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SOCIAL ASPECTS IN THE TEACHING OF OBSTETRICS AND GYNAECOLOGY

Fourth Report of the WHO Expert Committee on Maternal and Child Health

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SOCIAL ASPECTS IN THE TEACHING OF OBSTETRICS AND GYNAECOLOGY

Fourth Report of the WHO Expert Committee on Maternal and Child Health

The Expert Committee on Maternal and Child Health met in Geneva from 11 to 17 June 1963 to discuss social aspects in the teaching of obstetrics and gynaecology. Dr P. M. Kaul, Assistant Director-General, on behalf of the Director-General of the World Health Organization, opened the meeting and welcomed the members of the Expert Committee and the representative of the International Federation of Gynecology and Obstetrics.

Dr Kaul recalled that the importance of the social aspects of the discipline under discussion had been mentioned by the Expert Committee on Maternal and Child Health as early as 1949. Recommendations for activities of the World Health Organization in the field of maternal and child health included the giving of "advice and assistance in the teaching of social and clinical paediatrics and obstetrics . . ." ¹

A few years later, the WHO Expert Committee on Maternity Care re-emphasized this concept, stating :

"The modern concept that the undergraduate medical student should have his mind directed throughout the whole of his training to the preventive and social aspects of the conditions which he is studying, and their implications for the individual patient, would seem to have a peculiar aptness in relation to maternity care." ²

Dr Kaul concluded his opening statement by saying that the Committee would make a very valuable contribution to this particular field if it could outline certain principles for the guidance of countries developing or expanding teaching programmes in obstetrics and gynaecology, with particular emphasis on the inclusion of social and preventive aspects.

1. INTRODUCTION

Obstetrics and gynaecology have attained highly effective levels of care. In many areas of the world, maternal mortality has almost disappeared and perinatal loss rates not only have declined sharply but continue to

¹ *Off. Rec. Wld Hlth Org.*, 1949, 19, 35.

² *Wld Hlth Org. techn. Rep. Ser.*, 1952, 51, 20.

do so. Great progress has also been made in the preventive and operative aspects of gynaecology ; further advances in gynaecological endocrinology are confidently expected in the near future.

Technical advance, however, has often been more rapid than its application. Even in those areas of the world in which the greatest improvements in maternal and reproductive health have occurred, its progress has been uneven. The application to all groups of the population of existing knowledge and the best levels of care would itself produce a very pronounced fall in rates of death and disease and a positive gain in the health of women and hence the family as a whole. Firmer knowledge of the way in which social influences affect the health of women would make this objective easier to attain. In the developing areas of the world, scope for the application of existing knowledge is enormous and responsibility for it rests only to a small extent on obstetricians and gynaecologists. They have become increasingly aware of the way in which their patients, the maternity and gynaecological services and their efficiency, are affected by the broader society, and how the health and happiness of families and communities are affected by their techniques and their whole approach to the running of services. The interrelationship between personal and community life and obstetric and gynaecological conditions has now been sufficiently documented for it to take its place in the curriculum of the medical student and in the clinical work of medical departments. It was in this context that the World Health Organization decided to convene an Expert Committee on Maternal and Child Health to discuss social aspects in the teaching of obstetrics and gynaecology.

2. RELATIONSHIP BETWEEN OBSTETRICS AND GYNAECOLOGY

The Committee considered that the broad definition of maternity care as stated in the first report of the Expert Committee on Maternity Care could well form the basis of obstetric training :

“ The object of maternity care is to ensure that every expectant and nursing mother maintains good health, learns the art of child care, has a normal delivery, and bears healthy children. Maternity care in the narrower sense consists in the care of the pregnant woman, her safe delivery, her post-natal examination, the care of her newly born infant, and the maintenance of lactation. In the wider sense, it begins much earlier in measures aimed to promote the health and well-being of the young people who are potential parents, and to help them to develop the right approach to family life and to the place of the family in the community. It should also include guidance in parent-craft and in problems associated with infertility and family planning.”¹

¹ *Wld Hlth Org. techn. Rep. Ser.*, 51, 3.

In the narrower sense gynaecology consists in the diagnosis and treatment of diseases of the genital tract. In a wider sense it should cover a woman's needs for care in all matters related to her reproductive system and its functioning, with continuing emphasis on prevention of illness and promotion of health.

Obstetrics and gynaecology are so closely related that they cannot properly be regarded as two separate disciplines. A large number of gynaecological ailments result from bad obstetrics. Pelvic floor relaxations, urinary incontinence and pelvic infections are a few outstanding examples. Conversely, gynaecological conditions and treatment may affect the course and outcome of pregnancy and the reproductive efficiency of the woman. The tendency to consider gynaecology as part of general surgery should be deprecated. *In view of the intimate relationship, the two branches of the specialty should be combined in a single "department of obstetrics and gynaecology" under one full-time head competent in both fields.*

Further to emphasize this interrelationship, the Committee discussed the possibility of integrated teaching and integrated textbooks. It was stated that such integrated teaching was already being carried out in some universities while in others obstetrics and gynaecology were taught separately. The Committee felt that integrated teaching was both essential and feasible and should be encouraged. While the production of a fully integrated textbook presented many difficulties, it might be possible, without too great an effort, to produce a short text for medical students.

It would also be desirable to use a single name for both branches of the specialty, if this could be achieved without detriment to the importance of either. Of the alternative names suggested to the Committee, none could be recommended at this stage. It was interesting to note, however, that in one Latin American country, Uruguay, the name "*Ginecotocología*"¹ had already been adopted, but this name was not suitable for translation into many other languages.

Success in teaching this integrated subject will depend to a very large extent on the head of the department. This should be borne in mind in selecting a person for the post. The Committee concluded that the following attributes should be taken into consideration in making the appointment: broad and outstanding competence in clinical obstetrics and gynaecology; breadth of interest and knowledge of community problems; scientific interest as evidenced by accomplishments in clinical, basic or sociological research; proved teaching ability. The relative importance of each of these attributes would naturally vary according to the area and the nature of its problems.

¹ In Spanish "*tocología*" (from the Greek *tokos* birth, *logos* science) is used synonymously with "*obstetricia*" (obstetrics). In English "tocology" has the same meaning, but is seldom used.

The Committee considered that the burden of administrative duties often prevents heads of departments from devoting the necessary attention to clinical duties, teaching and research. The appointment of an administrative assistant was suggested as one means of relieving this situation. Chairmanship of a department should be a full-time occupation.

In some countries, professors of obstetrics and gynaecology, in addition to their clinical and academic duties, are also responsible for the administration of the maternity services of their region. At the other extreme, and particularly in developing countries, no such relationship exists. *The Committee felt that the appointment of the professor of obstetrics and gynaecology as specialist adviser to the maternity services of the region and the creation of a maternity liaison committee would be of benefit both to the health services and to the teaching programme.*

3. PLACE OF OBSTETRICS AND GYNAECOLOGY WITHIN THE TOTAL CURRICULUM

The Committee endorsed the following statement on the aims of medical education adopted by the WHO Study Group on Paediatric Education :

“ Medical education has as a basic objective the preparation of good general physicians able to serve the community as well as the individual. Prerequisites in the preparation of such physicians are : (1) the awakening of student interest in the human being, the family and the community ; (2) the development of sound habits of study and the continuous desire for self-education ; (3) the stimulation of scientific curiosity ; and (4) the acquisition of a specific body of knowledge and skills. The competent practitioner must recognize and be responsive to the social needs and health demands of the community and country in which he lives.”¹

Objectives in the training of medical students in obstetrics and gynaecology must differ to suit the needs and resources of the region. In the highly developed areas almost all deliveries are attended by physicians, either general practitioners or specialists. In the developing countries often only a fraction of the population gets skilled attention. The developing regions would inevitably need to pay more attention to the clinical and practical rather than the academic aspects of the subject. The following statement adequately describes the problem :

“ In the broadest sense, the objectives of medical education put forward in the various countries can be grouped in two categories : one concerned with the preparation for practical professional activities as soon as possible after graduation from the medical school, and another aimed mainly at the establishment of scientific foundations, leaving the training in their practical application to a later stage—i.e., after graduation. Both elements are present in practically all patterns of medical education, but in different proportions and with different degrees of emphasis. Urgent needs of a social nature

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1957, 119, 4.

sometimes result in putting the greater emphasis on the practical preparation of the student, but there is almost a universal acceptance of the need for the solid scientific basis even in less developed countries which do not want to compromise on the scientific quality of the doctor."¹

Sufficient time should therefore be allowed for both theoretical and practical training. This should take the form of clinical clerkship and may profitably occupy a single block of time. *Its length may vary in different schools but should not be less than that assigned to paediatrics and be as close as possible to the time devoted to medicine or surgery.* A major portion of the clerkship ought to be in residence. The student should be introduced to the subject soon after the pre-clinical studies. A three-month course, along with surgery, internal and preventive medicine, as an introductory period was suggested. Advanced clinical training is best given in the last years of training, since the student would by then have acquired the necessary grounding in medicine and surgery and other subjects.

4. DEFINITION AND RELEVANCE OF THE SOCIAL ASPECTS OF OBSTETRICS AND GYNAECOLOGY

The Committee decided on the following definition of the social aspects of obstetrics and gynaecology: those aspects of personal and community life which have an impact on the child-bearing potential, habits and efficiency of a population and the health and treatment of the individual woman, with particular reference to her reproductive system: Community life is meant to include not only social, economic and nutritional conditions but also the cultural systems of values, aspirations and satisfactions that influence marital and family behaviour. Under reproductive habits and health are included the factors influencing age at childbirth, family size and spacing, morbidity and mortality of both mother and child and the appropriate organization of maternity, gynaecological and medico-social services.

The role of social factors as a contributory cause of death in the first year of life is now so firmly accepted that the rate of infant mortality has long been used as an index of social conditions and standards of living. More recently, it has become equally apparent that social conditions also play an important part in the etiology of stillbirth, early neonatal death, low birth weight and a variety of both pregnancy complications and gynaecological conditions.

The level of perinatal mortality² varies greatly in different countries; geographic variations in the level of perinatal mortality correlate very

¹ Grzegorzewski, E. (1961) Medical education in international perspective. *J. med. Educ.*, 36, 971.

² Based on the WHO definition of perinatal death (see: *Epidem. vital Statist. Rep.*, 10, 506).

highly with standards of economic and social development. Where living conditions have improved, this has usually been accompanied by falling perinatal death rates and by changes in the relative importance of the various clinical causes of death. Different levels of perinatal death reflect, in part, differences in the adequacy of maternity services and the availability of obstetric skills. Social factors, however, are clearly important. Perinatal death rates are often considerably higher in industrial than in rural areas and within a given area the rates of poorer socio-economic groups have been shown to be several times higher than those of higher socio-economic groups. In England and Wales, where statistics concerning the level of infant and neonatal mortality in the various social groups have been maintained since 1911, the rates of the different socio-economic groups have remained in the same relationship to each other for many years despite economic advancement, improvements in medical care and the fall in the general level of infant mortality. Maternal age, parity, legitimacy and maternal height, each closely associated with social habits and the economic status of the population, all contribute directly to the level of mortality.

Women from different socio-economic groups, from urban and rural areas, from different regions of the same country, enter childbirth with different obstetric risks. Reproductive efficiency is therefore influenced by factors outside the control of the obstetrician and selection of the most appropriate groups of the population for specialist and hospital management is therefore of the utmost importance. Rational selection demands a detailed documentation of social groups within each community, the identification of those groups with the highest child-bearing risks and the application to each group of appropriate methods of treatment. In countries with limited obstetric resources such a policy of rational selection, based on medico-social study of the population, is the best way to make the most efficient use of limited means.

Low birth weight, itself a major contributor to stillbirth and early infant death, also shows striking variations from area to area and between social groups within each area. Rates¹ as low as 2% or 3% have been reported from obstetric centres in highly developed countries, which contrast with rates of 25%-35% reported from some of the larger cities in developing countries. Occupational groups with rates varying from 3% to 17% have been clearly identified among primigravidae receiving the same amount and quality of antenatal care.

A number of social conditions have been shown to be associated with low birth weight. Women who work late in pregnancy, for example, tend

¹ Rates reported in the literature are normally based on the current WHO definition, which uses birth weight as the sole criterion of prematurity (see: *Wld Hlth Org. techn. Rep. Ser.*, 1961, 217, 3).

to have babies of lower birth weight than those who have no occupation during pregnancy or who stop work during the early weeks. Rates in areas of cities where housing is poor are higher than those in good residential areas. Women with low levels of nutrition in pregnancy have higher rates than those whose nutrition levels are high. *All the above factors, however, may be correlates rather than causes.*

Poor social conditions rarely occur in isolation. The woman whose education, housing, nutrition and income are at a low level usually suffers during pregnancy from many other social and physical disadvantages which occur not only during the period of pregnancy but which may have antedated pregnancy by many years. Women with these disadvantages, for example, are normally shorter in stature than women from prosperous social groups, and this may well be an indication that their social conditions were poor already during their growing years. The mechanism by which social factors are translated into biological events is as yet by no means clear. Low birth weight in the poorer social groups contributes heavily to their high rates of perinatal mortality.

The effect of prematurity is not restricted to mortality. It has been shown, for instance, that premature children may grow less quickly, have lower intelligence test scores and more mental and physical handicaps than children of heavier birth weight. Again, the mechanism is by no means obvious and the specific influence of low birth weight is as yet unclear. Poor growth and development may merely be a reflection of an unfavourable environment.

The current definition of prematurity is based on the criterion of birth weight and there is no reason to suppose that children comparable in birth weight will also be comparable in viability or development. Various studies suggest that children of low birth weight in areas where prematurity rates are high have higher survival rates than children of comparable weight in highly developed areas where rates of prematurity are low.

The relationship of social factors to gynaecological conditions has unfortunately received less attention, but even in this under-explored field social variations in the incidence of some conditions have been established. Of these, the most striking and well documented are those relating to cervical cancer. Despite difficulties of definition and registration, it is now clear that mortality from cervical cancer is highest in poorer areas and social groups, particularly those with high rates of fertility. In the United States of America, death rates are higher among the coloured than among the white population and in most industrial societies the disease occurs more frequently in urban than in rural areas. Many studies confirm that the highest rates occur in married parous women and the incidence is highest for those who marry or who have intercourse at young ages and those who bear a large number of children. In industrial societies at any

rate, age at marriage and at first pregnancy, the number of children, and levels of hygiene, education and income are so closely correlated that it has not yet been possible to determine which of these factors, if any, are of primary importance. The low rates commonly found among Jewish and Moslem populations have often been attributed to male circumcision. This hypothesis is by no means proven and there are a number of alternative explanations that have not yet been fully explored. Most hypotheses suggest an association between differences in the incidence of cervical cancer and differences in sexual and child-bearing habits.

Part of the variation in mortality rates between social groups, however, is due not to differences in the relative incidence of the disease but to differences in treatment. Where gynaecological services are readily available and the population is well informed about preventive measures, women are more likely to present themselves for treatment at an early stage of the disease or to take advantage of cytological and other techniques of screening. The response to cancer detection campaigns varies from one social group to another, and where the possibilities of both prevention and cure are available it becomes important to ensure that all sections of the population take equal advantage of the service. Cancer is still a much-feared disease and the reasons why the poorer and the less-educated groups fail to take advantage of the service urgently need investigation. This disease presents a clear illustration that social factors may influence not only the incidence of disease but also methods of prevention.

These three conditions—perinatal mortality, birth weight and cervical cancer—have been chosen as examples of the effect of social factors on the causes and treatment of obstetric and gynaecological conditions. Similar, though often less documented, evidence is now available showing that social factors are associated with many other aspects of both childbirth and gynaecological conditions. These disorders include, among others, abortion, anaemia of pregnancy, cancer of the breast, congenital malformations, ectopic pregnancy, endometriosis, fertility, lactation, menstrual disorders, mental and physical handicap in the child, psychosis of pregnancy and the puerperium, prolapse of the uterus, stress incontinence and toxæmia. Some of these problems are more fully discussed in the following section of the report.

5. PRESENT STATE OF KNOWLEDGE

Existing information is sufficient to demonstrate variations in the incidence of pregnancy and maternal morbidity and mortality in a number of social groups and geographic areas. Much of the research from which this information has been derived, however, has been confined to a relatively small number of localities, and the applicability of the findings to other

areas has yet to be demonstrated. Even in those areas where research has been most intensive, there still remain a large number of questions to which the obstetrician can supply no satisfactory answer. Of all the complications of child-bearing, perinatal mortality is by far the best documented. However, national statistics usually do no more than show that variations exist between major social groups and that the relative importance of different causes of death varies with the level of mortality.

Most studies of reproductive efficiency are the result of cross-sectional rather than longitudinal investigations. We know that a woman who produces one child that is stillborn, of low birth weight or malformed is more likely than other women to produce a similar child at a subsequent pregnancy. There have, however, been few opportunities to study the whole child-bearing history of groups of women in order to relate the events of one pregnancy with those of another. More information on this topic would permit the identification of women with particularly high obstetric risks. The role of social factors in the causation of repeated perinatal morbidity or mortality and repeated abortion is unknown and deserves further study.

The Committee considered the role played by antenatal care in the prevention of morbidity. It is clear that if by early antenatal care the social antecedents of medical complications could be identified, this would give a better opportunity for prevention or control. A major problem in many areas, however, is that women attend late or irregularly for antenatal care, or in many instances only present themselves to the hospital in labour. Better organization of maternity services, more efficient use of family doctors and midwives, more antenatal clinics, better distribution of clinics among the population and the opening of such clinics at hours when women are able to attend are obviously important in persuading women to attend earlier for antenatal care. The unwillingness of women in many areas and social groups to take advantage of existing services may, however, often have deeper underlying reasons. A number of such reasons were discussed by the Committee, including the working hours of employed women, the need to care for existing children, the reluctance of unmarried mothers and those who conceive before marriage to disclose the fact of their pregnancy and, among parous women, their feeling that if their first pregnancy went without difficulty there is no need to receive antenatal care on other occasions.

Failure to attend or to attend earlier frequently indicates lack of understanding by expectant mothers, the family and the community in general of the advantages that antenatal care confers. There is evident need for more systematic and intensive education of the population in the events of pregnancy and in the ways in which the maternity service could help. Equally important is the need to establish the right set of emotional relationships between patient, doctor and midwives, and hospital. In many areas,

it seems probable that women regard the hospital with dislike or fear because they associate it with illness and death or because they feel that, in an over-crowded and understaffed clinic, the medical personnel has little interest in or understanding of them as individuals. *Whatever the balance of contributing factors in different areas, it is clear that social influences play an important part in ensuring adequate antenatal care for the population. There is a great need for more information and research on this topic.*

Evidence is accumulating which suggests strong variation between countries, continents and social-ethnic groups in the incidence of the toxæmias of pregnancy. There is also some indication of considerable variation between smaller areas of relatively homogeneous societies. Toxæmia as a clinical problem is now becoming relatively less important, for example, in some areas of the United States of America, while it still constitutes a considerable problem in other areas of the same country, and is one of the major obstetric problems in some Asian countries. Jewish immigrants arriving in Israel from different parts of the world also show quite marked variations. A number of hypotheses have been suggested. It was observed, for example, that in the Netherlands, during a period of extreme starvation, the incidence of toxæmia fell sharply. This led to the speculation that dietary levels and the composition of the diet might be contributory factors. However, more recent controlled dietary experiments have produced negative results.

Toxæmia has been shown to be correlated with excessive weight gain in pregnancy. This finding, while possibly applicable in many areas, is inconsistent with experience in parts of India where weight gain is low and the incidence of toxæmia high. The relationship of toxæmia to social status is ambiguous and does not show the clear gradient that is now familiar in perinatal mortality and low birth weight. Part of the ambiguity results from variations in definition and the Committee considered that more attention should be paid to the standardization of terms. Because of its geographic variation, its possible association with diet and with levels of physical activity, and because it is a pressing clinical problem in many areas, the Committee felt that more effort should be directed towards the study of this condition.

The earlier onset of menstruation, particularly in industrial societies, is creating a new set of educational, occupational and marital problems. Earlier maturation has, in general, been accompanied by earlier age at marriage and earlier child-bearing, but not necessarily by earlier intellectual and emotional development. *The Committee considered that urgent work was needed on the implications of these new trends—their impact, for example, on rates of illegitimacy and pre-marital conception, and the effect of teen-age pregnancy on adolescent growth and on the birth weight of the child. In some societies earlier marriage is associated with the earlier*

cessation of child-bearing and often with smaller families. The period devoted to childbirth and child-rearing may be reduced, and this brings with it a change in the traditional role of mothers that has not been fully appreciated or embodied into social and occupational life, and may lead to emotional and marital problems. The possibility that after a gap of many years a further conception may occur towards the end of the child-bearing period creates an increasing possibility of parents' having, as it were, a first and a second family. Here again, little is known about the effect on both the family and the child.

In a number of research centres, problems associated with age of parents and parity have received considerable attention. The incidence of abortion, toxæmia, prematurity, perinatal death and maternal mortality tends to be highest in first pregnancies, decreases in second and third pregnancies, and rises sharply thereafter. The effect of parity on gynaecological conditions, particularly prolapse of the uterus, stress incontinence and cervical cancer, while established, is not sufficiently well documented to permit interpretation. In each of these conditions a whole variety of social influences are involved and it is difficult to establish the effect of a specific factor. High multiparity is a problem of particular importance in developing countries, where, in the absence of skilled obstetric care, it may result in rupture of the uterus and other complications. The treatment of conditions such as these needs to be related to the social customs of the population and, in areas where the child-bearing and fertility status of a woman are particularly important, it may often be necessary to apply other than the most efficient means for the treatment of a gynaecological problem. Hysterectomy, for example, is unacceptable, except in extreme cases, in areas of the world where a woman's status in the community depends in part on her ability to bear children.

The relationship between social, psychological and biological factors is nowhere more apparent than in lactation habits. Violent swings of fashion from breast-feeding to artificial feeding and back again have occurred in many societies. These changes are often initiated by the more educated and prosperous sections of the population and followed at an interval of some years by acceptance of similar values in other sections. This has led to extreme variation in breast-feeding habits in a given community and has made it difficult for medical and nursing personnel or midwives to formulate a policy equally applicable to all their patients. It is common to find hospitals in which 90% of mothers are breast-feeding their babies on discharge from hospital, but, in the weeks that follow, social habits reassert themselves so that in some groups natural feeding will continue at the same rate while it is completely abandoned in others. Cessation of breast-feeding may occur for a whole variety of reasons—for example, unsatisfactory housing conditions and lack of privacy, return to work, tiredness on the part of the mother, the influence of relatives and

friends. In other areas and social groups lactation is maintained in the belief that it acts as a form of natural birth control. Any study or policy regarding breast-feeding must take account of the set of cultural habits and religious beliefs obtaining in the countries concerned as well as the intrinsic merits of breast-feeding itself.

Many gynaecological problems whose causes are little understood vary in their incidence between social groups and geographic areas. Menstrual disorders such as amenorrhoea, dysmenorrhoea and dysfunctional uterine bleeding may all be affected by, or themselves affect, domestic and marital harmony and occupational efficiency. Little systematic knowledge is available. Social factors, such as heavy work, poor nutrition and the traumatizing effect of repeated childbirth, also contribute to pelvic floor relaxation and genital prolapse, but there is not sufficient interpretative material to assess the relative contribution of these and other influences. This is also true of stress incontinence.

The relationship between social factors, pelvic infection and ectopic pregnancy is well known. Ectopic pregnancy is often preceded by gonorrhoeal or other infection. Before antibiotic therapy, pelvic inflammatory disease often resulted in sterility. While antibiotic therapy effectively treats the patient and thus limits the spread of infection, if partial tubal patency results this may permit conception but extra-uterine implantation may occur. The various social factors associated with gonorrhoea, other pelvic infections and ectopic pregnancy require elucidation. The incidence of choriocarcinoma also varies greatly from region to region, being more common in Asian countries. With this, and other gynaecological cancers, little is known about the interplay of the various social, cultural, ethnic and other factors that give rise to differences in both incidence and the effectiveness of treatment.

In recent years valuable knowledge has been gained about the influence of social factors, and this in turn has led to better understanding of the etiology of obstetric and gynaecological conditions. *If this information were more widely known and its implications absorbed in both teaching and clinical practice, preventive action and treatment would be facilitated.* On the other hand, more detailed and widespread documentation is required to permit an informed interpretation of available facts. A similar approach could profitably be employed in respect of many other conditions about which little is known other than the fact of social and geographic variations.

6. TEACHING PROGRAMME

6.1 Undergraduate medical education

The introduction of a new teaching approach, dealing with subject-matters outside the traditional medical curriculum, creates a variety of technical teaching problems. The student, and the specialist, not only

must learn a new set of facts but must integrate them into their existing framework of knowledge and apply them to the community in which they live. To achieve these ends much more than the routine factual learning is required, and the best method of doing so in itself requires study. In the discussion that follows, the Committee has therefore confined itself to an adaptation of traditional methods, since it did not feel qualified to put forward far-reaching recommendations in the absence of further experience and research.

Many social factors have a bearing on other branches of medicine, as well as on obstetrics and gynaecology. The social and demographic approach to medicine in its broadest sense should therefore be presented to the student very early in his training. Such instruction could effectively be carried out by departments of social and preventive medicine. Having been given an understanding of the relevance of social factors to medicine, the student will be better prepared for instruction in the same approach to obstetrics and gynaecology. The student must be made fully aware of these influences, and that is best accomplished at the bedside. The outpatient, pre-natal, post-natal and gynaecological outpatient clinics are also suitable places for such instruction. Where social workers are present, they should help to instruct the student.

Throughout his whole training, the student must learn to regard the patient as an individual and a member of both the family and the community. For example, while demonstrating a case of peritonitis due to illegal abortion, the teacher will have an opportunity to discuss the many factors that may be involved, such as the patient's age and marital status, the size of her family, her education, occupation and income, her social experience and aspirations, her state of physical and mental health and the relevance of existing laws. He should also discuss the risks of maternal mortality and morbidity and acquaint the student with methods of prevention. Many problems in obstetrics and gynaecology could profitably be approached in a similar manner.

Opportunities for the student to visit patients in their homes will bring him into direct contact with the daily life of the mother, the family and the community. This is particularly important in areas where domiciliary midwifery is commonly practised. The Committee recognized the advantages of home visiting but fully realized that this is difficult in many areas. Where departments of public health are able to co-operate in the teaching programme, their help is particularly valuable in connexion with field training and with the effective utilization of social agencies in the management of individual patients.

A most intriguing problem is that of instructing the student in home delivery. The tendency in the more developed regions of the world is increasingly towards hospital deliveries and, in some countries, almost all births take place in hospitals. In the developing regions most women deliver at home, often not attended by any skilled person. In these areas, part

of the student's training should take place within the domiciliary midwifery services.

In certain countries the greatest social pressures on physicians practising obstetrics and gynaecology stem from problems concerning abortion, family planning and sterilization. These pressures originate when there is conflict between the laws and social and religious customs that regulate the practice of medicine in these matters, and the views of a considerable body of physicians and laity. Laws and customs pertaining to these areas of medicine are widely divergent in different countries of the world.

Such social variability has led to wide differences in the amount and quality of the teaching of medical students in these subjects. In many departments of obstetrics and gynaecology, the student is taught little or nothing of the problems in question and the textbooks he reads treat them only superficially. Furthermore, in many areas of the world the growing public concern with population problems, and advances in knowledge, have resulted in an increasing discussion in the press of family planning and related problems.

Under these conditions it is essential that very careful consideration be given to the teaching of such material so that all medical students may have sufficient knowledge to formulate an intelligent approach and appraisal of the problem. Without such a background, the future physician may give inferior care and advice to his patients and will not be in a position to provide either his colleagues or his government with the expert advice they may seek.

The approach to such teaching must be factual and must give due recognition to the laws and customs of the community. Of paramount importance is the teaching, verbally and by example, of respect for the due process of law and for the ethics of the medical profession. This might be done in co-operation with the department of forensic medicine. Some examples of such an approach are given below.

While there are no firm data regarding the prevalence of illegal abortion, there can be no doubt that this constitutes a major public health problem in many parts of the world. For example, in New York City the proportion of maternal deaths due to abortion (probably predominantly illegal) has been rising steadily and in 1962 was 43.8%. There are countries that have met this problem by legalizing abortion, while others have made birth control information and facilities more easily available. Such practices have done more to reduce the bad effects of illegal abortion than is possible by restrictive laws. *Without making any recommendation regarding such practices, the Committee felt that the student should be made aware of all the available data in order that he might formulate for himself an informed approach to this problem.*

In a previous part of this report, the Committee has emphasized the potential dangers of high parity to both mother and child. Such factual

data and, where permissible, knowledge of the methods of control and spacing, should be given to the student. Nor is knowledge of methods alone sufficient. The student should also be acquainted with the biostatistical and other methods available for the testing of their relative effectiveness.

The Committee felt that the student should be given some basic understanding of the nature and social and economic causes of the vexatious problem of population growth.

In many developed areas of the world, therapeutic abortion has become less prevalent and the indications for its performance have shown marked changes. For example, in some areas psychiatric and socio-medical indications affecting the health of the family have tended to become relatively more frequent than organic disease. This situation is, however, not universal and the student should understand the forces and trends that have produced these changes and differences.

The maternal indications for sterilization centre about such conditions as high parity and serious illness. The student should be given the available factual information, including the psychic after-effects of sterilization on the woman, her husband and her marriage.

6.2 Specialty and post-graduate training

The aim of specialty training is to educate the physician in the clinical and practical aspects of obstetrics and gynaecology and to stimulate his interest in research. At present, little attention is given to the social aspects. However, the social approach to medicine in general and to obstetrics and gynaecology in particular outlined in the section of this report on undergraduate medical education is equally applicable during post-graduate instruction.

Very large variations exist in the methodology and duration of specialty training. They vary not only between countries but also, at times, between universities in the same country. *The Committee felt that in the implementation of its recommendations for the inclusion of social aspects in the training programme there should not be any prolongation of the training period.*

Research into the social aspects of obstetrics and gynaecology is one of the most effective methods of stimulating and educating the student. Physicians should be encouraged to undertake research into social aspects of common obstetric and gynaecological disorders as part of their specialty training. It is also desirable that the training should include first-hand knowledge of public health services, particularly in the field of maternal and child health.

Cancer of the genital organs is a major problem in all countries. A specialist must be educated in the social aspects of this disease and instructed in methods of early detection by cytology and other techniques. He should

be instructed in the organization of clinics required for such detection and of cancer control programmes.

Attendance at staff conferences should be mandatory and the specialist-in-training encouraged to play an active part in them. The attendance of specialty students should also be encouraged in the presentation of cases when the sociological aspects should be given due emphasis, and the presence of social workers might be helpful.

The success of a training programme in any discipline depends to a very large extent on the qualities and attitudes of the head of the department. If he is sympathetic towards the inclusion of sociological aspects in the curriculum and is sufficiently well informed on them, he will encounter no difficulty in impressing their importance on the specialist-in-training. The Committee wishes to stress that the introduction of education in social aspects should not in any way interfere with training in the clinical and practical aspects. *The harmonious blending of all these aspects—clinical, practical and social—should be the aim in the education of the specialist.*

General practitioners who are not recognized specialists will greatly benefit from periodic attendance at refresher courses. In many countries these courses are very popular, while in others they have not met with great success. One important reason is the financial loss that results if the practitioner has to leave his practice, even for a short time. Financial assistance from the government or other sources would greatly facilitate and encourage attendance. During refresher courses in obstetrics and gynaecology, it will be particularly important to bring to the attention of the general practitioner the social factors associated with the diseases and conditions that are prevalent and important in the area in which he practises.

The Committee discussed the organization of short courses on the social aspects of obstetrics and gynaecology for physicians who are already specialists in this field. Such courses could be of great value in the orientation of specialists and in stimulating greater interest. At present, insufficient experience is available to enable the Committee to make firm recommendations concerning the content of these courses. They must be adjusted, in any case, to the particular problems of the specialists to whom the teaching is directed. Universities and medical and obstetrico-gynaecological societies should be encouraged to organize such courses.

7: DEPARTMENTAL ORGANIZATION

The key person in a teaching programme is the head of the department ; hence the necessity for great care in his selection. From the point of view of the subject-matter under particular consideration by this Committee, it would be very desirable and useful if one member of the staff of the department would interest himself and receive special training in the sociological

aspects specifically so that not only would he contribute to teaching but would ultimately develop into a specialist in this field. As an alternative, a behavioural scientist working within the department would be of immense benefit. Close liaison with the department of public health in the area will be useful for field training.

Sociological research is important if there is to be growth and advancement of knowledge in this field. Continuing evaluation of the departmental results in lowering mortality and morbidity not only stimulates the student but is essential for the progress of the department. Unfortunately, many departments of obstetrics and gynaecology have not yet fully appreciated the importance of a modern biostatistical approach to the teaching, or to assessing the effectiveness, of clinical practices.

The suggestions on implementation and organization are presented only in a broad outline. Definite recommendations on the methodology for including social aspects in the teaching of obstetrics and gynaecology will have to await the evaluation of experience yet to be gained.

Whether general practitioner or specialist, the physician caring for a patient with an obstetrical or gynaecological condition often needs the advice and close co-operation of specialists in other branches of medicine. Paediatrics, internal medicine and psychiatry are given as examples in the following paragraphs. The Committee was well aware, however, of the role played by almost every other branch of medicine in the care of individual patients and also that developments in other fields might often find application in obstetrics and gynaecology.

Throughout his training, the student should be encouraged to consider the mother and her new-born infant as a biological and social entity. This applies not only to the undergraduate training of future general practitioners but also to the training of obstetricians and paediatricians. Close co-operation between the departments of paediatrics and obstetrics and gynaecology is therefore essential; joint teaching programmes, observation of problems of mutual interest and exchange of staff might all be helpful. Much benefit could be obtained by team-work and extramural activities, such as working in health centres and local maternity hospitals, both urban and rural.

The running of post-natal, infant and, where acceptable, family planning clinics, simultaneously in the same place, is worthy of consideration. Attendance is often unsatisfactory at post-natal clinics but not so at the infant clinics. The willingness and keenness of the mother to take her baby to the infant clinic should be utilized to obtain better attendance at the post-natal clinic. The student could be attached with benefit to these clinics, where the role of various social factors in problems of early infancy and in the post-natal period could well be demonstrated.

Many diseases may complicate pregnancy—hypertension, diabetes, heart disease, anaemia, to mention a few. In the instruction of the student, the

collaboration of the department of medicine is essential in impressing on him the importance of the social aspects of ill-health. The department of social and preventive medicine could also play a vital role, especially in organizing field training programmes.

Psychosomatic factors influence many aspects of gynaecology and obstetrics. These in turn may be related to social factors. Collaboration with the department of psychiatry can be of definite value in demonstrating to the student the influence of these factors.

Within the allied professions, the midwife deserves particular mention. In most countries nurse midwives and their auxiliaries play a most important role in maternity care. During his obstetric and gynaecological training, opportunities should be provided for the medical student to collaborate with midwives, nurses and auxiliaries and to accompany them to the homes of patients.

Medical social workers, or almoners, could be of particular help to the student in obtaining a better understanding of the social problems that women may face because of pregnancy or gynaecological illness and of the help that social agencies may provide.

8. RESEARCH

The preceding discussion has shown at many points the need for further information about those aspects of personal, family and community life that have an influence on child-bearing and the reproductive system. Such information is essential to any training programme that claims to give the student a comprehensive approach to obstetrics and gynaecology. At the same time, the Committee felt that the conduct of research within the department would be a stimulus to the student and to the teaching and clinical staff. A locally based research programme, for example, would provide excellent teaching material by which the student could be made to realize the relevance of the patient's social background to the organization of services and to clinical practice. The inclusion of a sociological component within such a programme would also bring the social aspects of the subject into departmental discussions.

Every department should, as a minimum requirement, collect, record and analyse sufficient data to evaluate the success of clinical policies and the efficiency of the service and to identify those groups of the population with special obstetric risks or those for whom the existing organization of the health and medical services is inadequate or inappropriate.

The establishment of such a research programme will frequently demand changes in the scope and administration of the department and the health service of the area. Many hospitals deal only with a limited population which may not be socially representative of the total area ; women with

high obstetric risks are disproportionately represented. This selectivity, though sometimes justified by local circumstances and of great value, makes it difficult or impossible to assess the true incidence of an obstetric or gynaecological condition and its distribution over sub-groups of the entire population, or the real effectiveness of a particular institution in meeting the needs of the community. The introduction of standard medical records for an entire community, requiring a minimum coverage of both social and medical information, would facilitate epidemiological study. The co-operation of public health departments, which often record relevant population data, would be invaluable in such a programme. The introduction of standard birth certificates, including both social and medical data, would also be a further stimulus to epidemiological research.

To carry out the programme effectively, departments of obstetrics and gynaecology should have at their disposal a biostatistical unit with its technical knowledge and machinery. The Committee were further impressed by the value of establishing within the medical school a behaviour science unit, which might include sociologists and social anthropologists, demographers, economists and psychologists. While the Committee were primarily interested in the contribution that such a unit might make to research in their own field, a unit of this kind would also contribute equally to work in other medical departments. Behavioural scientists are, at present, only occasionally and marginally interested in health problems and the establishment of a behavioural science unit would encourage their long-term commitment to medical sociology. Continuity of employment would enable them to build up a body of factual knowledge and achieve an intimate understanding of medical terminology and clinical problems. It would also make them available to take part in a teaching programme.

Many physicians are insufficiently aware of the work already carried out in social obstetrics and gynaecology. Research findings are frequently published in behavioural science journals with which obstetricians and gynaecologists are unfamiliar. *The need exists for some organization, preferably at the international level, which would collect, collate and exchange information about past and current research.* The inclusion in periodic national and international conferences of a section dealing with social aspects of obstetrics and gynaecology would not only disseminate information but give an added status to this branch of the specialty. Readier inclusion in medical and specialty journals of articles using a socio-medical approach would help to achieve the same end.

Implementation of these suggestions will demand the solution of a number of practical problems. This kind of research is expensive, particularly in personnel, and funds are less readily available than for work of a specifically technical or clinical nature. Few behavioural scientists have had any close or continuous exposure to medical research, and this means not only that few are available for research itself but also that there is no

sizable group capable of training their colleagues and students. The use of training schemes and grants such as those already promoted by the World Health Organization should be encouraged, but national governments will also need to make funds and facilities available to overcome the present shortage of skilled personnel.

Needs and opportunities for research in the field in different parts of the world are vast and the Committee could not profitably enumerate them in this report. Some of the fundamental topics of general relevance have been mentioned in the earlier discussion. Of particular importance are the social and family influences motivating women to seek medical care, the whole system of values and habits concerning family size and control, the effect of work on pregnancy complications, lactation, menstruation and general physical health and their implications for legislation. The social study of gynaecological problems should be particularly encouraged. Cross-cultural research, which, by spanning a wide range of social and ethnic groups and environmental conditions, could illuminate many problems, is impeded by inadequate methods of categorizing populations and conditions existing in widely different societies. Research into technical methods of cross-cultural study, though difficult and expensive, might therefore permit a new range of opportunities that are at present denied to the investigator.

9. CONCLUSIONS AND RECOMMENDATIONS

This report has demonstrated the great need for increased attention to the social aspects of obstetrics and gynaecology in the education of both undergraduate and post-graduate students.

The major findings and recommendations of the Committee have been italicized in the report. It is hoped that the educational, administrative and health authorities concerned will implement them as quickly as possible.

In particular, however, a great responsibility rests with the heads of departments of obstetrics and gynaecology and with their staffs to achieve a broadening of the curriculum and a resulting change in the medical student's approach to his future patients, their families and communities.

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