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## WHITHER OBSTETRICS AND GYNAECOLOGY?

The discipline of obstetrics and gynaecology is facing a challenge as never before—not even in the days when the efforts of Smellie, Semmelweis, Simpson and others eventually earned for 'men-midwives' a recognition of their specialty parallel to those of medicine and surgery. And, ironically, whereas these pioneers established the importance of obstetrics and gynaecology by saving mothers and babies, their successors—by for ever improving maternal and infant mortality statistics—have now left the present generation of obstetricians and gynaecologists literally holding too many babies. Controlling future overpopulation of the earth is a problem the magnitude of which requires no elucidation. The question is: who is going to take the lead and bear the responsibility of guiding the world?

At present, brilliant endocrinological and pharmacological research has placed more and more reasonably acceptable means of birth control at the disposal of our profession. The medical student of today already knows more about hormonal contraceptive medication than about the mechanism of labour, and the doctor of tomorrow will be able to offer reliable and completely acceptable means of contraception to both the sophisticated and the uneducated. He will also be able to offer fertility to many who would have to remain barren within the means at his disposal today. Already many women, who up to a few years ago were infertile due to failure to ovulate, can now be made to do so and are conceiving and carrying their pregnancies to a happy conclusion. Once problems of spermatozoal antigenicity and tubal transplantation, etc. are solved, the numbers to whom no hope can be given at present will further shrink.

How will this prospective ability to offer fertility to the woman who is at present barren, help obstetricians and gynaecologists to face the challenge of guiding the world to control overpopulation? The answer lies in the fact that by working such 'miracles' among the rapidly multiplying populations of the developing countries, the doctor will gain the confidence of and be able to obtain the cooperation of these communities in controlling reproduction. The press, governments and local authorities will not succeed in putting across to these people the urgency of curbing population growth. It is the doctor who will be able, in future, to help many more of the infertile women among them to bear children, who will be in the position to enlist their support in enjoining their hyperfertile sisters to heed the need for limiting the size of their families.

The gynaecologist is in the key position. It is with him the infertile woman and her husband seek counsel, admitting to frustration and failure. They are received with sympathy and compassion, while he marshals the knowledge and skills of the various scientists he has brought together under his leadership to investigate and attempt to cure infertility. He has a responsibility towards those

engaged in research in reproductive biology—the anatomist, physiologist, endocrinologist, immunologist, geneticist, psychologist and urologist—the responsibility of stimulating clinical experimentation as a means to verify or refute their laboratory experiments for future clinical usage. Such verification can only be done by the gynaecologist in his own office—that is his responsibility again to the couple who came to him personally for counsel. Because when all has been done and success is not achieved, it remains his responsibility not to continue fostering false hope, but to counsel acceptance of the verdict, and if desired, adoption of a baby. Every gynaecologist who has learnt the wisdom of this will testify that the gratitude of the parents of these adopted children is no less enduring than that of those he has been able to help to have their own.

This, then, is the spectrum of the gynaecologist's responsibility in the clinical application of the problems of reproduction—at the one end his infertile patient, at the other the woman who requires guidance in limiting her family. Detailing some of his responsibilities has been deliberate, because therein lies the answer to his retaining the key position in applying the results of new advances in research in reproductive biology, a new branch of science attracting some of the most brilliant brains in medicine as well as of the basic sciences, a science upon which the future of the world clearly depends. At present, the gynaecologist still holds the executive position in directing the application of the research products of this science, and the importance of his continuing to do so, from his patients' point of view, has been elucidated.

There is, however, a distinct danger of his losing this key position. The first signs are there. In the newlyfounded Medical School of the University of the State of Michigan, there are 3 major disciplines-medicine, surgery and reproductive biology. The latter has replaced the traditional discipline of obstetrics and gynaecology and the chairman of the department is a paediatrician, with an obstetrician second in command. The most recent chair created in a newly established medical faculty in the United Kingdom, at Southampton, is the Chair of Human Reproduction. The reason for this shift in the balance of authority is that the people who have the knowledge of the new science which will answer the challenge of controlling world population, the people who therefore command the ear of governments, medical research councils and financial foundations, are the basic scientists. Obstetricians and gynaecologists, to retain their identity and authority, will not only just have to acquire the knowledge of what is new in their subject, but will have to strive to direct the research towards finding the remaining answers to what is still unknown. Complacency will undoubtedly be the downfall of their specialty if they merely carry on delivering babies and doing hysterectomies, leaving research to workers in the basic sciences. They have to strive to solve the remaining problems of fertility and infertility. the duration of pregnancy, the cause of the onset of labour, the cause and control of dysfunctional bleeding, etc. Fortunately, they still hold the top cards in 2 major suits-teaching their subject, and their rapport with their patients. The pure reproductive biologists lack entrée in the first and are void in the latter, and provided the gynaecologists and obstetricians organize their training on the right lines to strike the correct balance between stimulating research and teaching clinical acumen, combined with a compassionate approach to their women patients, they are going to retain and enhance their rightful position. This they may do by producing obstetricians and gynaecologists who are humane, trusted by womankind, respected by their students for their clinical virtuosity, and endowed with the knowledge to direct them to lead the world in research towards, and execution of, the solution of the challenging problem of controlling human reproduction.

At the University of Ann Arbor, Michigan, South African-born Professor Sam Behrman is Chairman of Obstetrics and Gynaecology. He has contributed much to the understanding of reproductive biology and is the leading authority on the immunological aspects of fertility. His department has staggering financial backing for research, sponsored by the Ford Foundation and others. Engaged in research in reproductive biology he has 2 Ph.D. graduates and 4 Fellows concentrating on reproductive endocrinology; 2 Ph.D graduates working on physiology, another two working on immunology, and 6 Fellows working with these latter four; and one M.D. graduate working in neonatology. Professor Behrman aims at staffing his department with men who are clinically orientated but have research potential and training-selection is commenced among the premedical students. The 4 premedical years include reading the humanities and classics in the first 2 years. Selected students are financed for research projects. The importance of knowledge of the humanities is linked with research in, e.g. the effect of space, pressure of work, noise, light, etc., on reproductive potential, and the effect of changing of environment and social factors. During the first of the 4 clinical years of medical undergraduate training, selective research is again encouraged and financed among students, and again during the second year of residency. During the third and fourth years of residency those who decide on pure scientific or academic careers branch off, while the clinician continues for a further 3 years towards his Fellowship of the American College of Obstetricians and Gynaecologists, attained 16 years after entering medical school.

Professor Behrman has 5 interns and 5 residents in each of the 4 years of residency; 25 trainee gynaecologists being trained and training their juniors. Some, as mentioned, decide to remain pure research scientists, others academicians. Of those who remain clinicians and who will instruct the students, interns and residents, the chairman, associate professor, assistant and instructor are allowed private practice, but only the first two are allowed to charge fees.

The above, then, is the theoretical background for training the ideal gynaecologist—one clinically orientated but with research potential and training, who will have a

humanitarian approach and scientific and technical knowhow to face the challenge of the future, produced by a discipline with adequate financial backing to continue taking the lead. Unfortunately, this ideal is seldom achieved. One only has to read the presidential addresses of the various leading gynaecological colleges and societies of the world to realize that the wise old men of our specialty, though aware of their own shortcomings and the necessity for vigorous, knowledgeable leadership, have grave misgivings about the maintenance of a healthy balance between clinical experience and research drive in the administration of departments of obstetrics and gynaecology.

Israel, in defining the difference between 'artful and trade-school' philosophies, demanded that we turn out an obstetrician-gynaecologist in the fullest sense, not merely a surgically-minded one. The work of the gynaecologist brings him into the inner circle of family life, and—especially if he has had the advantage of general practitioner experience—when he succeeds, keeps him there. He is most likely to be the closest to being a personal family friend and counsellor because of his intimacy with crucial problems of the family life, sexual and otherwise. More than any other practitioner, he must acquire knowledge of, and have respect for, the physiological responses of the organs of reproduction and disturbances of these tending to interfere with marital happiness and psychological and emotional relationships.

Naturally, knowledge of recent advances in the basic sciences and research potential being the attributes of younger men, the trend lately has been for appointments as chairmen of departments to be made from their ranks, and probably rightly so, provided the man is also an outstandingly proficient clinician. Otherwise he lacks in stature and fails to command that all-important prestige so essential in his own department, the medical school, the community, and on a national basis, with his professional confrères.<sup>2</sup>

He must have facilities for private practice, for how else can he maintain his skill as a clinician and instruct residents training in his department in the office practice of gynaecology with private patients?\* If-as is likely at the time of his initial appointment—he has had little experience of private practice and of the gynaecologist's place in the patient's home milieu, Gardner furnishes the answer for the young chairman who is fair, reasonable, keen to continue learning from his colleagues, and above all a modest and adroit administrator. His department should consist of a nucleus of full-time men along with a group of well-qualified volunteers from his colleagues in part-time private practice. By no means may it be assumed that academic talent will be found only in the full-timers or that all part-timers are solely clinicians and thus to be viewed as second-rate teachers.

Probably the ideal teacher of postgraduate obstetrics and gynaecology other than the chairman experienced in private practice, will be a senior part-time consultant with an inquiring mind, conservative approach, and the will to teach, who is entrusted with an autonomous 'firm' of his own in which students, interns and residents will be proud to work. He must be a patient senior man who is

prepared to listen to the problems of, and then test and develop the judgement of, his students, undergraduate as well as postgraduate. This must apply in the day-to-day clinical work of the outpatient department, wards, labour ward and theatre, illustrating from his own experience and always setting an example in compassion towards the patient and courtesy towards the nursing staff. He must also be prepared to assist his juniors at operations and teach them finer points of surgical technique repeatedly and with patience and good humour, so that the trainee will be encouraged to seek his guidance and to learn from him. He must welcome the opportunity of coming to the hospital in the small hours of the night to consult on a difficult obstetric case and teach good judgement in how often Nature, when given a chance, can provide pleasant surprises and leave the patient without a caesarean scar. Positions in his service will be sought by appreciative, modest junior staff who are eager to learn and not interested in exhibiting surgical speed or aggregates of procedures personally performed without senior guidance.

Teaching of medical students is once more undergoing a metamorphosis. Mention has been made of attention to the 'humanities' in the preclinical years and of stimulating interest in research. There should be fewer didactic lectures and more clinical tutorials. Technology has made available instruction by audiovisual tapes and live closed-circuit audiovisual demonstrations of obstetrical and gynaecological techniques. In postgraduate teaching, individual and departmental ('journal club') reading and the opportunity of exchanging ideas through visits to and from colleagues eminent in their field overseas or in other national centres. exchange fellowships and exchange of residents between departments and countries are excellent and essential means of broadening the trainee's outlook and expanding his knowledge. Combined with an ideal apprenticeship with a senior gynaecologist experienced in private practice, as already outlined, we need have no qualms about the clinical excellency and finesse of the obstetricians and gynaecologists of the future, who will remain autonomous in a major discipline, directing research and not being directed by it. They will employ technicians and not themselves be little more than technicians who can do caesarean sections and hysterectomies, employed by reproductive biologists where they have failed to find other means of cure short of surgery.

Finally, their strongest allies are their patients, and in meeting their great challenge they shall stand or fall by the measure of the faith and support they receive. What is it that makes a good gynaecologist, who will be able to play his part in meeting this challenge? Apart from a sensibly trained use of the 5 physical senses plus common sense,2 knowledge of his subject and good judgement, compassion is essential in establishing sympathetic rapport with patients of widely differing cultural and social backgrounds. The best way of establishing this rapport and making the patient aware of the doctor's interest and compassion, is by giving her the opportunity of talking and unburdening. An adequate history should always lead to understanding of a woman's anxiety and tension levels and ego reactions. Such understanding is essential for, and part of, successful therapy, and though reassurance is often all that is required, the fact that the doctor listened and gave her the opportunity to unburden herself, assures the patient's confidence in her gynaecologist. If we build on this philosophy, we will assure the continued autonomy of obstetrics and gynaecology as a major discipline. If the gynaecologists lose the faith of the women of this world, more and more medical schools will replace them by immunobio-endocrinologists in Chairs of Reproductive Biology and they will not even be required to be present at the birth of the first 'test-tube' baby.

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<sup>\*</sup>Views expressed in this guest editorial are not necessarily those of the Medical Association of South Africa