on students and their families. At the same time, applications from this group to other faculties has increased considerably, presumably indicating that other professions are now perceived as being more desirable.

Having graduated, the student in debt must now find a means of repayment. Most bursary debts can be repaid with service, and this need not preclude the junior doctor from specialising. Cash debts present a more difficult problem, exacerbated by the relatively low salaries paid to the junior doctor. A solution seriously considered by several students is to go overseas and work in an area where the rate of pay is good, the rate of exchange favourable and their qualification accepted. These opportunities exist and offer the young doctor the potential to save sufficient money quickly to repay at least a portion of the accumulated debt. The possibility also exists, however, that the young doctor will find an attractive niche in the new community, and not return home despite earlier intentions to do so.

Increasing costs, a decline in the standard of living — which has resulted in the inability of most families to afford a medical education for a child — and the large debts accumulated by many students have serious implications for medical education in South Africa.

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