IMPLICATIONS OF THE SPECIALITY OF OBSTETRICS AND GYNAECOLOGY

1. Aims Of Obstetric Practice

BY

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This century has seen rapid strides in the field of various branches of Medicine. Our speciality has not lagged behind. Much of research and specialised work has tended towards development of various specialities, too numerous perhaps from the ordinary man's point of view and even from the general practitioner's. There is a tendency to treat the general practitioner as a clearing house for the different specialities. The general practitioner may well begin to feel that he is not capable of treating any but the mildest of minor ailments and needs must get guidance from the relevant specialist on all others. Such a tendency is most noticeable in large towns where specialism in all branches of Medicine (term used in the wider sense) abound. Most of the general practitioner's time is spent either at the patient's house, meeting specialists, or flitting from consulting room to consulting room with his patients, and yet the same general practitioner will be thrown on all his resources if stationed at an out-of-the-way place, with not only the absence of a specialist of any kind, but having no facilities for ancillary aids. He must be a good clinician to be able to do justice to the demands made on him. We look forward to a time, let us hope not too distant in the future, when well-equipped medical units will be established, so as to be accessible to the population in the remotest part of our vast country. At the same time, I presume, you share with me the hope that the future general practitioner, the back-bone of the profession, will go out well enough equipped with a clinical acumen which will help him through his difficulties. I agree that the student, during his undergraduate studies, must be shown the value of laboratory and radiological aids in diagnosis, but that should not tend to minimise the value of careful clinical study, a detailed history and correlation of signs with symptoms. You will recollect that such a study is of immense importance in our branch. Take for instance the diagnosis of ectopic gestation. Most of you will recollect how the diagnosis is clinched by such a correlation. I say "our branch" advisedly, as you know that over 60% of gynaecology is the result of mishaps in obstetrics. Great concentration must be placed on the development of good obstetric work. It is a far cry from the days of Semmel-

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weiss to our present period of chemotherapy and antibiotics. But all said and done, antibiotics have not given cent per cent guarantee against sepsis and "Prevention" is still the watch-word. This word should be written in bold letters in every Obstetric Department and on the heart of every obstetrician.

Ideal obstetric practice should include careful pre-natal supervision, efficient intra-natal work and properly planned post-natal work; nay, I would say that the obstetrician's interests start before conception occurs, or even before the couple is married, to ensure that a healthy stock participates in procreation. Nor can the problem of an obstetrician end with the immediate post-natal period, for he is interested in seeing that the child grows up healthy and is prevented from developing rickets and other deficiencies which would leave a formidable legacy for future motherhood. Genetics, environment and social habits have perhaps been responsible for differences in morphology of the female pelvis. Obstetricians and pediatricians will need to work together over this problem so as to foster the development of the normal morphological type (gynaecoid) and thus ensure a larger percentage of normal labours than obtains at any clinic at present.

A survey of causes of Maternal Mortality in our country reveals glaringly what an important role is played by infectious diseases and nutritional defects. Twenty years ago the highest single cause of maternal mortality was puerperal sepsis. In recent years sepsis takes a very small toll in cases conducted by trained personnel, but anaemia tops the list. Much research has been done on this subject of anaemia in pregnancy and valuable suggestions for efficient treatment of the same have been evolved. However, effective treatment is only possible if the case is seen fairly early. A large number of cases come under observation for the first time when they are very anaemic, with haemoglobin under 20% and red blood cells under a million. In such cases the cardiac muscle has already degenerated and the woman has generalised oedema. Cases of this type hardly give one time for treatment. There is no doubt that nutritional deficiency plays a large part in the aetiology of the disease. Prevention then is again the watch-word.

Moreover, the contraction of an infectious disease by an expectant woman makes for a more fulminant type and higher mortality. If you look through the statistics of mortality during epidemics of small-pox, cholera, enteric and, of late, infective hepatitis, you will find a proportionately high percentage of pregnant or parturient women. Tuberculosis again takes a high toll in the parturient. It is usual to classify maternal deaths into those the direct result of pregnancy or labour, and secondly, diseases associated with or aggravated by pregnancy or labour. It is a disheartening revelation that associated diseases should take such a high toll of maternity, particularly as most of these are preventable by proper public health measures. We obstetricians can ill afford to dissociate

ourselves from public health activities. On the other hand, we should be foremost in our efforts to promote the spread of ideas on sanitation, clean living and proper nutrition, as also education on the prevention of spread of infectious diseases. The link between the work of Public Health Authorities and that of the obstetrician is obvious, and that may be taken as the first line of defence in our preventive work. In Great Britain special arrangements were made during the last world war, when rationing for the population was very stringent, by which the expectant and nursing mothers and children were given extra rations, particularly of milk, with the consequence that maternal and infant mortality was kept very low. An achievement of this kind is praiseworthy. Our problems are multiple and have to be tackled on a wider scale. The state of sanitation, even in areas in big towns inhabited by the enlightened classes, is far from desirable. Civic sense is sadly lacking amongst the majority of the population. Even the study of medicine and hygiene does not seem to give us the right attitude to our surroundings. We tolerate refuse dumps and perhaps add to them by our careless habits. The unfortunate fact is that study is considered to be required for purposes of examination and not for translation into action. Such a mentality is undermining the roots of healthy living. As for food, even those well able to afford to spend, have not the basic knowledge of a balanced dietary. They would prefer to revel in luxurious palatable food which may not necessarily be wholesome. The majority of the population, however, suffers from want, not only due to uavailability of the articles but their prohibitive prices. Prices of common commodities need to be brought down if the health of the population at large is to be salvaged. Housing is another of the basic problems affecting health. Cheaper and cleaner housing needs to be provided. If all these basic requirements are provided we can look forward to healthy men and women who would then procreate healthy children. The responsibility of the obstetrician will, however, continue into careful supervision and guidance through each stage.

The state of maternity is a normal physiological condition but often verges on the abnormal, and hence it is imperative that a careful understanding of the physiology and the possible pathological changes is aimed at.

Marriages are either arranged by families or by the parties concerned. It is a tradition amongst families to see to the heritage and health of the bride and bridegroom, but exigencies of economic circumstances often mar the superior understanding and clear conscience of parents and thus we see an ill-nourished and ill-developed young girl, barely in her teens, given away in marriage. Most of us have had cases of congenital absence of development of Mullerian ducts, where obviously there have been no menstrual periods, brought to us for dyspareunia. Does it not seem almost criminal to get such a girl married without informing the other party of the defect? The future of

these girls can easily be imagined. They provide a good field for the ingenuity of gynaecologists proficient in plastic work, but I wonder what percentage of cases are ultimately made really happy, for alas! we cannot put in a uterus to afford a ground for nidation and only exceptional families can tolerate a childless woman.

Apart from such congenital defects, the prospective couple will need much guidance towards a happy and healthy married life. Marriage is no licence but a life-partnership in every sense. There is an idealism which can well be inculcated into the minds of the young couple.

Once conception occurs, regular supervision by an obstetrician is essential. I would like to remind my friends that *ante-natal care* starts quite early in conception. The first question is to decide if it is right to allow the pregnancy to continue, if the woman has gross organic disease. Apart from eugenics, the common systemic diseases are those of the heart, lungs and the kidneys. The problems presented by these complications are not so formidable these days, in view of the advances made in recent years in their management, and thus the indications for interruption of pregnancy are minimised. Venereal disease, if present, needs to be diagnosed early in pregnancy if effective treatment is to be carried out. The earlier the treatment is started the better the prospects of continuing pregnancy to term, resulting in the birth of a healthy infant. The immediate obstetric problems are chiefly connected with possibilities of (a) ectopic gestation, (b) retrogravid uterus, (c) vesicular mole, (d) associated tumours of uterus or ovary, and (e) question of repeated abortions.

A careful examination in the early days of conception is necessary to anticipate an *ectopic* rupture, for one would keep a vigilant watch over a suspicious ectopic mass and warn the patient against delay in seeking advice. An ordinary *retrogravid* uterus usually rights itself as pregnancy advances but if it does not, incarceration may occur and lead to acute symptoms. In this connection I would like to warn prospective obstetricians against using force in replacing the uterus. I recall a case, in my early days, I suspected to be incarcerated retrogravid uterus, but fortunately I did not make attempts at replacement. Within a couple of days of warding, in anticipation of treatment, she got acute symptoms and the case turned out to be a rupture of an ectopic sac. The efficacy of expectant treatment for incarcerated retrogravid uterus was brought home to me some 33 years ago, when a case was brought in from a village. That was the worst case of incarceration I have seen. The bladder was distended and so badly infected that, during the course of regular lavage, large pieces of sloughs came out; the vaginal walls were oedematous and prolapsed. It was obviously not a case for manual replacement and I anticipated that, as the infection cleared up, I would have to do a laparotomy to break down adhesions. The only treatment we gave was regular emptying and washing out of

the bladder, Sims' posture and later knee-chest at intervals. To our surprise the uterus gradually rose up into the abdomen. Since that day I have always practised and advocated emptying the bladder at regular intervals, continuous Sims' posture and knee-chest posture three times a day. The results have been uniformly satisfactory.

Cases of *vesicular mole* can be diagnosed early if a periodic watch is kept over the growth of the uterus. The usual experience is that these cases are brought in extremis, markedly anaemic due to bouts of bleeding and often toxic as well. It is possible that early diagnosis and treatment of vesicular mole may minimise the chances of development of chorionepithelioma in future. Be that as it may, early treatment of vesicular mole will save many lives. The problem of *repeated abortions* is a tiresome one, for we still seem to be in the dark as to the various causes of this mishap. And yet with care and practical advice, a number of cases can be salvaged.

The formidable type of *hyperemesis gravidarum* can be prevented by having the case under supervision from the earliest onset of gestation. Most of these cases are of functional (or neurotic) origin, and respond to proper management. It is only an occasional case who turns out to be of toxic origin and requires drastic treatment.

A case tided over the early months of pregnancy must be watched with vigilance for the earliest signs of eclamptic toxaemia, the so-called pregnancy anaemic and placenta praevia, to mention only a few. *Toxaemia* is normally a disease of the last trimester but its development can be anticipated from the fourth month onwards. It has been shown that the diastolic pressure is high in these early months in cases who later develope toxaemia. A rapid weight gain is also a warning, showing a tendency to occult oedema. The work done in recent years on electrolytes has a bearing on this problem. In fact advances in biochemical work give much guidance in the understanding of this disease of theories and a rationale of management on proper lines. *Placenta praevia* again comes under observation in the last two months of pregnancy, but mild warning haemorrhages, from the fourth month on, are often neglected, only to be followed by sudden haemorrhage and collapse. The prospects of efficient treatment of placenta praevia are greatly improved if the cases come under observation at the first onset of bleeding. We owe much to the introduction of blood transfusion and timely caesarean section in selected cases.

Anaemia in pregnancy is usually seen associated with the later months. A number of cases seen in the early months were known to be hale and hearty and have been found to be profoundly anaemic near term. The aetiology is still not quite clear, but is intimately connected with nutritional deficiencies. It is, therefore, highly probable that pregnant women, followed up regularly from early pregnancy to term can be prevented from getting profound anaemia by proper guidance. Moreover,

repeated blood counts during pregnancy, but particularly in suspected cases, can give the clue to early treatment. Thus it seems possible to prevent the high mortality from anaemia which towers above all causes of maternal deaths.

In the later months and nearer term two more problems present themselves, these being cases of disproportion and malpresentations. (I may state that in this general dissertation I am not going into details of all possible complications, but pick out only the common ones). Radiography gives much help in diagnosis and mangement of these cases, but here again I would like to emphasise the need for careful development of the clinical sense, for radiography can only give guidance and suggestion of possible aberrations. The final evaluation is by clinical methods. Ante-natal work in the field of cephalo-pelvic disproportion is the way of anticipation. The dictum "Forewarned is forearmed" applies to ante-natal diagnosis of disproportion and malpresentations. The latter are often possible to be corrected during the ante-natal period, but a residue can be corrected only during labour or there may be a recurrence after correction. What are the prospects of prevention of cephalo-pelvic disproportion? The gross cases of disproportion are seen in pelvic deformity, resulting from rickets and osteo-malacia. These are definitely preventable and one has already noticed a reduction in the incidence of such deformities; but types of minor disproportion persist and form the bulk of cases where the skill and judgment of the obstetrician are put severely to the test. Many of these cases are the result of morphological variations, not only in the contour of the pelvis but in the size and shape of the foetal head. It is well known in genetics that an ancestral type repeats in a future generation. The woman may be of a slight build with a moderate-sized pelvic capacity, but if she is mated to one who has a broad and tall build or comes of a stock of big-made men, the prospects of disproportion are highly probable.

It has been a routine in most ante-natal clinics that cases in the last two months are examined regularly every fortnight, the usual examination, after the preliminary history-taking and general overhaul, includes examination for signs of toxaemia, presentation and position and cephalo-pelvic disproportion. It is too routine a course to attract the seniors, and usually the ante-natal clinic is relegated to the juniors. And the fact that certain days and hours are set apart for this routine examination is enough to deter the obstetrician from examining a pregnant woman if she comes on an odd day and hour, this often to the detriment of the case. For, instances are known when a woman seen casually at ordinary out-patients, has come in with severe eclampsia, or failing compensation in a valvular disease of the heart before she had time to attend the regular clinic.

It has been noticed that regular ante-natal examination is not carried out as a routine by many a practitioner and midwife. Urine has to be examined regularly (every fortnight

after the sixth month) and so has the blood-pressure to be checked. A careful overhaul and scrutiny at frequent intervals will bring many a case of anaemia and incipient tuberculosis under treatment before it is too late. It is too common an experience at the large centres to see cases of profound anaemia and pre-eclampsia brought in, even though the cases were under regular supervision of some practitioner.

It is high time ante-natal care was taken up in the right perspective. Fortunately ninety-nine per cent of cases will run a normal course, but it is just the hundredth case which should be spotted in time to avert a calamity. A junior may not be in a position to detect minor variations, and therefore it is imperative that senior obstetricians make a point of attending the clinics regularly, supervising and guiding the work of the juniors. At the same time the presence of the senior person gives confidence to the patient and is an encouragement for them to attend regularly as advised. Perhaps in no field is the help of a social worker so necessary as in ante-natal and post-natal work. A special type of worker usually known as the Health-Visitor is trained for such work. She will help the doctors in advising and guiding the patient as to her care during the expectant period, as to the symptoms she should not neglect to report immediately, ensure regular attendance and proper preparation for confinement. This is a duty devolving equally on the doctor. In fact an ante-natal clinic should be considered largely as an educative clinic, during which incidentally one ensures that everything is normal. Looked at from this angle the whole organisation and management of the clinic needs overhauling.

During ante-natal care one gets the opportunity of reassuring the patient and giving her the right approach to the impending confinement. Apprehension and fear can often work havoc in labour. Grantley Read has devoted much thought to this aspect and brought out a revolution in the idea of so-called "labour pains". The practice of relaxation prepares the woman psychologically for the labour and minimises the need for analgesia and anaesthesia, both of which are far from harmless in their effects on the mother and the infant.

The few complications of pregnancy referred to and many others will make it imperative for the department to have beds for ante-natal complications. It is suggested in western countries that at least 15% of beds in a maternity institution should be reserved for ante-natal complications. In India we would need even 25% of the beds for these cases. Institutional treatment makes a great difference to cases of anaemia, toxaemia and osteomalacia, all of whom seem to show marked improvement within a week or two even on the usual hospital diet. For a teaching institution such beds, lodging a variety of complications, give good material for study and clinical teaching. Such a ward should form an essential part of every obstetric department.

INTRA-NATAL CARE

Efficient and thorough ante-natal work will minimise the problems of intra-natal work. The majority of cases will get into labour in a healthy state with normal presentation and fixity. Inertia is mostly confined to the feeble or apprehensive woman and thus is largely preventable. However, there are other complications which have to be anticipated early in labour and treated promptly, e.g. abruptio placentae, prolapse of the cord, persistent occipito-posterior, to mention a few. One must never tire of watching and following a good number of normal labours in one's early days of training, if one would want to be alert to variations from the normal. The present teaching is to desist from vaginal or rectal examinations, if the labour is progressing normally. One ensures that the head is well flexed and deeply engaged by a careful abdominal palpation, and if labour pains come on regularly, all is expected to go smoothly. On the other hand if the head feels deflexed and barely fixed, one would need to apprehend complications and do a vaginal examination at the onset of labour, and again immediately after rupture of membranes, to exclude the possibility of prolapse of the cord. A deflexed head can be best treated at this stage. A few attempts at flexion with pains will help the head to descend and rotate.

One of the bugbears of midwifery in the past was puerperal sepsis. Control of this has been brought about in various ways. There is no doubt that there has been an abrupt fall in the incidence of, and particularly in the mortality from, puerperal sepsis, since the advent of chemotherapy and, later, of treatment by antibiotics. This, I presume, is due to the fact that control of the virulent organisms has prevented the spread of these by carriers. However, much careful planning and organisation has helped to prevent sepsis. A well-organised institution should have aseptic labour-wards for normal cases, and separate labour rooms with special staff for semi-infected cases, admitted after interference. The staff for the labour-wards should not be expected to nurse in the lying-in wards, as that would be a sure way of spreading potential infection. Cases of abortion should be treated as suspect cases and not admitted to the aseptic labour ward. Isolation of cases with morbid temperature, to be nursed by a separate staff, will go a long way towards preventing spread of infection. Dettol has proved a reliable antiseptic. Exhibition of prophylactic treatment with sulphonamides, or preferably antibiotics, in cases requiring artificial interference has been helpful. Thus, by careful aseptic methods and early administration of anti-infective drugs, puerperal sepsis is hardly a problem in the modern obstetric department.

Unforeseen accidents of labour e.g. abruptio placentae, placenta praevia, idiopathic rupture of the uterus, obstetric shock or amniotic fluid embolism are accidents which, if recognised early, may still give time for treatment with prospects of recovery, but a number of these may form the ir-

reducible minimum of maternal mortality.

Third stage and *post-partum haemorrhages* take a high toll of the deaths from haemorrhages. Management of the third stage requires care and patience. However, once haemorrhage starts, prompt measures, in the right order, may be the only salvation. Post-partum haemorrhage can occur even after normal labour, and hence it is possible that only a junior is present at the time the bleeding starts. By the time an experienced obstetrician arrives it may be too late. It is because of the possibility of such sudden emergencies that it is considered necessary for one or two experienced obstetricians to be within easy reach. The practice at the Rotunda Hospital, Dublin, where the Master and the Assistant Masters reside on the premises is an instance. The percentage of cases of post-partum haemorrhage, and mortality from the same, may well form an index of the efficiency at an obstetric institution. Blood transfusion has made a marked difference in the treatment of haemorrhages, but to be effective it must be given promptly and in sufficient dosage (neither too small a quantity nor too large a quantity, nor too quick a transfusion, which may embarrass the heart). Addition of fibrinogen has of late been shown to be effective in cases of abruptio placentae which do not yield to ordinary measures. This special work on blood chemistry has far-reaching results.

The *fate of the infant* cannot be treated lightly, for our aim is to see the woman safely through parturition to ensure a healthy mother and infant. Much of foetal and neo-natal mortality depends on obstetric management right from the early months of gestation. The percentage of prematures and intra-uterine deaths are an index of the type of ante-natal work. Unfortunately for our country this is very high, partly due to avoidable obstetric and general factors but largely to malnutrition of the expectant mother. Again, foetal mortality during labour is indicative of the type of intra-natal work. A high percentage of intracranial haemorrhage and atelectasis fall in this group. These causes may work into the first two days of birth, aptly termed as "delayed still-births". Apart from these, deaths during the neonatal period are largely due to infections of the lungs, gastro-intestinal tract, umbilical cord or blood. Prematurity takes a high toll in the neonatal period. This is a problem which has to be worked on. In fact, the whole problem of still-births and neo-natal deaths awaits careful investigation in our country. In the absence of regular post-mortems, diagnoses are unreliable. Then there is the Rh factor which is of importance both to the mother and infant. In modern clinics in the West every expectant woman has her blood grouped and the Rh factor tested so that if she is negative she is followed up carefully with repeated tests for anti-Rh titre, this with a view to salvage the infant, but the knowledge of the Rh factor is also important if a transfusion is necessary for the woman.

Recent work on neo-natal deaths has brought out the possibility of

development of hyaline membrane in the pulmonary alveoli leading to a train of symptoms ending in death. With the development of specialisation, the pediatrician now claims the care of the new-born from birth onwards. How far we should comply with this is a debatable point. The obstetrician has possibly brought this on himself, for he is getting more interested in operative obstetrics and gynaecology, to the detriment of normal ante-natal, intra-natal and lying-in work. To my mind the obstetrician should hold himself responsible for the mother and infant during the first ten days at least of the puerperium, provided the infant is progressing normally. He should, however, welcome consultation with the pediatrician directly he notices the least deviation from the normal course. The care of the new-born is largely the responsibility of the nursing staff and it is high time we agitated for this staff to be given special paediatric training. Only thus can we hope for salvaging a large number of the new-born prematures as well as the full-term. The care of the infant passes into the hands of the paediatrician after the first ten days or two weeks, but, as I have said earlier, the obstetrician should continue to take interest in the progress of the child, as it grows up into manhood or womanhood.

POST-NATAL CARE

The care of the mother does not end with her safe delivery and the ten days of lying-in. She needs guidance to help her to return to the normal non-pregnant state. Involution is not complete till six weeks after parturition. Improper care at this stage will tend to turn the woman into a chronic invalid. It is at this period that much preventive work is possible and yet this is the period which seems most neglected. Post-natal care starts soon after delivery. The attendant has to ensure that the uterus is empty and is well contracted. Even retention of clots invite infection and later sub-involution. An abdominal binder is advised at least for the first twelve hours if only to prevent the uterus being distended with clots. Tendency to reactionary post-partum haemorrhage has to be watched for. The binder however, should not be tied too tight, for it will, apart from the discomfort it may cause, only push the heavy uterus down and tend to stretch the already slackened ligaments and thus be a precursor of future prolapse. The genital tract should be inspected carefully for lacerations. Perineal lacerations are obvious but they are usually associated with vaginal lacerations. A careful opening of the vulva will bring these into view. Some advocate regular inspection of the cervix. This will involve introduction of a speculum. How far this is advisable as a routine procedure is debatable, for we must realise that the woman is already tired and would like to be left in peace, and moreover, cervical lacerations cannot be too frequent, particularly after normal labour. A regular follow-up during the post-natal period will confirm this.

During the early days of the lying-in period, freedom of movement is

allowed to the woman. Of late it has been advocated that even women with perineal sutures may be allowed out of bed within 2-3 days. This freedom of movement has gone a long way towards minimising the tendency to pulmonary embolism. Moreover, it helps with regular evacuation of the bladder and the rectum, improves circulation and thus ensures better involution of all the tissues concerned. Within a week of confinement, regular abdominal and perineal exercises are advocated. I have in addition advised knee-chest exercises from the second week on, with a view to prevent retroversion. Women are keen on regaining their former non-pregnant figures. They are most concerned about a saggy abdomen and think a binder, kept on for a few weeks, will ensure flattening of the abdominal walls. They need to be impressed with the fact that exercises of the abdominal muscles will be more helpful than mere support of the same. At the same time the ordinary working woman, at least, needs to be warned against overexertion and strain, for these would tend to slacken the attachments and thus predispose to prolapse. The aim of post-natal care is to ensure proper involution and normal position of the uterus and adnexa. Retroversion is usually the result of sub-involution. The heavy uterus, left as a result of sub-involution and the persistent sub-involution of the attachments, tend to bring about pathological retroversion, as distinct from physiological retroversion, for it must be remembered that 25% of women have retroversion as a normal position, and, with involution, the uterus will return to this position; but in cases of pathological retroversion it is an acquired condition, the result of sub-involution, and the consequent symptoms are due mostly to the sub-involuted state. It turns into a vicious cycle. The sub-involution brings about the retroversion, which in its turn keeps up the sub-involution. It is, therefore, important to prevent retroversion, if proper involution is to be ensured. The symptoms most commonly associated with sub-involution, with or without retroversion, are chronic backache, prolonged and frequent bleeding and chronic leucorrhoea. Backache and leucorrhoea are also associated with chronic cervicitis, a common result of parturition. This is often noticed in cases where the membranes have ruptured prematurely and the woman makes ineffective attempts at straining. There follow lateral tears of the cervix and later eversion of the lips. It is best to see the woman about the fourth week of the puerperium, when the local parts are examined carefully; the state of the perineum and the vaginal walls noted, which are perhaps still rather lax, as there are at least two more weeks for full involution. The cervix should be not only digitally palpated but also inspected. The condition and position of the uterus and adnexa are noted. It is imperative to do this post-natal examination in every parturient woman, as this gives a good opportunity for early treatment so as to prevent future obstetric and gynaecological complications. Chro-

nic cervicitis and sub-involution, with perhaps a retroversion, are the legacies to gynaecology, apart from unrepaired or ununited tears and genital fistulae. These latter are definitely preventable by proper intra-natal management, but sub-involution and chronic cervicitis are to be detected early in the puerperium and treated, so as to avoid chronic invalidism. It has been noticed that post-natal clinics are attended by a very small number of women. I have known even educated women failing to return for a proper post-natal check-up. They are content that all has gone well with the delivery and early puerperium, and see no need to go again to the doctor. It is our duty to impress this need on each patient. In large institutions it will devolve on the health visitor to contact the lying-in women in the wards and follow them up to their homes by weekly visits, to guide them in their own care and that of the infant, and see that the women come up to the doctor for a full post-natal examination about the fourth week. I do feel that this aspect of our obstetric work will go a long way towards preventing chronic invalidism and future gynaecological ailments. Moreover, it is at this stage one gets the opportunity of advice on *family-planning*, a very important feature of preventive work. The subject has almost been wrested out of our hands by lay social workers who seem to tackle it from every angle, but we must take a well-balanced view of the problem. There are various factors to be considered. How many years' interval should one advise between children? A single child in a family is usually a problem child. The usual experience is that a few children, of ages not too disparate, will make for better family life. The children grow up together and help each other in a way perhaps even elders cannot, and develop a companionship as they grow older. The question of *sterilisation* is often raised in the early days of the puerperium. Here again I feel one must consider the case from every angle. I have seen cases turning mental after this operation. It requires much ingenuity to convince a couple that this operation does not unsex the woman. Nor do I feel it right to sterilise a woman under 30. For, if by chance an epidemic breaks out and the woman loses most of her children she should have the possibility of having others and not be doomed to a forlorn life. Methods of temporary sterilisation which can be easily undone at a subsequent operation (not get undone automatically) need to be evolved.

One of the important features of the puerperium is *lactation*. This may not be much of a problem for the ordinary hospital class of woman, but in the higher classes it is noticed that not many women are able to carry on lactation for long. This is a problem which needs investigation. Then there is the possibility of infection of the mammary glands, a purely preventable condition. It the infection spreads on to abscess formation, it undermines the woman's health and at the same time deprives the infant of its legitimate feeds. Adequate preparation of the nipples and their

care during lactation should go a long way towards preventing this complication.

A parturient woman needs careful feeding—not overfeeding with rich fatty food which only tends to make her pasty and flabby—but feeding on properly balanced diet. Parturient women are often not allowed to take green vegetables, fresh fruit, curds and butter-milk. This is a fallacious idea which should be explained away. Apart from proper feeding, many a woman needs supplementing with extra calcium (if she is not able to take enough milk), iron and vitamins. Such a regime will help towards better involution of the pelvic tissues and moreover, assist in resisting infections of the various organs and of the mammary glands. A well-nourished woman will secrete a good quality of milk which will be of immense help to the growing infant. Thus a careful follow-up of the woman through her puerperal weeks will ensure a healthy and happy mother and a contented infant.

It will be noticed that much of this is routine work, but never-the-less, it is the real basis of preventive work and no one taking up obstetrics can shirk this great responsibility of planning out and working through this programme of preventive obstetrics.

References

1. Browne, F. J.: Antenatal & Postnatal Care.
2. Jhirad, J.: Ind. J. Surg. Vol 1.2, p. 12, 1939.
3. Kerr, M. & Moir, C.: Operative Obstetrics, 1949.
4. Read, Grantley.
5. Weiner A. E., Reid D. E. & Roby C. C.: Amer. J. Obst. Gyn. Vol. LXVI, p. 475, 1953.