Contemporary Themes

Glasgow Women Medical Students: Some Facts and Figures

MORAG C. TIMBURY, G. C. TIMBURY

British Medical Journal, 1971, 2, 216-218

Summary

A questionnaire was sent to 343 women medical undergraduates at the University of Glasgow, and 317 replied. Of the respondents, 36% had a member of their family in medicine and 15% had either one or both parents a doctor; 45% had a working mother. Half of all the students had doubts about medicine as a career, and the proportion of these rose with seniority. Doubts were mainly due to the length of the medical course but the girls also recognized the difficulty of combining a medical career with family life. There was a significant correlation between having doubts about a medical career and having a mother who worked.

Half the girls said they would prefer to work in hospital after qualification—the favourite specialties being paediatrics and obstetrics; only a quarter said they would like to do general practice. The need for careers advice which links actual career openings and the wish of most women to combine medical work with marriage and child-rearing is emphasized. The majority of the students saw a doctor's primary role as the giving of advice and reassurance.

Introduction

At a time when there is national shortage of doctors the loss to medicine from women doctors retiring from full-time work after marriage has focused attention on the role of women in medicine. In a previous paper¹ the contribution and attitude to medicine of 106 women doctors who qualified in Glasgow during 1951-4 were described. The results of this study suggested a possible connexion between a married woman's decision to pursue a full-time career and some aspects of her background—including relatives who were doctors, education at a fee-paying school, and deciding on a medical career at a relatively early age. A prospective study of the girls who were studying medicine at the University of Glasgow in the academic sessions 1968-9 and 1969-70 was therefore undertaken to confirm these apparent trends, and this paper reports the initial results.

Methods and Results

A questionnaire consisting of 16 questions was sent to 343 women medical undergraduates representing seven consecutive medical intakes. The ages of the 317 who replied ranged

from 17 to 28 years and only 14 (4.4%) were married (Table I). Five of the married girls had a child. Nearly half had been to fee-paying schools, more than a third had a member of their family in medicine, whereas 16% were the children of doctors. Nearly half the respondents had a working mother. The mean age for deciding to study medicine was 13 years, the ages ranging from under 5 to 23 years. The students were asked if they had doubts about their choice of medicine as a career and half the respondents replied that they had (Table II). The incidence of doubts was about the same among the girls in the early years of their study but increased sharply in those who were nearing the end of their training. Girls at the start of their course said that their doubts were largely due to difficulty with examinations and to the length of the course of study. In later years the length of the course and—especially towards the end of their training—the difficulty of combining a medical career with family life were the main reasons for doubts about the decision to enter medicine. There was no correlation between having doubts about medicine as a career and education at a fee-paying school or the age at which they said they had decided to do medicine. Nevertheless, relatively more girls with doubts had a working mother and this difference just reached statistical significance (Table III). Though more of the students with doubts came from a medical family, this difference was not significant.

Tables IV and V show the career preference of the 317 students. There was no significant difference between the different years. Half of the girls wished to work in a hospital and only a quarter preferred general practice; 55 students at all stages of their training were undecided about their career choice. The most popular hospital specialty was paediatrics, which 41 girls said they would like to do. Obstetrics, general medicine, psychiatry, surgery, and anaesthetics were the other main choices.

TABLE I—Personal Background of Women Students

	No. (%)
Total sample	343
Replies	317 (92.4)
Age range	17-28 yr
Married	14 (4.4)
Married with children	5
Fee-paying school	147 (46.4)
Family member in medicine	115 (36.3)
Parent a doctor	50 (15.8)
Working mother	143 (45.1)
Mean age of deciding to apply for medicine	13.0 yr

In response to a question which attempted to assess attitudes to the place of women in medicine (Table VI) over a third of the girls said that they thought that women were not so good at science as men but that they were more sympathetic as doctors and more suited to work with female and child patients than men. Fifty-four of the girls believed that women were better at repetitive work than work requiring initiative, and 11 thought that men made better doctors.

Department of Virology, University of Glasgow, Glasgow W.2
MORAG C. TIMBURY, M.D., M.R.C.PATH., Senior Lecturer

Gartnavel Royal Hospital, Glasgow W.2
G. C. TIMBURY, F.R.C.P.GLASG., D.P.M., Physician Superintendent

TABLE III—Comparison of Personal Background of Girls with Doubts about Medicine as a Career to that of Girls without Doubts

	No. With "Doubts"	No. Without "Doubts"	χ^2
Family member in medicine	63 (41.0%)	51 (31.5%)	3.04 n.s.
Working mother	79 (51.3%)	64 (39.5%)	4.43 P<0.05

TABLE IV—Career Preference

Career Preference	No. (%)
Hospital specialty	157 (49.5)
General practice	84 (26.5)
Public health	10 (3.2)
Other	11 (3.5)
Don't know	55 (17.4)

TABLE V—Preferred Specialty

Preferred Specialty	
Paediatrics	41
Obstetrics	20
Medicine	11
Psychiatry	10
Surgery	8
Anaesthetics	7
Haematology	3
Orthopaedics	3
Ophthalmology	3
Pathology	2
Neurosurgery	2
Bacteriology	1
Radiology	1
Don't know which specialty ..	45

TABLE VI—Attitudes to Women in Medicine

	No.
Think women: not as good doctors as men	11
" " less good at science than men	112
" " more sympathetic as doctors than men	113
" " better than men at working with women and children	114
" " better at repetitive work than work requiring initiative	54

Asked about the most important aspect of a doctor's work 98 or two-thirds of the students stated that this was the giving of advice and reassurance, whereas only 20 thought that the primary task of a doctor was to advance scientific knowledge about disease (Table VII). Similarly few considered that prescribing drugs and performing operations was of first importance. Table VIII compares some aspects of the per-

TABLE VII—Opinions on Most Important Aspect of a Doctor's work

Most Important Aspect	No.
Prescribing drugs	8
Performing operations	12
Advancing scientific knowledge about disease	20
Giving advice and reassurance	198 (62.5%)
Other	53*
Don't know/No reply	26

*Majority added phrase indicating need to see and treat patient in his total setting.

TABLE VIII—Comparison with Women Graduates 1951-4

	Present Survey	Previous Survey	χ^2
No.	317	106	—
Fee-paying school .. (%)	147 (46.4)	65 (61.3)	7.10 P<0.01
Family member in medicine (%)	115 (36.3)	50 (47.2)	3.96 P<0.05
Working mother .. (%)	143 (45.1)	19 (17.9)	24.84 P<0.001

TABLE II—Women Students Expressing Doubts about Medicine as a Career

Year of Intake	1	2	3	4	5	6	7	Totals
No. with doubts about medicine as a career	26 (44.1%)	19 (43.2%)	22 (45.8%)	18 (42.9%)	16 (37.2%)	32 (72.7%)	21 (56.8%)	154 (48.6%)
Reasons:*								
long course of study	11	8	10	9	9	17	9	73
difficulty with exams	12	3	9	6	6	5	2	43
dislike of medical work	—	2	3	—	1	3	1	10
difficulty in combining medical work & family life	5	10	7	5	7	11	14	59
"Other"	8	3	3	3	1	8	4	30

*Many respondents gave more than one reason.

sonal background of the present respondents to that of the women who qualified in Glasgow during 1951-54.¹ Significantly fewer of the present students had been educated at a fee-paying school and belonged to a medical family. Many more had a working mother, and this difference was highly significant.

Discussion

The personal background of the present group of students differs from that of the Glasgow women previously surveyed.¹ Social changes are presumably reflected in the greater number of working mothers now found, but a larger admission of girls from non-medical families and state schools has also taken place. The significant association of doubts about medicine and having a working mother may indicate a more realistic attitude among the girls whose mothers were working to the difficulties of combining a career with family responsibilities. Only a follow-up can determine if the girls with doubts are more or less likely to continue their career after marriage. Eversley and Gales² have studied the factors which influence the proportion of married women in different areas who go out to work. Among the many factors investigated the most significant correlation of a high activity rate in married women in an area in 1961 was a high proportion of working married women in that area in 1931—in other words, the mothers of the generation investigated. This suggests that having a working mother may be the main factor which determines whether or not a woman continues working after marriage.

The career preferences found in the present survey are broadly similar to those reported for both male and female medical students by Martin and Boddy³ in that only about a quarter of the students said they would like to do general practice. This contrasts with the actual career openings in Scotland (Scottish Home and Health Department⁴). Thus in the next five years an average of 64 hospital consultant posts will be available every year, compared with 181 principalships in general practice. The popularity of paediatrics and obstetrics corresponds to the students' view that women are better than men in medical work with women and children. Nevertheless, there are few openings in these specialties and no evidence that advancement in them is easier for women. Unrealistic choice of career must lead to disappointment and frustration, and we consider that appropriate careers advice should be made available to women students at an early stage and during the preregistration year. A specially appointed adviser to women students would seem desirable⁵ and should be associated with the development of regional postgraduate medical committees. Such an adviser could draw attention to the opportunities available to women in the less crowded specialties.⁶

The belief of the students that women are less good at science than men is not borne out by examination results.⁷⁻⁹ But it does indicate—along with their other answers on the place of women in medicine—that many in this group of intelligent and highly selected girls accept the conventional stereotype of women's role in society. Ulyatt and Ulyatt¹⁰ have recently shown that women medical students of high academic achievement do not work more than their less gifted contemporaries. Factors other than high academic ability therefore seem to be associated with a woman's capacity to

pursue a professional career in addition to family responsibilities.

The large proportion of students who regarded the main work of a doctor as advising and reassuring rather than more technical procedures suggests that concern with illness in its broadest aspects predominates in the students' interest—as was found in both male and female students by Walton.⁹ This contrasts with another popular stereotype—that doctors have become technicians and purveyors of drugs.

We are grateful to all the girls who co-operated in the study, to the staff of the Medical Faculty Office of the University of Glasgow for their invaluable help, and to Mr. R. Elton for statistical advice.

References

- ¹ Timbury, M. C., and Ratzer, M. A., *British Medical Journal*, 1969, 2, 372.
- ² Eversley, D., and Gales, K., *The Unilever Quarterly*, 1969, 53, 145.
- ³ Martin, F. M., and Boddy, F. A., *Sociological Review Monographs*, 1962, No. 5, 21.
- ⁴ Scottish Home and Health Department, *Career Guidance for Senior Students and Recent Graduates in Medicine*, Edinburgh, H.M.S.O., 1970.
- ⁵ Rue, R., *Lancet*, 1967, 1, 1267.
- ⁶ Stanley, G. R., and Last, J. M., *British Journal of Medical Education*, 1968, 2, 204.
- ⁷ Anderson, J. R., Lennox, B., and Low, A., *Lancet*, 1964, 1, 96.
- ⁸ Jeffreys, M., Gauvain, S., and Gulesen, O., *Lancet*, 1965, 1, 1381.
- ⁹ Walton, H. J., *British Journal of Medical Education*, 1968, 2, 156.
- ¹⁰ Ulyatt, K., and Ulyatt, K. W., *Medical Officer*, 1970, 124, 33.

Research in Progress

Royal College of Surgeons Department of Surgical Sciences

FROM A SPECIAL CORRESPONDENT

The Royal College of Surgeons has recently completed building a new Department of Surgical Sciences. The emphasis of this is and will be on research, and there is already a flourishing programme of studies in progress.

The new department is housed in the former research pathology museum, on the third floor of the College building in Lincoln's Inn Fields. Giving a total floor space of 6,400 sq. ft., the conversion cost about £20,000, and with its present staff of 13 the department's annual running costs are estimated at £25,000. These costs have been met by grants from the Freemason's 250th Anniversary Trust, the Medical Research Council, and the College itself. Besides administrative offices the department contains five main and three subsidiary laboratories, an operating theatre for animal work which does not involve survival, postmortem room, and an aseptic, air-conditioned operating suite (see Fig 1). The last has been deliberately built to standards as high as any hospital operating unit. Changing rooms lead into a clean corridor, and thence to two scrub-up rooms and their respective operating theatres (Fig. 2);

there is also an anaesthetic room, and an intensive care unit, as well as a bedroom enabling the surgeon to spend the night there should he need to.

Aims

As well as setting the high standards for animal operating conditions, which it hopes other centres will copy, the new department's principal aim is to house a research programme that is at once active and relevant to human problems but also does not duplicate work going on elsewhere in Britain. So far a start has been made on three main projects. The first is to find effective methods of preserving organs for grafting; not only has this meant finding the appropriate techniques but also determining criteria of the functional capacity of the organs during the experiment. As far as the heart is concerned it has been found possible to keep it alive in vitro for up to 96 hours by perfusion with a modified Hanks's solution,

Fig. 1 — Plan of the Department