Panel ophthalmic practice / by A. Freeland Fergus.

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PANEL OPHTHALMIC PRACTICE.

BY A. FREELAND FERGUS, M.D., C.M.,
P.R.F.P.S. GLASG.,
SURGEON, EYE INFIRMARY, GLASGOW.

I TAKE it for granted that panel ordinary practice is to be continued, but contract practice seems to me so intrinsically bad that instead of being extended it should be limited as much as possible. No doubt scores of superb men are on the panel, but there can be as little doubt that a fair amount of panel practice is scamped, and moreover it tends to atrophy the medical practitioner. When a student leaves college entitled to registration, he knows little of his profession. He may have laid a foundation on which he can build, but that building may not be done at all if he forthwith acquires a large panel practice. Real study begins when a man has got his diploma. Every young practitioner should on attaining that status, begin either in hospital or clinical laboratories with clinical ward work, or, failing such appointments, he ought to become an assistant to a competent general practitioner. Work of that sort should be compulsory for at least two or three years. Nobody under any circumstances should be allowed to become a panel practitioner till he has been for at least three years on the Medical Register. These considerations, however, are apart from the special subject to which I wish to address myself at present.

Ophthalmology in State Medicine: A Piece of Personal History.

I have long recognised that ophthalmology in certain of its branches must be taken advantage of in the State services. About 30 years ago I wrote two letters. One letter was to the late Mr. William Graham, of North Erines, then a member of the Glasgow School Board, to say that in my opinion every child in the kingdom should have its eyes carefully examined. The other letter was to the late Dr.

J. B. Russell, at that time medical officer of health for the city of Glasgow, to say that I thought both trachoma and gonorrhœal ophthalmia should be made notifiable. Mr. Graham replied that he could not believe for a moment in the necessity for such a step as I indicated, and rather a curt letter from Dr. Russell intimated that he did not intend taking any action in the matter. Within the last few years both of these things have come into use.

The reason for urging the examination of school children's eyesight is as follows. From my earliest school days right down till the time I graduated I suffered very much from headache. I do not think that all through my college career I was ever able closely to read for more than an hour or an hour and a half at a time ; and how I ever got a degree I do not know. My father, a medical practitioner, took me to see an ophthalmic surgeon here. The worthy man, I think, had no more idea of modern ophthalmology than I have of the cuneiform inscriptions. He used to dust calomel into my eyes and prescribed various lotions. Once when he attempted to make a refraction correction he prescribed a spherical 24-inch concave lens for each eye. I saw him off and on for many years, and he always reported that he thought I was making the most of my troubles.

About two years after graduation I happened to be at Marlborough where my uncle was medical officer to the College. He was intimate with the late Sir William Bowman, and insisted that I should see him. By this time I would be about 24 or 25 years of age. I had graduated in Glasgow and had spent some time in Paris and Utrecht. I was most kindly received by Sir William Bowman. He lifted an ophthalmoscope and looked at my eyes and at once said, "You have got a considerable amount of hypermetropia and of hypermetropic astigmatism." I was carefully measured and glasses prescribed, and at once was able to read with freedom and pleasure.

It was that personal experience which led me to recommend that children's eyesight should be carefully investigated at school.

A Qualification and Training in Ophthalmology.

At present there is the possibility of making ophthalmic surgeons available for panel patients; this is thoroughly desirable. Because a man is poor is no reason why he should not in illness receive adequate attention. Indeed, as regards eyesight it is more desirable, for on his eyesight depends his livelihood. But that opens up the question as to what is meant by an ophthalmic surgeon.

The State avails itself of certain persons as ophthalmic surgeons for school board work, for medical referee work, and for various other purposes; but so far as I am aware

there is no legal qualification in ophthalmology, as, say, in dentistry. If a man is to be specially paid as an ophthalmic surgeon there is no reason whatever why care should not be taken to make sure that he has a special and reliable knowledge of what is one of the most scientific departments of the whole of medicine. Yet anybody at present can buy a case of testing lenses and call himself an eye specialist. I have no objection to that. Just as a medical practitioner can practise dentistry, so I think no medical practitioner should be prevented practising ophthalmology. But if a man is going to be paid by the State as a specialist in ophthalmology, then I would make quite certain that he has had a special training.

This training should begin even in his preliminary education. He ought, at any rate, to know enough of the elements of pure mathematics to be able to read text-books in ophthalmology such as Helmholtz; in other words, part of his preliminary school training must give him a sound acquaintance with such subjects as plane trigonometry, logarithmic arithmetic, the elements of analytical geometry, and even the elements of the calculus. Certainly if a man is going to teach the subject he must know these things. It ought not to be got up for examination, but should be part of his permanent store of knowledge.

Then in addition to his medical curriculum I would put him through a special course very much as is done for the D.P.H. or a dental qualification. Three subjects are absolutely essential for an ophthalmic practitioner—viz., modern surgical pathology, physics—particularly the physics of light and of colour—and physiology. A great deal of modern ophthalmic work is operative. In 1891 I laid down and adhered to a rule with, I think, most beneficial results to my patients. When I first joined an ophthalmic hospital a large number of cataract operations went wrong from acute suppuration. I well remember one that I had in 1891, and I wondered from where the infection had come. I found the *Staphylococcus aureus* in the discharge from the eye that had gone wrong, and I also found the same parasite in the conjunctival secretion of the other eye, although apparently perfectly healthy; I was obviously dealing with an auto-infection. From that day I have never operated on an eye without proper bacteriological investigations, for the most part made by myself. About the same time also I introduced into my clinic for purposes of diagnosis the oil immersion lens. I would not allow any man to call himself an ophthalmic surgeon who was not able to make such investigations and who was not in the habit of doing so. I would expect, therefore, that an eye specialist available for panel patients should be competent to do this work.

Refraction Work.

A practitioner who wants to do ophthalmic work for the panel ought to have an excellent knowledge of refraction testing and its difficulties. It appals me to hear that under the School Boards 200, or perhaps even 300, children have their eyes tested in an hour. Recently I had a lad of 16 years of age before me with six dioptres of hypermetropia in each eye. He was examined several times at these school examinations and each time pronounced normal. No doubt children who are hopelessly bad are sometimes detected, and are then sent to have their eyes specially done. One gentleman engaged in this class of practice has said that he can do 12 of these children in an hour, but nobody who knows anything about ophthalmology will regard such a statement seriously; from 20 minutes to half an hour at least per eye will be required to test young children. One child or a child and a half per hour, say three children in the course of two hours, is the most that any man can do accurately.

Refraction testing is a subject which a panel practitioner should know to the ground, and he also should be a man of sufficiently strong ethic as to be reliable to make his measurement accurately and in a painstaking manner. In many cases I fear that children cannot in any real sense be said to have had their eyes examined, although no doubt such performances will pass muster with the authorities.

Further Subjects of which Knowledge is Required.

Then there is the whole of modern muscular work that a panel ophthalmic practitioner should know. He will certainly require trigonometry for that; the measurement of angles of squint, the measurement of angles of convergence and of divergence and of deviation, all that will require a sound working knowledge of the trigonometrical tables.

Then the ordinary operative work, cataracts, glaucomas, plastic operations on eye-lids, lacrymal operations, all these things he ought to know. Again, the proper specialist must have a knowledge of the fundus of the eyeball and of its diseases. So ought also the physician. Lastly, the ophthalmic practitioner should know all the symptoms in the organs of vision which indicate systemic diseases or diseases of the brain and nerve system.

No man can learn this amount of work unless he has had a training in an eye clinic and in pathological and physiological laboratories for at least three years. A man, in my opinion, has no right to be regarded as a specially qualified ophthalmic surgeon unless he has spent three years at clinical ophthalmology and in laboratory work.

The Need of an Adequate Staff.

At our eye clinics the number of people is far too great for the staff. Take, for example, an afternoon at the Glasgow Eye Infirmary. There may be myself, one of my colleagues, a junior assistant, and possibly a house surgeon. There may, on a busy day, be say 60 new patients and 100 old, in all 160 people to be seen by three of us with all these various complicated diseases which can only be diagnosed with an immense amount of care and time. That works out at something like 60 for each of us; supposing we each work for four hours, about 12 to the hour. Accurate ophthalmic diagnosis cannot be done like that. It leads, as I know from painful experience, very frequently to failure to recognise many important conditions. Just take a patient with a muscular insufficiency; a proper examination will take from half an hour to three-quarters of an hour. Supposing, in addition to that, you have a patient with an astigmatism; that may take 20 minutes to work out even if done hurriedly.

Now because I think the results obtained in our eye clinics are not good I wish to see an alteration, but not unless it is an improvement. If merely a certain amount of money is to be distributed in salaries I do not wish to have anything to do with it, but if the poorest of the land will have painstaking, thoroughly well-informed assistance in his or her necessity, then it has my whole-hearted support.

Meantime, the first thing to do is to train the ophthalmic surgeons. I personally have suggested on several occasions that there should be an ophthalmic diploma which would make sure that the holder at any rate knew the elements of mathematics; that in addition he knew conjunctival pathology and bacteriology; and that he had good laboratory training in physics bearing particularly on the subject and on physiology.

The foregoing gives some account of how I would train ophthalmic surgeons and the class of men that I would employ as specialists for panel ophthalmic work. People who have undergone a training such as indicated are the only persons who have any right to be called eye specialists.

Hospital Accommodation.

The next question is as to where these men are to work. There would require to be in every centre ophthalmic hospitals, with attending nurses and adequate ward accommodation. The days are past when you could see a patient and write a prescription for some lotion and send the patient away. It is not the lotion that is important, but the application of the sterilised fluid to the removal rather than to the

destruction of pyogenic organisms. Hence, there would have to be proper ward and clinic accommodation, and in addition a small bacteriological laboratory. Nothing less than this is of the slightest use.

If I am rightly informed, at one time it was proposed to expend something like £300,000 for special branches. Such a sum is totally inadequate. It would not even meet one-half of the expenditure required for ophthalmic work alone. It is usual with politicians to underestimate. The cost to the country of the National Insurance Bill was underestimated by almost 100 per cent. The same holds true as regards old-age pensions. I personally have little faith in politicians. The National Insurance Act, particularly as regards the sanatorium benefits and in other ways, has not been satisfactory. I sincerely trust that if specialties are to be taken in it will mean thorough work.

I am also in favour of any ophthalmic appointments, if such be made, being whole-time. You will not then have men rushing through 10 or 12 patients in an hour in order to get off to more lucrative work. A man might enter the ophthalmic service very much as he enters the Indian Medical Service; he might be so many years in panel ophthalmic practice, then afterwards he could leave it and take up ordinary civilian work But I want to point out that the practice should be well done and should not be a make-believe, such as it has sometimes been under school boards. I estimate that at least from 800 to 1000 centres would be required for the United Kingdom. If we suppose that each cost £1500 a year to run, we get an approximate idea of the sum required on the assumption that none of the patients contributed anything.

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