THE NOVA SCOTIA MEDICAL BULLETIN

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Worthy of his Hire?[1]

The physician should always remember that whatever status, financial and otherwise, he has is accorded him by the general public. The same is true of the lawyer, the teacher and the movie star. We can only be what others allow us to be. This basic fact of life is often lost sight of when physicians speak on public issues, particularly on the issue of socialized medicine.

Much of the talk about socialized medicine centers on the mechanics of payment for medical services. Nowhere in a surgical textbook does it say that the success of relieving intestinal obstruction is dependent on how the operation will be paid for. A cold will last two weeks no matter how fiscally sound or unsound its financing. It is conceivable that good medicine can be practiced under many economic systems.

While we doctors are entitled to express our political and economic philosophy, it would be better if we did not give the impression that somehow quality medicine and traditional methods of payment for medical care are joined together in a holy alliance. This does more than anything else to foster an already too prevalent concept of the physician as self-interested and greedy.

There are many good reasons other than economic for the public to be cautious in changing the present organization of medical care too radically. Let us concentrate on showing how the essentials of good medical care might be compromised. Let us not aggravate the people further with talk of money. It is unbecoming: it makes our friends cringe; it gives comfort to our critics; and it treads on the prerogatives of those we serve. It is all the people who will ultimately decide about such things, not the medical profession. We should not make it so hard for them to see our point of view. □

[1]From the Westchester Medical Bulletin, published by the Westchester County, N. Y., Medical Society and the Westchester Academy of Medicine.

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Summer Meeting, Digby Pines
July 4th, 5th, & 6th, 1966

Arrangements are being made for the Summer Meeting of the Medical Society to be held at the Digby Pines Motor Hotel on July 4th, 5th, and 6th.

Preliminary plans call for registration in the afternoon of Sunday July 3rd, with panel discussions in the mornings of Monday July 4th and Tuesday July 5th providing the clinical programme. (It is hoped that members of the Medical-Legal Society of Nova Scotia will provide the first panel on July 4th, and representatives of the Sections of the Society the subsequent panels).

The afternoons are to be devoted to golf, sailing, tennis or other activities. A cocktail party and an informal supper will precede entertainment for our families and meetings for some of our members in the evenings. The Executive Committee is expected to meet in the mornings of July 5th and 6th. It is proposed to have the Presidents and Secretaries of Branch Societies get together after supper on the 5th. The evening of July 4th will be available for meetings of Sections if they so wish.

We hope to have guest speakers at some of the lunches or suppers, but the primary aim is to have a happy blend of informality, entertainment, a modicum of useful clinical instruction and an account of the highlights of the June C.M.A. meeting. A more exact programme will be published soon together with reservation forms for accommodation.

School will be out and wives and children will be welcome. Put a ring round the dates July 4th, 5th, 6th and help make our first Summer Meeting a resounding success! □

A.J.M.G.

Vitamins in Foods

There is still some confusion about Vitamin D. especially as it relates to infant feeding. According to the Food and Drug Directorate, Ottawa, Vitamin D may be added to 1. canned milks, 2. milk powder and skim milk powder, 3. margarine, 4. prepared infant formulas. Vitamin D has already been added to the canned milks in our stores.

At the annual meeting of the Canadian Council on Nutrition in Ottawa in June, the possibility of an overdosage of Vitamin D was discussed. The Council decided that when an infant is receiving canned milk in its formula or receiving prepared infant formula, it is not now required for the infant to receive a Vitamin D supplement as well. On the other hand, when the infant is being breast fed or being fed whole milk, the Vitamin D supplement will be necessary.

According to the Food and Drug Directorate, Ottawa, Vitamin C may be added to canned evaporated milk.

Recommendation - That physicians enquire into the vitamin intake of infant patients. When infants are receiving canned milk or prepared infant formula, it is not required for the infant to receive a Vitamin D supplement as well. □

W. I. Bent, M.D.
Chairman
Committee on Public Health

Ovulen 1 mg.*

Each tablet contains: Ethynodiol Diacetate 1.0 mg., Mestranol 0.1 mg.

100 percent effective conception control reported ...[1]

Tyler, E. T. "The use of Ovulen as a contraceptive agent." A Paper given at Guadalapin, Mexico, Monteray (November 3rd, 1964). ". . !The tolerance to Ovulen in the combined series of studies is statistically very good, and in a dose of 1 mg. of the progestin the effectiveness is excellent. No pregnancies were reported in a total of almost 44,000 cycles."

unparalleled experience ...

1. Searle introduced the first oral contraceptive 12 years ago. Today over 3,000,000 women use Searle oral contraceptives daily.
2. Years of research have given Searle unequalled experience in this field.
3. A logical outcome of this leadership in research was Ovulen 1 mg., the low dosage oral contraceptive.

fewer side effects ...

Physicians throughout the world have confirmed that Ovulen 1 mg. produces fewer side effects.

"It is believed that Ovulen is the most satisfactory oral contraceptive that has been produced."—Flowers, C. E. (1964) North Carolina Medical Journal 25,139.

maximum patient acceptance ...

"The reduced dosage made possible by the increased potency of the ethynodiol diacetate has been accompanied by reduced incidence of side effects and has thus enhanced the acceptability of progestin therapy."

Andrews, W.C., and Andrews, M.C.: Reduction of Side Effects from Ovulation Suppression by the Use of Newer Progestin Combinations, Fertil. Steril. 15:75-83 (Jan.-Feb.) 1964.

Contraceptives Today

S. C. Robinson, M.D.

Halifax, N. S.

With bewildering speed, contraceptive techniques have developed and been adopted by the public so eagerly that a sharp drop in birth rate is apparent. As with all new developments, the indications, advantages and disadvantages of the various techniques are sometimes not clear. Moreover experience has brought to light factors which influence the choice of method applicable to the particular family.

In choosing a method for birth control, one needs to consider first the general features and second the particular qualities required by the individual couple.

General Features:

Essential:	Effective;
	Safe;
	Reversible;
Desirable:	Esthetic;
	Convenient to use;
	Economic;
	Easily obtainable.
Undesirable:	Adverse side-effects.

Special Features:

Patient's age, parity, moral scruples;
" understanding;
" dependability;
" dexterity.

On the basis of these criteria, we may consider the methods available today:

1. Natural Methods

The Rhythm method depends on foregoing coitus during the likely fertile days of each cycle. This involves abstinence for a week of each month, including three days before and after ovulation. When is ovulation? The Farris formula: Average length of last 3 cycles divided by two, minus two (e.g. 28/2 = 14, −2 = 12th day) is fairly reliable and at least as accurate as the various tests (temperature, cervical mucus, vaginal carbohydrate, etc.) which only indicate that ovulation **has already occurred.** The problem here is of course the individual who has irregular cycles, or postpartem before cycles are re-established. One may attempt to regulate the cycles by D & C or hormone therapy but the latter is contraceptive in itself. Not all couples will be able to exercise the discipline necessary to achieve success with rhythm and many will resort to mutual masturbation or coitus interruptus on these occasions - techniques which may, through prejudice, produce real tensions.

Prolonged lactation is said to serve as a contraceptive method in the Eskimo, but appears to be less successful in more temperate areas.

2. Mechanical Barrier and/or Spermaticides

(a) Condom - This is the only reliable method available to the male. It is quite reliable and satisfactory for occasional use but is unpopular in the marital setting for reasons esthetic and economic.

(b) Vaginal Foam - This is simple, convenient and fairly reliable but not sufficiently esthetic for prolonged general use.

(c) Jellies, creams, suppositories. These are not very reliable for the parous female but are convenient and simple especially for the newlywed until other methods can be comfortably applied.

(d) Vaginal Diaphragm - This method is tried and true, the modern diaphragm having been in use for over 40 years. It is highly effective if a suitable diaphragm is selected and the patient is carefully instructed in its use **and demonstrates her competence.** The diaphragm should be inserted manually, without the applicator, so no injury can occur. An arcing spring diaphragm is excellent for some cases with uterine retroversion, but generally a flat spring diaphragm is satisfactory. A reliable jelly must be used.

This method demands some dexterity and intelligence on the part of a woman and also sufficient motivation to ensure that the diaphragm will invariably be used. As preparations can be made up to an hour or two in advance, and the diaphragm must not be removed before 6 hours after coitus, the esthetic aspect of the method is satisfactory. Most importantly, this method does not interfere with or affect in any way the function of the reproductive apparatus - menstruation and ovulation remain unaltered and sterile surfaces such as the endometrium are not touched. The vagina and vaginal surface of the cervix show no ill effects provided the diaphragm is properly used

and removed. Occasionally an individual will show a sensitivity to a jelly or cream and an alternative will be necessary.

(e) Sponges, Caps, etc. - These devices are less satisfactory than the diaphragm and are rarely used in this country.

3. Oral Contraceptives

"The Pill" has undoubtedly revolutionized the practice of contraception. All these tablets are combinations or sequences of estrogens and progestins. They usually inhibit ovulation and always alter the endometrium. Ovarian activity is held in abeyance probably through pituitary or hypothalamic inhibition but perhaps also through a direct effect. The cervical mucus will generally be less permeable to sperm penetration.

Ten years of experience since Pincus introduced these preparations and Rocke & Satterthwaite conducted the Porto Rican trials has indicated virtual 100% effectiveness, complete reversibility and probably complete safety. One can only say probably because it appears that some clotting factors are increased although there is no proof of increased thrombosis or embolism of major degree. Possibly minor changes in retinal vessels soon to be reported in several studies may suggest a more cautious selection of patients Despite these uncertainties, the fact remains that hundreds of millions of woman-years of use has resulted in no proven serious complication. Upon cessation of medication, ovulation occurs as before, pregnancies happen with the usual frequency and there is no evidence that ova are affected. The incidence of malignancy in breast and uterus is not increased in pill users and is indeed less in some studies - probably because of more careful screening.

Obviously, the general features - esthetic, convenient, available, are all satisfactory for most people in this country. The cost of $2.00 to $2.40 per month is considerably less than cigarette smoking and dosage schedules are simple enough for all but the most stupid. There are some unpleasant side effects. The initial side effects of nausea, vomiting, breast fullness and soreness, bloating, spotting or metrorrhagia, and weight gain are often absent, and when present usually pass off in a few weeks. The menses are usually decreased after several cycles and may even disappear. Dysmenorrhoea generally improves. A major group of problems are psychic. Anxiety, tension, agitation and depression are subjective phenomena difficult to evaluate and may arise for reasons quite unrelated to any direct pharmacological effect. Nevertheless discontinuing "the pill" or using a reduced dose or a sequential type may sometimes be followed by relief of symptoms. The reported studies of these features are not well controlled and conclusions are difficult to draw.

An effect on migraine and epilepsy has been suggested in rare instances and physicians should be on the look out for such an association. Effects on the libido - both increase and reduction, have been noted, but usually are transitory and more profound psycho-social influences determine this attribute.

Obviously the smallest dose consistent with reliable results is desirable. Two basic groups of oral tablets are available. These are:

1. the estrogen - progestin combinations;
2. the estrogen - progestin sequentials.

In the combination tablet, estrogen and progestin are administered together for 20 days commencing on day 5 of the cycle. The endometrium will develop proliferative and secretory changes simultaneously leading to a bizarre appearance. With continued use the endometrium may become hypoplastic and the shedding and blood loss may be greatly reduced. For this reason, some physicians will withhold medication for several months every two years to allow regeneration of the endometrium to occur during several spontaneous cycles. There is no proof that this is a necessary practice.

At present a low dose estrogen-progestin tablet (e.g. Norethindrone 2.0 mg. with ethinyl estradiol 0.10 mg.) is most widely used but 1 mg. preparations are being introduced. These should decrease side-effects and cost.

Irregularities of dosage will reduce effectiveness and may also lead to very disturbing bleeding disorders.

In general, spotting should be ignored and the dose pattern maintained until the end of a cycle. Even then one should be reluctant to increase dosage unless there is considerable bleeding difficulty. Oligomenorrhoea is customary and reassurance can be given. In cases of Amenorrhoea, one may change to a sequential dosage. These tablets contain estrogen alone for 15 or 16 days and estrogen plus progestin for 5 or 6 days. Consequently the effect on the endometrium is more physiologic, and more abundant menstruation usually occurs. Nevertheless spotting, breakthrough bleeding and the other annoying side-effects can and do occur with the sequential tablet. In rare instances pregnancies have occurred with some sequential preparations, so they may not be as effective as the combination perparations.

To simplify administration, one manufacturer is adding a distinctively colored placebo packaged in the proper sequence so that the patient need not even count days, - she simply takes a tablet a day, the color sequence indicating estrogen, estrogen plus progestin, placebo.

With all these potent drugs, one must observe closely for long-term effects. Many observations will be necessary before a final assessment can be made. It is, however, fair to say that rarely has there been such careful pharmacologic and clinical testing over such a long time.

It is sound practice to prescribe only for a year, and to insist on a satisfactory pelvic examination and Papanicolaou smear before an additional year's supply is prescribed. This should be the pattern on a year to year basis.

What happens at the menopause? The only way one can be sure the menopause has occurred is to discontinue the tablets for a time and observe the patient.

There is no evidence that the menopause is delayed.

4. Semi-Permanent Devices

For centuries she-camels have been prevented from conceiving by the insertion of an almond stone in the uterus. In the human, coils, buttons, winged devices, springs, etc. in silver, gold, platinum or glass have all been used. These were not totally reliable, were easily lost, caused tissue damage and were pretty well given up. The search continued for a suitable device of the type. Recently several intrauterine Contraceptive Devices (I.U.C.D.'s) have been tried on vast population groups particularly in Asia. There has been good success with many of these. Obviously the advantages are permanence, low long-term cost, simplicity and applicability to even the most illiterate or stupid person. To date, most devices have been inserted by specialists in gynecology, but other physicians are being trained. The devices can be removed easily and subsequent pregnancy rates are probably normal. The devices are inserted easily, with minimal pain, as an office or clinic procedure. They also are as easily removed. Unfortunately, the devices developed to date (coils, loops, bows etc.) are not problem-free. Pregnancies have occurred and a baby developed right alongside the I.U.D. Fortunately, the babies have been normal. The incidence of pregnancy may be 1-3 per 100 patients. Uterine perforation, pelvic inflammation, prolonged and heavy menstruation are serious enough, if uncommon complications. Some increase or prolongation of menses, intermenstrual spotting, pelvic cramping are common and annoying side-effects. Generally these subside after a few weeks but the I.U.D. must sometimes be removed to obtain relief.

Many hundreds of thousands of these devices have been inserted but detailed long-term follow-up studies are lacking. Hopefully, the plastic material is inert. Successive cytologic testing over long periods will be necessary before absolute safety in regard to carcinogenicity can be established.

To keep the matter in perspective it should be noted that various plastic materials are being included in heart valves, pace-makers, vessel grafts and other prostheses with remarkable safety. Nevertheless the usual precautions concerning periodic pelvic examination and Papanicolaou smear testing are imperative.

Because these devices are still relatively new, it seems reasonable to restrict their use to those who have had several children. They are suitable for people who have difficulty with other methods due to side-effects or technical difficulties or those of low intelligence or poor reliability. Their chief virtue is that the woman need have nothing to do for or with the device. The applicability for population control in many areas of the world is obvious.

Undoubtedly we will see many changes and improvements in the future. Unusual occurrences should be carefully documented and reported.

SUMMARY:

The present status of contraception has been reviewed. The general and particular attributes of conception control have been outlined and the currently available methods described and evaluated against these criteria. A plea is made for documentation and reporting of observations relative to these techniques. □

FORTY YEARS AGO
From the Nova Scotia Medical *Bulletin*
April 1926

The Written Examination

It is an extraordinary paradox that we, who belong to a profession where *practice* bulks so large, are for the most part adjudicated as to our fitness to enter it by a method which deals almost entirely with *theory*. Is there any other profession in the world that demands such a training of the senses and such finished practical workmanship? Is there any calling known to man where a knowledge of why and what to do must be so closely wedded with a knowledge of how to do? Does it matter greatly if the young minister stammer over his sermon and trip over his prayers? Does it matter greatly if the young lawyer fail to discover the exact case in Blackstone, or apply the right case in a clumsy fashion? It does matter if the young doctor cannot handle the persistent occipitoposterior or diagnose the ruptured gastric ulcer. It does matter if his knowledge has been gained rather in the lecture room and the text book than in the clinic and at the bedside.

Chemoprophylaxis in Chronic Pulmonary Emphysema[1]

Daily chloramphenicol reduced significantly the incidence of H. influenzae in sputum of patients with chronic bronchitis and emphysema, but only slightly reduced the number of acute clinical exacerbations in a group of patients with chronic obstructive pulmonary disease.

A study was undertaken to extend earlier observations on the bacterial flora of the sputum of patients with chronic bronchitis and emphysema, and to assess the role of *Hemophilus influenzae* in acute episodes occurring in these conditions.

Selected for the study were 40 patients from the Emphysema Section of the Bellevue Hospital Chest Clinic. All had clinical and physiologic evidence of chronic bronchial obstruction and emphysema. All but three of the patients were men and the majority were too incapacitated by breathlessness or cough to maintain a job. The three women were able to do housework only.

On the basis of sputum examinations over a period of weeks, patients were grouped according to the presence or absence of *H. influenzae* in the sputum and according to whether they had had previous prophylactic therapy.

The patients were randomly divided into two groups, 21 being placed on chloramphenicol and 19 being given a placebo. During the treatment period, from four to 14 months, all patients submitted weekly sputum specimens, were interviewed briefly, and received their weekly supply of medicine.

While being treated, the 19 patients on placebo had 41 infections and the 21 on chloramphenicol had 31.

During treatment, an immediate and persistent change in flora occurred in five patients. *H. influenzae* disappeared from the sputum of three patients in whom it had been observed intermittently before therapy, and in two patients in whom it had been present consistently before treatment. In one of these, pneumococci, which had been present sporadically the previous year, were subsequently isolated from almost every specimen during treatment with chloramphenicol, yet remained susceptible to the drug.

H. influenzae occurred significantly less frequently in the sputum of the chloramphenicol-treated patients than in the sputum of the placebo patients. The frequency of isolation of this microorganism did not follow any seasonal pattern, but it was found more often in purulent than in nonpurulent sputum.

The incidence of pneumococci in the sputum increased in both the patients taking the placebo, and in those treated with chloramphenicol. This microorganism was present throughout the year regardless of treatment and was found more frequently in purulent than in nonpurulent sputum.

Staphylococcus aureus was isolated slightly more frequently during the treatment period than in the pretreatment period. The incidence of this microorganism was higher in patients who were hospitalized at some time during the study than in those who were not hospitalized.

Gram-negative enteric rods appeared with about equal frequency in the sputum of both groups of patients during the treatment period. Beta hemolytic streptococci were isolated from about 5 per cent of the cultures from the placebo patients and from those of the chloramphenicol patients.

As for pulmonary function, although the patients receiving chloramphenicol showed slight worsening during therapy, the differences in lung volumes, maximal breathing capacity measurements, and arterial blood gases before and during treatment were not considered significant.

Studies Compared

The results of the daily, long-term prophylactic regimen with chloramphenicol confirm, in general, the findings of a previous trial with long-term, intermittent tetracycline therapy.

While daily administration of chloramphenicol appeared to reduce the number of infections, subjective improvement was not striking and was less frequent than in the tetracycline study.

The reduction in the incidence of *H. influenzae* in the sputum of the patients receiving chloramphenicol was slightly more striking than that obtained with the intermittent tetracycline regimen. However, with tetracycline the incidence of pneu-

continued on page 115

Anne L. Davis, M.D.; Evelyn J. Grobow, M.D.; Theresa Kaminski, B.A.; Ralph Tomsett, M.D., and John H. McClement, M.D. *The American Review of Respiratory Diseases*, December, 1965.

[1]Reprinted from the Abstracts of the National Tuberculosis Association, March 1966.
Printed through cooperation Nova Scotia Tuberculosis Association.

A Priest Looks at 'the Pill'

Rev. Eric L. Theriault
Dartmouth, N. S.

Introduction

Hardly a day goes by that there is not some article in the press concerning "the Pill" or subjects related to it and to the position of the Church with regard to the whole problem.

These different articles, reflecting many different opinions, have caused some confusion in the minds of many doctors as to the present teaching of the Church and their own responsibility as professional men and women.

This paper was requested, therefore, to shed some light on a situation which has become somewhat obscured and to give some general principles with which to deal with the problem. It is divided into three parts: First, an explanation of how this confusion has arisen; secondly, to give some general principles concerning the use or prescription of the "Pill;" and thirdly, to discuss some of the psychological implications of its use.

To place the problem within its proper perspective, it might help to explain how it arose. Over the centuries, theological thought and the application of moral principles to concrete situations have developed as new knowledge became available and new situations arose. Although the Church claims to be infallible in matters pertaining to faith and morals, she neither speaks, nor pretends to speak infallibly on every subject pertaining to these areas. Though constant therefore in her general principles which she believes reflects the will of God for His people, her direction in the application of these principles is influenced by the knowledge of the pertinent problem. We have seen, for example, over the past centuries, a gradual change in her attitude toward usury, the charging of interest for money loaned, as cultures and structures of society changed. In the past century, her understanding of the thesis "Outside the Church there is no Salvation" has undergone a complete metamorphosis. An example more germaine to our discussion, her attitude toward the use of the rhythm method in the spacing of children, has broadened and become more comprehensive.

The principal reason for this development of doctrine is the enlightened knowledge that the various sciences have contributed to the understanding of the different problems confronting the Church and the emergence of new problems non-existent when the general principles were formulated. One should note, however, that in the past, development has been a slow, gradual process. But then the acquisition of new knowledge has been slow and its dissemination even slower because society was not a communicative one.

Today we find ourselves in a completely different situation. The sciences of psychiatry, psychology, physiology, indeed all the various branches of Medicine, along with sociology, anthropology and the rest, have made enormous drastic contributions, giving new perspectives and deeper understanding of such things as the human body, the human mind, the emotions, love, marriage, education. Not only has this store of knowledge been so quickly increased, but in our era of instant communication, every discipline has had immediate knowledge of the advance of the others, so that today's gain becomes the stepping stone to further gains tomorrow. As wonderful as this is, it has greatly reduced the time formerly provided for prudent reflection before theory becomes accepted as fact.

Consequently today, faced with this amount of new scientific knowledge, with its equally large amount of corollary theories, the Church is being asked to assimilate its bulk and give immediate answer in a change of theological thought to moral questions which these new theories contend necessary; and the Church at present is giving serious study to the whole problem. She is not moving as quickly as some would like; she is moving much too quickly in the opinion of others. However, she is moving in a prudent, reflective, yet cautious manner, as quickly as prudence decrees. Herein lies the problem.

Pope Paul has convened a large committee comprised of theologians, psychiatrists, psychologists, gynecologists, sociologists, demographers, etc. to make a comprehensive study of the whole problem. Their conclusions will be studied and he will make a doctrinal statement. In the mean-

A paper given to the professional staff of The Nova Scotia Hospital.

time, he has asked that clergy and faithful refrain from making public statements and voicing personal opinions in a manner which will influence behavior before all the facts are known. However, this has not been done! Many premature and irresponsible statements have been made by some of the clergy and members of other disciplines. Newspapers and magazines have seized upon fragmentary statements, quoted them out of context and blown them out of proportion and made sweeping predictions of what we can expect from the Church in the future. I suggest, that the journalists have not always proved themselves accurate oracles of theological progress and I declare unequivocally that *Time* magazine is not now, nor is likely to become the official spokesman for the Church. However, much confusion has been caused in the minds of our people and also in the minds of those who have to deal with the problem.

I will confine my remarks generally to the use of the Pill. However, we must understand that this is only one facet of the study now in progress, a study which includes love and marriage, sexuality and marriage, sexuality and love, the whole concept of birth control and other related subjects. I can neither speculate nor predict what this study will produce, but two things are certain: First, new thought on these subjects is emerging. Even those of you who are not Roman Catholic may recognize the name Cardinal Ottaviani. He has been portrayed by the press as the arch leader of the so-called conservative group in the Church as demonstrated at the Vatical Council. He has declared that new medical discoveries "could lead to conclusions susceptible of being taken in close and respectful consideration by Church moralists for a re-thinking of the question." The second is that whatever statement the Church makes will have a far greater impact on a half a billion people than any other pronouncement in her history.

However, such a statement has not yet been made and consequently the general principles still apply and we must interpret present problems in the light of what she has already said on the subject. We are not permitted to anticipate her judgement and avail ourselves of decisions before they are made. Academic discussion is one thing; premature application is quite another. Doctors are bound in conscience and by law to avoid mercy killing. If you knew that the law was going to be changed at midnight today and yet caused someone's death at eleven, you would be breaking the law and would surely be prosecuted.

Probably the most frequently asked question of priests today is "Can I use the Pill?" Second, at least in my experience, only to the question asked by doctors "can I prescribe the Pill?" Before giving an answer to the question, remember what I have said of the traditional teaching of the Church, still binding in conscience on Roman Catholics. The Church holds that artificial birth control is illicit; anything done to deliberately prevent conception as its primary purpose is forbidden. The Church maintains that the use of the rhythm method is not an artificial prevention of conception and therefore is not morally wrong. Then along comes the Pill. Artificial certainly, but in the sense of the general principle there is some doubt; the issue is not that clear, if the only function of the Pill were to prevent conception, the answer would be evident at this time. However, the Pill is not simply a contraceptive in the usual sense of the word. It is also a medicinal tool used to cure a physical or physiological disorder. The cure of disease is a morally good thing and any means to do this is permitted, even if undesired effects follow from it, provided that there is direct correlation between the disease and the remedy used. Now there are medical reasons for using the Pill. To mention a few - functional uterine bleeding, dysmenorrhea, pre-menstrual tension, primary and secondary amenorrhea, idiopathic infertility, endometriosis, recurrent and threatened abortion, infertility due to inadequate luteal phase, adjustment of the menses, etc. At least, so the literature says.

If you as a doctor ask me "Can I use the Pill?" I can only say that if there is a medical reason for its prescription; if there is some physical or physiological malfunction that you are trying to rectify and you feel that the Pill will accomplish this, then you may use the Pill. If, however, you are prescribing the Pill strictly as a contraceptive measure, with no other reason for justifying its use, the answer must still be no.

I believe that any discipline that ventures outside its recognized sphere of knowledge and intrudes into another, not only runs the risk of doing damage to the other, but causes lack of respect for its own. It is the function of the Church to interpret God's will and moral law for His people. Consequently, the Church fulfills this role for Her members. While having a true respect for work and the role of medicine and the other disciplines, She maintains that the interpretation of the moral law lies outside their domain, even though these other disciplines provide needed assistance to Her as She strives to accomplish Her purpose. However, similarly it is not the role of the clergy to restrict the other disciplines in their research (when no moral issue is directly involved) or to make decisions which patently belong to another's domain.

I believe, therefore, that the interpretation of what constitutes a medical reason for the use of the Pill belongs to the doctor alone. I do not question him when he prescribes any other Pill or medication, because I have respect for his knowledge and his integrity as a professional man and I

interpret his action in view of his commitment to the healing of the sick. I take issue only when his actions clearly violate the moral principles held by the patient. My answer, therefore, when I am asked by an individual woman if she can use the Pill, is to consult her doctor. My answer to the doctor, when he asks whether he can morally prescribe it, is that if there is a medical reason for doing so (a medical reason understood in a correlative sense between illness and remedy), then the answer is yes.

If therefore, I know that the doctor involved knows what the moral principles of the patient are and has the intention of rendering aid to the person, while at the same time respecting his principles, I do not question his decision as to the use of the Pill. I may disagree on occasion with his interpretation of medical grounds, but I recognize his competence and his responsibility in this area. I believe that the physician has just as much responsibility in the realm of morality as does the clergyman; the principles apply equally to all. We do not ask that you are right in every case - none of us can ever claim that - but we ask that you try to be. When, therefore, the question at hand is whether or not a medical reason exists, it is your decision. When, however, a moral issue is involved, we claim the same respect.

I have told you what I do when these questions are asked of me. These answers I give when I know that the physician involved respects the principles of his patient, whether he agrees with them or not. When I do not know this, or more precisely when I suspect the contrary to be true, I advise the person to go to another doctor. When I have definite knowledge that a doctor prescribes the Pill indiscriminately refusing to acknowledge the moral connotation for his Roman Catholic patient, then I have to regard him as no help at all in the solution of a very complex problem and I have lost respect for him as a professional man. I consider him a poor doctor and a discredit to a reverend profession. Thank God this has not happened to me that often.

The other disciplines, besides the Church and the physician, have contributed much to our understanding of the whole problem and undoubtedly their findings will influence the thinking of both professions in its ultimate solution. However, the moral and the medical aspects in any given case lie outside their respective spheres and I believe that they step into another dimension when they suggest to an individual that they use the Pill. I think, when faced with the complexity of the problem, by responsible clergy and doctor, there is a natural tendency to want someone else to make the decision. We engage at times in a game of professional *"Buck Passing"*. These decisions are often quite involved and complicated and from a personal point of view, not easy to make and demand great responsibility for their utterance. Unless one is willing to assume the responsibility of another's actions, one should not advise as to what they should be.

In the mental hospital, it happens frequently that the patient is too upset or disturbed to make decisions which will influence her future. In many cases, the doctor will be called upon to give advice or even to make decisions for the patient. When moral principles are involved, the doctor is bound to make such decisions in the light of the patient's principles, not his own. Neither clergyman nor doctor is justified in influencing a patient to behavior which is against the patient's conscience. Psychiatrists, more so than anyone else, should be aware that a person's moral conscience is formed in childhood and reinforced with each successive year. People do not act against their conscience without some guilt accruing. However, many of the people that you deal with have great difficulty in handling this thing called guilt, whether it be real or neurotic. With such people, therefore, even greater care must be given to avoid any suggestion that will result in this burden of guilt being increased.

And do not be fooled by a person asking for the Pill and declaring that as far as they are concerned it is perfectly all right. For most Roman Catholics the Church's teaching concerning birth control is deeply imbedded in their conscience, is intimately connected with their concept of Christian marriage and their role as wife and mother, and even those who most loudly proclaim their disagreement with this teaching and their peace of conscience when they act contrary to it, seldom escape this burden of guilt. So we find it a not too uncommon thing that then a doctor prescribes the Pill because he feels that another child is undesirable, when its use cannot be justified on moral grounds, in the solution of one problem, he has unwittingly been the cause of others, even more severe.

This leads me to the third part of the paper: The doctor, whether he be general practitioner or psychiatrist, is supposed to treat the whole person, not just a diseased organ or a pathological condition. No doctor would ever prescribe a medication which would help the person in one way and yet do him damage in another. You would not prescribe shock treatment to remove depression if you suspected that this treatment might cause a heart attack. While it may be very true that pregnancy for a particular woman is undesirable at this time, one should never proceed to advise this without taking into consideration what effect such advice is going to have on the person. We cannot look upon the prescribing of the Pill as we would the prescribing of an aspirin. Emotionally, intellectually, morally, the Pill will have some impact upon the person.

Therefore, one must ask the further question, "even if there is no moral objection against its use, is it always wise to prescribe it?" Obviously, I am not qualified to speak about the medical effects of the Pill, but many doctors have done so and have suggested caution because the thalidomide tragedy is still very much in their memory. Personally, I think I would feel a little less anxious if I could see a child whose grandparents had used the Pill.

May I suggest a few reflections that should be made before the Pill is used. The decision not to have children is for Roman Catholics a soul-searching one, intimately connected with their marriage and their role. However, the decision to do this involves not one person, but two - husband and wife. However, for doctors, as for clergyman, advice is very often given only to one. I believe that serious thought must be given by both of us before we advise a person to have no more children or assist them in preventing them, as to the secondary effects that such a decision will have on *both* husband and wife. We can create an unbearable situation when we suggest to a woman that she use the rhythm method or the Pill and tell her honestly or hint that serious harm will be done to her health by another pregnancy, and then find out that the husband refuses to accept this.

There is another situation with which I am sure all of you are acquainted. We see sometimes a marriage which is pretty shaky because husband or wife, or both, are incapable of meeting their responsibilities or are inadequate in their relationship. Very often this shows up in the sexual sphere. The teaching of the Church on birth control has often been used by such people as a justification for getting out of normal relationships and yet you will hear such people maintain that this very teaching is at the core of all their marital difficulties. In such cases, when the Pill is prescribed, the mask has been taken away and they are faced with the cold fact that this was not the reason for their difficulties but rather their own inadequacy. It is not uncommon to see such marriages quickly disintegrate. One must be careful to prescribe medications to heal disease, and not to heal a broken marriage. Unfortunately no one has come up with a Pill that is capable of doing that, nor is it likely that they ever will.

We as clergymen cannot always give definitive answers to every moral problem any more than doctors can solve every medical dilemma. In these cases we must use what we believe to be the safest course of action. However, all of us in our work are helped (or hindered according to some) by a framework of laws, legal, moral and professional, within which we must dispense our aid. We are not permitted to ignore these laws every time they seem to impede an immediate solution. We do not make morality, any more than the doctor makes health. It is all too easy for both of us to become emotionally involved with the terrible problems that some of our people have to contend with, and yet we must not lose our perspective of the whole person, with an eternal as well as a temporal dimension.

I have tried to give some explanation of why we are in the state of confusion that now exists concerning this problem; to give at least some general principles by which to deal with the problem today; and finally, to discuss some of the psychological implications or possible secondary effects of the use of this Pill. I firmly believe that the final solution to the whole myriad faceted problem will only be achieved by close cooperation of many branches of knowledge, medicine, theology, sociology, psychology and all the others, and close study of and respect for the valid contributions of each. And finally, unless this mutual respect does exist, the one to suffer most from its lack will always be the person or the patient. □

A New Deal for the Aged and Disabled

FRED R. MACKINNON, R.S.W.*

Halifax, N. S.

It has been said that more social change has been effected in the last century than in the entire 2,000 years of the Christian era. There is much truth in this statement in respect to many aspects of public welfare in Nova Scotia.

We operated for approximately 200 years, from 1758 to 1958, with minor changes in the Elizabethan Poor Law that had been enacted in the Nova Scotia Statutes in the early colonial days. Problems affecting the needy and conditions of poverty presented many difficulties in Nova Scotia, perhaps more than elsewhere in Canada, but as these became more urgent they were dealt by establishing special categories of assistance by the provincial government.

Mothers' Allowances were enacted in 1930, and periodically up to 1961 additional categories of needy mothers were added to the original program. Old age pensions were first paid in 1933 and this program too, was improved and amended through the years. Pensions to the blind began in 1937 and allowances to the disabled in 1954. During the same period extensive changes were made in child welfare services and institutional care of children. While these improvements were being made in provincial programs and shared federal-provincial programs, the Poor Law and municipal relief payable, by the poor districts, under its provisions *were left without change* commensurate with what was happening in the new programs for meeting need. Worse still, there seemed to be little concern about the developments that were taking place in other parts of Canada.

The changes effected in 1958 were, in a sense, far reaching, inasmuch as they established at least two distinct policy directions. The first emphasis was to improve and extend municipal responsibility in the field of public assistance with federal-provincial sharing of assistance costs. This, of course, implied the corollary that insofar as it was possible to improve municipal assistance, provincial programs need not be extended. The second emphasis was towards upgrading and improving the old Poor Houses and County Homes with a view to having them become more modern Homes for Special Care with federal-provincial cost sharing.

*Deputy Minister of Welfare, Province of Nova Scotia.

The Old Municipal Homes in Nova Scotia

The assumption of responsibility for the mentally ill by the Hospital Insurance Commission, effective January 1st, 1966, has created a situation in which not all patients in Municipal Mental Hospitals will be accepted for treatment by the Commission. Then too, only a limited number of the Municipal Mental Hospitals caring for the mentally ill will be accepted by the Commission as recognized hospitals under the new program. This means that approximately 1000 patients in Municipal Mental Hospitals became the responsibility of the Department of Public Welfare as of January 1st, 1966. The immediate urgency of finding suitable institutional facilities and properly classifying these patients has underlined the necessity of a thorough analysis of our existing Municipal Home program.

Up to 1958 the mentally ill, the indigent, and the severely retarded were all housed together in one institution. Some of these "Mansions of Woe" as Joseph Howe[1] called them, were worse than others. The best of them at least made some pretence of segregation between the classes of patients for whom they were caring. The worst of them provided no segregation and all the patients were housed in one congregate institution, under conditions which were not too different from what the Webbs described in 19th century England.[2] The Social Assistance Act of 1958 made it possible to effect the first real improvements in this 200 year old system. The mentally ill and the severely retarded became the responsibility of the Department of Public Health and were placed in institutions inspected or regulated by that Department.

The Municipal Homes came under the supervision of the Department of Public Welfare. The new Social Assistance Act permitted sharing costs for patients in these homes. As a result, standards of care were greatly improved. Municipal Homes' personnel were assisted through training courses and a new order gradually replaced the old air of dreary hopelessness that prevailed in the institutions. The Department of Public Welfare did not

[1]Parody by Joseph Howe on the Workhouse.

[2]Sidney and Beatrice Webb - English Poor Law History - Parts I & II.

insist on a centralized or provincially controlled admissions procedure. This responsibility was left to the local municipality operating the home, with the proviso that patients would be admitted on the recommendation of the municipal home physician. We were fully aware that eventually this omission in the Regulations would have to be remedied if municipal homes were to achieve the standards we planned for them. We had reached the stage in 1965 where such a policy was being recommended to Government when the province decided to take responsibility for the mentally ill through the Hospital Insurance Commission.

Issues in Modernizing the Homes for the Aged

Although we have made very considerable progress in the past seven years our major concerns now are not greatly different from what they were in 1958. We are still puzzled about the future role of Municipal Homes in Nova Scotia. What kind of care will these provincially supervised municipal institutions be expected to give in the years ahead? How can we maintain and improve standards to such an extent that we will be proud of the care that these homes are providing to our older citizens? How can we develop a simple, but effective admissions policy to insure that patients admitted to Municipal Homes will be properly classified and capable of benefitting from the care the Muncipal Homes can provide?

A second consideration is the future of the community residence program under which patients are placed in foster homes. Can this program be extended? If so, where will personnel be secured? How will standards be maintained? The answers to these and other related questions have to be found.

A third area of concern is the severely retarded children. There are, at the moment, 125 such children in Municipal Hospitals. Very few, perhaps not even ten per cent of these children, may be committed as mental patients to the Hospitals operated by the Commission. Who will care for these children - Health or Welfare? Where will they be cared for? How will such a progrm be administered?

Finally, there are those severely handicapped adults who, because of retardation and mental disturbance, cannot be cared for in a conventional Municipal Home setting. They require a special segregated type of care. How will we care for these patients - will Health or Welfare be responsible for them?

The New Homes for the Aged

We are changing the term "Municipal Home" to "Home for the Aged." It is our considered view that these "Homes for the Aged" should care for two types of patients:

Personal care patients, and
Nursing home patients

Even this dual responsibility will impose heavy burdens on those institutions and of necessity, will require them to accept a wide and diversified range of patients. The maintenance of patients in these homes will be financed under the proposed Canada Assistance Act. Standards will continue to be improved. The Department of Public Health, through the Department of Public Welfare, will be responsible for the licensing and control of the Nursing Home section. We hope that the new name or designation "Home for the Aged" will remove the last vestige of the old poor law character of these homes. Viewed negatively, patients, who are severely retarded, or disturbed, or whose presence in the home might create conflict in relationships with older patients whose mental outlook is normal or near normal, will not be admitted to these homes.

We see the Community Residence program being enlarged and extended so that all patients who can use and profit from this type of care will have it available to them. This means small caseloads, continuous and careful supervision, and a greatly expanded responsibility as more patients are accepted for placement.

It would appear that of the 870 adult patients for whom we will become responsible under the new program, approximately 640 will be classified as suitable for placement in a home for the aged. This leaves 230 adult patients classified under the general heading of retarded. This group comprises:

1. Those persons who have been severely retarded from birth.

2. Those persons who have suffered from chronic mental illness for a long period of time, and whose behaviour and needs are similar to that of a congenitally retarded person referred to above.

All of these 230 patients will be cared for in specialized *Homes for the Disabled* to be designated as such by the Provincial Department of Public Welfare and with standards of care prescribed by the Department.

Proposals for Retarded Children

The plans for severely retarded children have been formulated for some time and have been awaiting that degree of priority necessary to have them implemented. We plan to have four cottage-type institutions, strategically located through the Province. We will provide for approximately forty retarded children in each of these cottage-type institutions, under the general direction of a nurse matron. Each of these institutions will be under the general oversight and direction of the Superintendent of the Nova Scotia Training School in Truro. This overall direction will insure a

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The Diagnosis & Treatment of Anemia

VINCENT ING, M.D.[1]

and

G. R. LANGLEY, M.D., F.R.C.P.(C)

Halifax, N. S.

Anemia is commonly defined as a reduction in the hemoglobin or hematocrit concentration in the peripheral blood below the normal range for the age and sex of the patient (Table 1).

TABLE 1. Normal Hemoglobin and Hematocrit Levels at Various Ages.

	Hemoglobin gms/100 ml	Hematocrit %
Adult Male	13.5 – 18	40 – 54
Adult Female	11.5 – 16	37 – 47
Children		
3 months	10 – 14	–
1 and 2 years	10 – 12.5	34 – 36
3 – 5 years	12.5 – 13	–
5 – 10 years	13 – 13.5	–

The major disadvantage of such a definition is that the hemoglobin concentration does not necessarily reflect the actual size of the total body red blood cell mass. For instance, immediately following a gastrointestinal hemorrhage the hemoglobin concentration in the peripheral blood may be normal, while the total red cell mass may be considerably reduced. Further in certain chronic diseases there may be a low hemoglobin but a normal red cell mass with this dissociation being due to an increased plasma volume. However, the simplicity of the techniques involved in the determination of the hemoglobin and the hematocrit accounts for their popularity. These determinations therefore continue to serve as very useful parameters, but occasionally they will have deficiencies.

Anemias have been classified according to red cell size and hemoglobin content. However, because of the expansion of knowledge in recent years, because the vast majority of anemias cannot be adequately evaluated without an accurate history and physical examination and because the blood smear is only one aspect of the laboratory approach to the diagnosis of anemia, this morphological approach is becoming more and more unsatisfactory. Dr. Duncan Graham[1], Emeritus Professor of Medicine at the University of Toronto, was one of the first who approached the patient through an understanding of the disturbed physiology which resulted in the anemia. This pathophysiological approach is simple, and allows the physician taking a history and performing a careful physical examination to make a correct diagnosis clinically, in the majority of cases. The physician is then in a position to ask the laboratory for confirmation of his diagnosis, selecting those laboratory procedures which will permit the most complete diagnosis on the basis of his clinical findings.

An important basic principle is that anemia results only when there is a disturbance either of red cell production, or destruction, or if blood loss occurs. Normal hemoglobin levels are present when there is a balance between red cell production and red cell destruction. If the bone marrow fails to produce sufficient red blood cells, or if there is increased destruction of red blood cells, not matched by compensatory increase in marrow production, anemia will result.

As a first step in the approach to a patient with an anemia it is therefore important to determine whether the anemia is due to increased marrow production, increased destruction of red blood cells or blood loss. To appreciate the clinical features of an anemia due to decreased marrow production it is necessary to know the requirements for normal production, (Table 2). Abnormalities in any of these factors or functions may result in an anemia due to decreased production of red blood cells.

Anemias Due to Decreased Production of Red Blood Cells

If a deficiency of iron, Vitamin B_{12}, or folic acid exists, or if there is decreased thyroid, adrenal or pituitary function, anemia will result. A variety of other alterations in the human organism will result in anemia. Particularly likely to cause an anemia are acute and chronic infections, liver and kidney disease of diverse types and malignancy. Thus the presence of disease elsewhere in the patient may be expected to alter bone marrow function and anemia may occur. Many drugs will affect bone marrow function by reducing the cellularity of the marrow or inhibiting the maturation

[1]From the Department of Medicine, Dalhousie University and the Victoria General Hospital, Halifax, N. S.

TABLE 2. Requirements for Normal Red Blood Cell Production.

1.	Essential "Building Blocks"	Iron, Vitamin B_{12}, Folic Acid, Pyridoxin, Vitamin C, Protein.
2.	Normal Endocrine Function	Thyroid, Adrenal, Pituitary, Testes.
3.	Normal Internal Environment	Absence of infection, normal kidney function, normal liver function, etc.
4.	Normal Marrow	

of erythocyte precursor cells. In addition the bone marrow may be infiltrated by tumor cells, granulomata or fibrous tissue, reducing cellularity or altering marrow function and leading to anemia.

In view of the variety of diseases which can decrease bone marrow production of red blood cells the simplest way to detect this type of anemia (anemia of decreased production) is by an adequate history and physical examination. Certainly the diagnosis of iron deficiency anemia will be most easily made by obtaining a history of blood loss. The clinical features of Vitamin B_{12} deficiency are classical and folic acid deficiency rarely occurs except in the presence of steatorrhea or pregnancy. The detection of anemia due to thyroid disease would not be possible by hematological investigations but is readily apparent by the correlation of history and physical examination. A complete functional inquiry directed toward symptoms and signs relating to disturbance in any organ function is important in determining the etiology of an anemia of this type.

The laboratory findings in an anemia due to decreased production have one thing in common, that is, that the reticulocyte count is low. Ordinarily in any anemia, if the bone marrow is functioning normally, there will be a reticulocytosis. If, in the presence of an anemia the reticulocyte count is low, we must conclude that the marrow is not responding to this anemia and therefore there is decreased red cell production. The morphological features of anemias due to decreased production vary depending on the specific pathological disturbance. For instance, iron deficiency is usually associated with a hypochromic microcytic anemia, Vitamin B_{12} and folic acid deficiency with a megaloblastic macrocytic anemia. The remainder of the anemias due to decreased production are usually normochromic anemias with the cell size varying from microcytic to macrocytic.

Anemias Due to Increased Red Cell Destruction (Hemolytic Anemias) and Chronic Blood Loss

The anemias of increased red cell destruction or chronic blood loss are readily separated by the clinical features. With blood loss there is a history of excess bleeding usually from the gastrointestinal tract or genito-urinary system and in the former the stool will be positive for occult blood at the time of bleeding. Supporting laboratory evidence for chronic blood loss can be obtained from finding hypochromic red cells on the peripheral blood smear, a low serum iron associated with a raised iron binding capacity. The bone marrow aspirate will show an absence of stainable iron.

Anemias due to increased destruction (hemolytic anemias) are recognized by the triad of pallor, jaundice and splenomegaly, and the underlying process causing the hemolysis may be obvious from the clinical features. For instance a history of drug ingestion, cold induced hemolysis, or a family history of a similar anemia will suggest a diagnosis which can then be confirmed by laboratory studies. Laboratory confirmation that the anemia is hemolytic in type is obtained by studying two aspects of the hemolytic process. 1. Evidence of increased red cell destruction (increased indirect serum bilirubin, hemoglobinemia, hemoglobinuria, increased urine urobilinogen, spherocytosis),
2. evidence that the marrow is responding to the increased destruction, that is, that there is increased red blood cell production (reticylocytosis, erythroid hyperplasia of bone marrow). Of these laboratory features reticulocytosis (usually ranging from 5 to 20%) is almost invariably present when the anemia is primarily hemolytic. If acute blood loss can be excluded, reticulocytosis will indicate that hemolysis is present. Once the anemia is recognized as being hemolytic the etiological diagnosis is determined on the basis of the family history, clinical features and laboratory findings.

Anemia therefore is not a diagnosis but a feature symptomatic of a variety of diseases. The treatment of most anemias is that of the underlying disease. The remainder of this paper will discuss three specific deficiency anemias and the anemia of pregnancy.

IRON DEFICIENCY ANEMIA

A recent article in The Nova Scotia Medical *Bulletin* reviewed the current status of iron in clinical medicine[2] and only a few pertinent points will be mentioned here.

The normal adult has about 1 gram of iron in bone marrow and liver as storage deposits. In a time of need this will be utilized. It follows that a *sine qua non* of iron deficiency is an absence of iron stores (hemosiderin) in the bone marrow. Following depletion of marrow stores the serum iron falls and the iron binding capacity of plasma increases. A low serum iron may be seen in association with a variety of disturbances (infection, malignancy) but here the iron binding capacity will also be low, thus differing from the changes seen in iron deficiency. Following exhaustion of

iron stores and fall in serum iron, anemia develops, initially the red cells are small (microcytic) but of normal hemoglobin content (normochromic); later, hypochromic red cells appear.

Because less than 1 mg of iron is lost per day, the body iron stores are sufficient to last 3–5 years if no further iron is ingested. For this reason dietary lack of iron causing iron deficiency anemia in adults is almost unknown in this country. In adults iron deficiency anemia means blood loss and the primary aim of treatment is the recognition of the site of bleeding. At birth however iron stores are very low, being between 34–50 mg. The blood volume at birth is approximately 300 ml but by the time a child weighs 60 lb. the blood volume has increased to about 2,000 c.c. This period of rapid growth requires 800 mg. of iron virtually all of which comes from the diet. Thus in children dietary iron deficiency may often result in anemia, whereas in adults dietary deficiency is an exceedingly rare cause.

Vitamin B_{12} and Folic Acid Deficiency Anemias

Vitamin B_{12} deficiency has three major clinical characteristics, anemia, neurological disturbance and atrophic glossitis. By far the most frequent cause of Vitamin B_{12} deficiency is pernicious anemia: less commonly Vitamin B_{12} deficiency occurs in malabsorption syndromes. Pernicious anemia is uncommon under age 40 and is extremely rare under age 30. The anemia is insidious in onset and neurological disturbance may precede the onset of the anemia. Diminished vibration sense in the lower extremities is an early neurological finding. Adult pernicious anemia is always associated with achlorhydria and the presence of free hydrochloric acid in gastric juice excludes the diagnosis. The defect in pernicious anemia is failure to absorb Vitamin B_{12} because of the absence of gastric intrinsic factor. Even though the Vitamin is provided parenterally the gastric defect persists and the diagnosis can be verified at any time by an oral dose of radioactive Vitamin B_{12} with and without orally administered gastric intrinsic factor (Schilling test). The blood smear, red cell morphological changes and bone marrow in Vitamin B_{12} deficiency are identical to those of folic acid deficiency both showing a macrocytic anemia with hypersegmented neutrophils and a megaloblastic bone marrow so that the distinction is made by the clinical features and confirmed by other laboratory tests. Folic acid deficiency is seen with malabsorption syndromes such as coeliac disease, adult idiopathic steatorrhea or pregnancy. Because of the similarity of the hematological findings in Vitamin B_{12} and folic acid deficiency, the laboratory differentiation requires other studies. For instance the demonstration of achlorhydria, an abnormal Schilling test corrected by intrinsic factor, or a low B_{12} or folic acid level in serum will be helpful. When not all these laboratory procedures are available a therapeutic trial may be carried out. Since folic acid may increase the neurological disturbance while correcting the anemia of Vitamin B_{12} deficiency it is never given first. Vitamin B_{12} requirements are 1 (one) μg daily and to treat pernicious anemia a single dose of 15 μg is given. This will cause a brisk reticulocytosis by the seventh day. If the reticulocytosis occurs Vitamin B_{12} deficiency has been demonstrated and maintainance Vitamin B_{12} 60 μg monthly can be initiated. The hemoglobin should then return to normal over 8 weeks. Although commercial preparations of Vitamin B_{12} containing 1,000 μg per c.c. are available this dosage is unrealistic and wasteful since more than 80% will be excreted promptly in the urine.

The treatment of folic acid deficiency will not be discussed since the therapeutic approach requires recognition and treatment directed towards the underlying disease rather than just the administration of folic acid alone.

The Anemia of Pregnancy

Pregnancy is a normal physiological state and any of the anemias of decreased red cell production, increased red cell destruction or blood loss can occur at this time. Certainly the pregnant patient with anemia requires as careful a history and physical examination and as complete a laboratory study as the non pregnant patient to determine the cause of her anemia. A few points peculiar to anemia in pregnancy are however worth noting. The non-pregnant female has about 25 c.c. of red cells per kilogram of body weight. Near the 40th week of gestation the red cell mass is approximately 28 cc/Kg an increase of about 200 cc of red blood cells. During gestation however plasma volume increases as well. Early workers studying these changes attributed the decrease in peripheral blood hemoglobin seen in pregnant patients to a greater increase in plasma volume than in red blood cells (hemodilution of pregnancy). While there is no doubt that plasma and red cell volume do increase in pregnancy, there is still uncertainty whether, in normal pregnancy the one should increase more than the other. It is interesting to note that the African Bantu who consumes large amounts of iron apparently does not get a hemodilution anemia during pregnancy. However, Canadian workers have shown that even with excess iron administration in early pregnancy hemodilution occurred. Iron deficiency is often first detected during pregnancy and it is usually considered that there is a greatly increased need for iron during pregnancy. However, as shown by Moore the requirements may not very much greater than in the normally menstruating woman.

Iron deficiency anemia does occur during pregnancy and probably is due to the patient be-

ginning pregnancy with latent or undetected iron deficiency which in association with hemodilution becomes more apparent as pregnancy progresses.

Folic acid deficiency in pregnancy occurs in three of every hundred pregnancies. Recent studies from Liverpool and the Boston City Hospital have indicated that folic acid deficiency is present in an even greater number of pregnant patients with abruptio placenta, uterine bleeding in the third trimester and placenta previa. The incidence in Nova Scotia is unknown but is assumed to be close to that seen elsewhere. Folic acid 5 mgs three times daily is used in treatment and a reticulocyte response should occur within one week. □

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A Recent Look at the Saskatchewan Medical Insurance Plan[1]

As established in 1962, this represented the first development in Canada of an overall government operated medicare plan. Compulsory for all residents of the province, the benefits under the plan include the full range of services normally provided by the family physician together with the services of specialists for referred conditions or for unreferred conditions of a purely specialist nature.

Funds for the purpose of paying the benefits derive in part from a premium tax, and in part from the province's consolidated revenue fund. In 1964 the premium tax accounted for about 15% of the total cost and at the beginning of 1965 this particular premium of $6 single and $12 per family which had been lowered by the previous government shortly before the provincial election of 1963, was again restored to the 1963 level of $12 single and $24 per family.

One of the important agreements associated with the installation of the plan in 1962 was the method arrived at for payment to doctors. Following the long drawn out disagreement between the medical profession of the province and the government of the day, it was finally decided that the two physician sponsored voluntary medical care plans in the province should be utilized in some form as a buffer between the government administration and the medical profession in dealing with the day to day submissions of claims. Consequently, three methods, under the fee for service arrangement, became available by which the doctor might choose to be paid.

In the first method a physician may choose to submit his bill directly to the government Commission for payment. In doing so, he agrees to accept Commission payment as payment in full. This payment incidentally, is 85% of the private practice schedule of the province.

In the second method a physician may become a medical member of either of the approved health agencies. (The two physician sponsored voluntary plans). In so doing, he agrees to submit all bills for service for subscribers of such agencies to the approved health agency for payment. The agency in turn submits the bills to and receives payment from the commission. Here again payment is on the basis of 85% of the private schedule and the physician agrees to accept all payments as payment in full.

In the third situation where the patient or the doctor is not a member of an approved health agency, and the physician chooses not to bill the Commission directly, he may submit his account to the patient. In these cases while the physician may charge up to 100% of the private fee the patient can only recover from the Commission, 85% of the schedule allowance.

Apart from the above, there is a further special arrangement for a small number of physicians in special areas where a fixed salary rather than a fee for service payment is made.

In 1964 the plan covered 879,224 persons or 93.2% of the population. Other government programs, federal and provincial, in the province accounted for a further 62,532 or 6.63%, so that in effect, practically 100% of the population was covered.

The cost of the service for the 1964 year was $20,439,000. When final adjustments were arrived at, the per capita cost was $23.53, an increase of 5.8% from the previous year. Some highlights from the year showed that over 2,200,000 claims were paid; 87% of the insured families received services; and those receiving benefits had an average of $75.00 per family.

Some rather interesting costs are revealed concerning the very young as well as the older age persons. Under one year of age the average annual cost was $51.82 for males and $37.51 for females. For the over 70 age group, the average annual cost for males was $51.54 and for females $51.24. Among all age groups, the average cost for males was $28.86 as compared to $20.70 for females.

As pointed out in its report the Commission found it desirable to follow precedents established by doctor sponsored medical care plans, in working closely with the medical profession of the province in ensuring some stability of costs of the program. In close co-operation with the College of Physicians and Surgeons of Saskatchewan, the Commission has instituted a program to analyse in detail, the services rendered by individual

[1]Trans Canada Medical Plans Newsletter - Winter, 1965 (Vol. 8, No. 5).

physicians and the payments made to them. The College has established its own Professional Review Committee. One of the tasks assigned to this body is to consider the practices of physicians which differ significantly from fellow physicians in comparable practice circumstances.

In the matter of relationship between the profession and government, it is well known that a number of practicing physicians in the province in 1962 left when the new program came into effect. The most damaging loss in this respect was among long time highly qualified specialists. However, with a more favourable climate created by a new government in the province some of the animosity seems to have disappeared so that while at the beginning of 1963 there was 201 specialists submitting claims for services, at the end of 1964 this had increased to 251. In the case of the general practitioners, at the beginning of 1963 there were 532 and at the end of 1964, 660.

In 1963 there were about 438,000 or 47.6% of the population enrolled under the approved health agencies. At the end of 1964, some 575,000 or 61% of the population were availing themselves of the use of such agencies. The main value of the agencies from the doctors' point of view is that such organizations from their long time experience in adjudication act on behalf of the doctor concerned in dealing with the Medical Assessment Committee of the Commission, and for the small number of hard core claims where differences cannot be compromised, such plans are able to assist the doctor in dealing with the Medical Appeal Board. For the public, belonging to an approved agency means that in dealing with the great percentage of the doctors of the province, such doctor will send his account direct to the agency and eliminate the personal involvement of the patient in handling the account and also incurring the risk of a higher private billing from the physician.

While the whole arrangement worked out in Saskatchewan in 1962 left many unanswered problems, the fact remains that as a result of the co-operation of the medical profession and the succeeding government in the province, the Saskatchewan plan has already succeeded in overcoming many of these difficulties. Its progress for the future will be watched with great interest in all parts of Canada.

1965 Postscript

The drop in the province's birth rate is declared to be one of three factors which are keeping the rise in 1965 medical care costs to less than four per cent per capita, compared with a sharper jump of 5.8 cent in 1964. □

Assault and Battery of Children and Others

I. D. MAXWELL, M.B., ChB.[1]

Halifax, N. S.

The Clinical problems of the Battered Child Syndrome, a condition in young children who have received serious physical abuse were examined in *The Bulletin* last year by Pashayan and Cochrane.[1] It may now be helpful to consider some of the legal and moral problems.

The possible existence of this syndrome should be considered by the physician when a child dies unexpectedly or has soft tissue swellings, bruises, skeletal fracures or subdural hematoma. This is particularly the case when the explanation advanced is bizarre or inadequate to explain the nature or intensity of the trauma. The fact that in most cases the injuries will have been produced by a parent or foster-parent may cause the attending physician to hesitate to report his suspicions to the proper authorities. Doctors find it hard to believe that a parent could attack a child in this manner, and, particularly when the child has been brought for medical attention voluntarily, they may attempt to obliterate such suspicions from their minds, even in the face of obvious circumstantial evidence.[2]

The problem is of desperate urgency; the person who today, in a fit of uncontrollable temper injures a child, may next time cause injuries which are grievous or even fatal.

It is immediately important that the physician make a correct diagnosis in order to institute proper treatment (particularly in cases involving subdural hematoma, limb fracture or ruptured viscus), and it is then his responsibility to take any steps likely to prevent a recurrence. Attending physicians are often unwilling to become legally involved in these cases, not only because they dislike involvement in litigation, but also because they fear an inability to prove any allegations they may make and the possibility of a suit for slander being laid against them. In office practice a doctor may be afraid that in reporting such cases to the authorities he is divulging a professional confidence, and in hospital practice each of the attending physicians may feel that someone else should take the responsibility. Again, physicians in hospital may be concerned that they are implicating the hospital itself in possible litigation and that they do not have the right to involve a third party in this manner.

These fears are almost certainly groundless. In many cases the doctor will never be called upon to appear in court, and in none will he be required to make specific charges against any individual. Legal opinion is unanimous that notification by a doctor not prompted by malice cannot be actionable.[3] Doctors must realize that it is their moral duty to report such cases to the authorities - the duty of a citizen who suspects foul play; in addition, their professional training enables them to suspect the syndrome when a layman might not do so, and in this respect it becomes a medical duty also.

The Advisory Committee to the Children's Division of the American Humane Association has strongly urged the adoption of State Legislation to make it mandatory to report cases of suspected inflicted injuries on children. The Committee endorsed the following principles:

"1. That such legislation be directed to Medical Practitioners and hospital personnel coming in contact with children for the purpose of examination and treatment of injuries sustained allegedly from accidental or other causes.
2. That doctors and hospital personnel have mandatory responsibility for reporting all cases of child injury in which medical diagnosis or findings are incompatible with alleged history of how injuries were sustained and the syndrome leads to the inference of "inflicted injuries".
3. That doctors and hospital staff members reporting cases of suspected inflicted injuries be made immune to possible civil or criminal action for the disclosure of matters that might be considered confidential because of the doctor-patient relation.
4. That all reports of cases of suspected inflicted injuries be made to the public or voluntary child welfare service that carries the child-protective function in the Community".[4]

[1]Department of Pathology, Halifax Infirmary; Chairman, Medical Legal Liaison Committee.

Some states have already adopted this legislation, and many doctors and lawyers would also welcome codification of other reportable lesions; such legislation in Canada would, however, involve changes in the Criminal Code, and would not lie within the jurisdiction of the Provincial Legislature.

To whom should the report be given? The first report should not necessarily be given to the authority who will finally deal with the problem. Depending on the gravity of the situation, the case may eventually be dealt with by the Social Service Department of the Hospital, the Municipal Child Welfare Department, the Children's Aid Society, the Society for Prevention of Cruelty to Children, the Juvenile Court or the Department of the Attorney General. Some of these bodies can take action only if the doctor lays a specific charge, a thing he must never do; many of them do not possess the requisite investigative ability or executive powers. Efficient investigation can only be carried out by the one agency which has been set up to maintain law and order in the community and which has personnel trained in the investigation of possible breaches of the law; namely, the Police. Most of us however would hesitate to call in the Police in cases of minor injury.

In such minor cases, if the cause is *clear and admitted*, it may be evident that Police investigation is not required and the case may be referred to one of the other agencies with the concurrence of the legal guardians of the child. If, however, the guardians resist this suggestion, or the cause of the minor injuries is not clear, then the police should be asked to investigate. It may be extremely unwise to count on a simple "talking to" to protect the child from future abuse unless the physician is in the position to keep close check on the home throughout the child's dependency, and this will be possible very rarely. In some cases - unfortunately they are the gravest ones - it is important that police investigation proceed with the utmost expedition and the introduction of unnecessary intermediaries in the chain of reporting may greatly hamper this. In cases of severe injury, therefore, **the primary notification should be to the Regional Police Office**, which, if the case falls within the competence of another jurisdiction will transfer it without delay.

Who should report? In private practice, the attending physician may be the only individual who can report the condition. At times the parents who bring the child in for attention may make allegations against some other person and the physician may be tempted to leave the matter of reporting in their hands. This course of action is most unwise as experience shows there is a strong probability that such parental allegations are smoke-screens which are being made with the specific aim of preventing the physician reporting the case.

The doctor must himself report to the police, giving a brief account of the nature of the injuries and his reasons for recommending an investigation. Under no circumstances should he make specific charges against any individual, but, when he considers it necessary, he should indicate that the matter is of extreme urgency. He should not delegate the responsibility to his nurse or receptionist, and, even if the parents indicate that they plan to notify the police, he should never assume that this relieves him of the responsibility of doing so personally.

In hospital the problem is compounded by the fact that several physicians may be concerned in the care of the case and that each of them may leave the unattractive task to another. As has already been recognized by some Hospital Administrations, the Administration also has a responsibility to the community to see that this type of case is expeditiously reported to the necessary authorities. In individual hospitals this is discharged in different ways: in some, the Hospital Administrator issues the report; in others, he delegates this authority to the attending physician, to the Chief of the Medical Staff or to the nursing staff in the Admitting Department.

It does not greatly matter who does the actual reporting providing the report is as full as possible and as expeditious as practicable, but as the Hospital Administration is entirely dependent for its information on the medical personnel and as the report is essentially a medical-legal one, it is probably better for the hospital to delegate the responsibility for reporting, to the medical staff by means of a suitable directive, it being appreciated that the hospital perhaps still has a responsibility to see that the directive is carried out. Because several physicians may be concerned in a particular case, the one who should furnish the report, either the attending physician, the Chief of Service, or the Chief of the Medical Staff, should be clearly indicated in the Staff By-Laws. There are advantages in designating one disinterested person to make reports of this nature in the hospital, particularly some one who has discussed all facets of hypothetical cases with the relevant authorities well in advance. **In most hospitals, the best person to be so designated is usually the Chief of the Medical Staff.** There is probably an inherent aura of respectability about such an individual which few laymen would dare to challenge and the calling in of this second (and official) consultant opinion will make it clear that the public is being protected from idle or malicious charges.

It is a remarkable fact that whereas it is mandatory in some provinces for garages to report damage to automobiles by bullets[5] no such duty is imposed on medical practitioners to report gunshot wounds, stabbings, cases of wife beating or injuries sustained in automobile accidents. There

are cogent reasons for making these reportable. With all these facts in mind, it is suggested that Hospital Staffs incorporate regulations along the lines of the following in their By-Laws:

1. It is the responsibility of attending physicians undertaking the care of injured persons (particularly if the injured person is a child) to ascertain whether the injuries may have been caused by violence or assault.
2. It is their duty to report such suspicions to the Chief of the Medical Staff or his deputy without delay.
3. On receiving such a report, the Chief of Staff or his deputy will make an immediate investigation himself and, if he agrees that there are reasonable grounds for the suspicions, he will notify the correct authority forthwith, informing the Hospital Administration that he has done so.

SUMMARY:

Although not specifically covered in the Criminal Code of Canada, it is clearly the ethical duty of Medical Practitioners to report all cases of suspected child abuse to the authorities. Undoubtedly many cases have gone unreported in the past because physicians have been unsure of their responsibilities in this regard and also of their legal position.

It is suggested that the Police Department or other agency should be notified of all cases suspected to represent the so-called battered child syndrome seen in medical practice whether in the office or in the hospital and that the Medical Staffs of hospitals delineate in their By-Laws the course of action to be carried out. Important though the problem is, as it is only part of a wider problem, and as the Criminal Code has up to now avoided the issue, Hospital By-Laws should probably also cover other types of trauma which the staff consider should be reportable.

Acknowledgement:

Grateful acknowledgement is given to the Children's Aid Society (Halifax), the Halifax City Police and to the Department of the Attorney General of Nova Scotia for advice in preparing this report. □

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flexible system, in which all mentally retarded children requiring institutional care will be looked after in one administrative system. Since the Nova Scotia Training School is now responsible for the foster home program for severely retarded children, this plan will facilitate the transfer of children to and from the three distinct parts of the system; namely, the Training School, the four cottage institutions and the placement program. We have been impressed by the need for a flexible admissions and transfer procedure and this system will provide for it. It should also be noted that since Homes for the Disabled will be under the general direction of the Department, this will make for easy transfer back and forth from one type of institution to another without the attendant red tape that sometimes delays these procedures.

Classifications of Patients for Admission

To date we have not had a uniform admissions procedure for our Municipal Homes. A classifications committee, of three persons, has now been established. A senior departmental official will be the permanent chairman of this committee. Where there is a local municipal welfare authority, the local welfare director will act as the second member of the committee. The third member of the committee will be a representative recommended by the Department of Public Health and approved by the Minister of Public Welfare. This will insure continuing medical oversight and supervision in respect to admissions, and at the same time will guarantee, not only a consistent admissions policy and screening of admissions in these beginning stages, but more important, it will be on a continuing basis.

In consultation with Dr. Peter Gordon of the Department of Preventive Medicine of Dalhousie University, and Miss Pauline Macdonald of the Medical Social Service Department of the Victoria General Hospital, we have worked out a procedure and definitions to guide the classifications committee in the admissions process. It is our first attempt at planned and formalized classification, and we are well aware that we are working in relatively new and uncharted ground. To make matters more difficult, the whole classification process is being completed under the pressure of time which results from classifying and finding accommodation for approximately 870 patients in a few months.

No program as complex as what we envision here can be administered without areas of administrative conflict and problems. We would do well to anticipate these in advance and prepare for them. It may well be that some patients not considered as mental patients by the Hospital Insurance Commission, will not be acceptable by the Department of Public Welfare. Neither medical science as it operates in this area of responsibility nor the social sciences have reached that stage of precision and accuracy where it can be stated categorically that some patients will do best in one institution or another. Some mistakes are bound to occur.

The problem of finding personnel in adequate numbers to staff the personal care and nursing home sections of our Homes for the Aged, to staff our Homes for the Disabled, to supervise our patients in foster homes and to care for the severely retarded children, will be an extremely difficult task. We require professional personnel in these fields with much the same urgency as these are required in the medical field. The solution is not in sight at the moment, although the form it will take is clear to us.

Social Rehabilitation

We have a good program of medical and educational rehabilitation. We are very short on the rehabilitation of the total man and the inter-weaving of administrative techniques and methods required to achieve a rehabilitation program which will be effective in this total and generic sense. The task, therefore, to which the Department has set itself in this area may well be described as social rehabilitation. Rehabilitation is defined in the dictionary as the restoration of an individual to a previous condition or as the setting up of a proper condition. Habilitation refers to enabling or qualifying or capacitating. What we are seeking to do in this new institutional set up and, indeed, throughout the entire Department, is to habilitate and rehabilitate persons who require such help. The provision of adequate medical care and those restorative devices that medical science has found useful are only one part of this total habilitative and rehabilitative process. In essence we seek to provide for the individual a climate or an environment, in which, through his own efforts and with such help as he may need, he can achieve his maximum usefulness and productivity. For some, the residual capacity left to know, to enjoy, and to understand life may be very small indeed. For others it may be considerable. It is our task to provide an environment in which each and every one of the persons coming under our care will have the maximum opportunity for a good life. □

Personal Interest Notes

"Doctors are fascinating: patients idolize them, wives learn to live without them, RN's ignore them, aides avoid them, students help them and insurance protects them. Nobody else could go to school for a total of 20 years and still not learn to write." (excerpt from a speech by a Texan nursing student, reprinted in Canadian Journal of Nursing)

Cape Breton

A new 84-bed hospital is planned for Sydney Mines which will be one of the most modern in eastern Canada. It will include all services, obstetrics, paediatrics, etc. The site has been chosen and construction will shortly get underway.

The Annual meeting of the Cape Breton Branch of the Canadian Mental Health Association was held with **Dr. Clyde Marshall,** Administrator of N. S. Mental Health Services, as a guest speaker. He described the complicated process of converting the old type custodial county hospital into a real hospital for the treatment of mental illness, outlining the new system and the changes involved, the progress made thus far and the plans for the future.

Dr. Cornelius Donovan, chief psychiatrist of the Cape Breton Mental Health Centre gave a comprehensive report of cases treated and other services rendered by him and his associates in the department. He stressed the need for more gymnasiums for young people and the need of schools for children with brain damage.

Dr. Marshall also addressed the Kiwanis Club of Sydney on February 17 on the many changes made in mental health services in the province recently.

Dr. Donovan was the special speaker at the annual meeting of the Cape Breton Cerebral Palsy Association, earlier in February and also addressed the annual meeting of the Victorian Order of Nurses in Glace Bay.

Dr. C. F. Brennan of Sydney is continuing his excellent campaign to arouse interest among Home and School organizations, the schools and public generally so that there may be introduced into the curriculum some form of sex education and compulsory pre-marriage courses, and a minimum age of 21 years of age before marriage be established.

Halifax

Health Unit directors from various parts of the province met in Halifax early in March for a discussion of health unit services. The chairman of the meetings was **Dr. J. S. Robertson,** Deputy Minister of Health. Present also were **Dr. N. F.MacNeil,** and **Dr. L. D. MacCormack,** Sydney, **Dr. N. A. Morrison,** Truro and **Dr. J. R. Cameron,** Dartmouth.

Dr. Doris Hirsch, a graduate of John Hopkins University who took her post graduate work in psychiatry at the same University and has for some years been associated with the Mental Health Clinic for Children and the Childrens' Hospital in Halifax, was on a special panel to discuss the role of the church and family at the fifth annual public meeting held in the Anglican Diocesan Centre late in February.

Dr. Gwendolyn Service, director of the Tuberculosis control programme for the Halifax City school children was the guest speaker at a recent meeting of the Halifax Infirmary Graduate Nurses Alumnae meeting. A panel with prepared questions, and audience participation as well, on all aspects of tuberculosis, case finding, holding, follow-up work, control, laws, research, etc., formed the main part of the discussion.

Dr. John F. L. Woodbury, Medical Director of the N. S. Division of the Canadian Arthritis and Rheumatism Society was in New York recently to lecture to the postgraduate school of New York University on Rheumatic Diseases.

University

Dr. R. O. Jones, Head of the Department of Psychiatry left on March 16th for the same two-week Carribean cruise, sponsored by the College of General Practitioners, on which Dr. C. L. Gass is to give a lecture. He will, as President, represent the Canadian Medical Association.

Dr. H. C. Still, chairman of the committee on Advanced Training of the College of General Practice attended the Annual Board meeting of the College on March 16-18 in New York to present a report on Advanced Training in General Practice.

Dr. R. L. deC. H. Saunders, Head of the Department of Anatomy returned on March 14 from lecturing to the medical school of Johns Hopkins University, Baltimore, Md., on circulation of the brain. He also presented one of the opening papers at a meeting of the American Heart Association held in Philadelphia during the same week on X-ray microscopy of the cerebral micro circulation.

In January Dr. Saunders was in Jamaica at the University of the West Indies, where he deliver-

ed a paper on X-ray microscopy of the cerebral microcirculation at an International Conference on Microcirculation.

All the findings presented at these meetings were obtained at Dalhousie by a new high voltage X-ray microscope (XMPJ) which is a unique instrument and the most powerful of its kind in the world. It was built under grants of the Medical Research Council of Canada for Cerebral vascular studies.

We are indebted to **Dr. H. W. Schwartz,** well beloved retired EENT man from Halifax, now living in Ottawa, who also recently visited Jamaica and sent an illustrated account of the University of the West Indies at Mona. Though barely a decade old, 55 doctors are graduated yearly from it, and a recently expanded programme plans to increase that number to 90 by allowing the students to complete their training at general hospitals in Barbados and Trinidad as well as in Jamaica's University College hospital.

We are very glad to report that the two children of Dr. & Mrs. **James R. Baker** who were so terribly injured in a car accident on December 22nd en route to San Francisco from Victoria and were unconscious for eight weeks are now recovering more rapidly than hoped for. Suzanne has regained limited speech and Christopher is attempting to do so.

CONGRATULATIONS

CANADIAN MEDICAL ASSOCIATION

DR. ARTHUR F. W. PEART, APPOINTED GENERAL SECRETARY

Dr. R. D. Atkinson, chairman of the Executive Committee and the General Council of the C.M.A. today announced the appointment of Dr. Arthur F. W. Peart, as General Secretary of the 17,944 doctor-member Association, on March 17, 1966.

Dr. Peart succeeds Dr. A. D. Kelly, who retires after serving nearly thirty years in Administrative Medicine. During the past twelve years, Dr. Kelly held the position of General Secretary of the C.M.A., and for his efforts in the interest of organized medicine he was awarded the Honorary Degree of Doctor of Science from the University of British Columbia, and Doctor of Laws from the University of Western Ontario and Dalhousie University.

The new General Secretary, Dr. Arthur F. W. Peart, is well known to the Canadian medical profession. He joined the Association on January 1, 1954 as Assistant Secretary, bringing with him a background in public health, and extensive experience in medical and health administration. A graduate of Queen's University in 1940, Dr. Peart joined the Canadian Army after a period of internship and served in the army from 1940 until 1946. For his war services, he was made a Member of the Order of the British Empire (M.B.E.).

Following World War II, Dr. Peart spent two years in Swift Current, Saskatchewan, the first year as M.O.H., and the second in private practice under the Swift Current medical care program. He went to Ottawa in 1948 as Chief of the Epidemiology Division, Department of National Health and Welfare, where he remained for six years. While with the Department, Dr. Peart received special training in Epidemiology at Harvard University, and was largely responsible for conducting Canada's Sickness Survey in 1950 and 1951. He has written several scientific papers on communicable disease control and epidemiological research.

Dr. Peart is a certificated specialist in Public Health by the Royal College of Physicians and Surgeons of Canada, and last year was elected a Fellow of the Royal Society of Health of England.

Dr. Peart served the C.M.A. as Assistant Secretary from 1954 until 1960 when he was appointed Deputy General Secretary.

To **Dr. William A. Cochrane,** professor and head of the Department of Paediatrics at Dalhousie, and Physician-in-chief at the Children's Hospital who has been the sixth recipient of the annual **Borden Award** administered by the Nutrition Society of Canada for his discovery and elucidation of the effect of leucine on carbohydrate metabolism in idiopathic hypoglycemia of infancy which has contributed significantly to knowledge regarding the pathogenesis and treatment of this condition.

One of the standard measures now used in the management of the disease is based on his reasoning that a moderate protein intake followed in 30 minutes by supplementary carbohydrate was a better regime than the customary high protein intake for these leucine sensitive hypoglycemic children.

To **Dr. Robert A. MacLellan,** the Grand Old Man of General Practice in East Hants Co., who graduated from Dalhousie in 1908 and since then has served his province both as a doctor and as a school board member and chairman and also as a member of the House of Assembly for four years.

In his honor a $200.00 yearly scholarship for East Hants students has been set up by the East Hants municipal school board on advice of the municipal council and has been named "**The Dr. R. A. MacLellan Scholarship**". His own education was obtained under great difficulties, but at his high school graduation, he was third in the province, and had four languages to his credit, and from Dalhousie graduated with distinction in Pharmacy. Since 1916 he has been interested in the work of the school board in his district and has seen to it that all owners of property shared in the allocation of school taxes.

To **Dr. C. M. Harlow,** Director of Laboratories at Camp Hill Hospital and Chairman of Education for the N. S. Cancer Society, whose published work

forms the basis of "**The Great Nova Scotia Diet**" - a featured article in the March edition of the "Ladies Home Journal". It promises those who follow the diet that a month from the day they begin, they can "without starvation, without hungering" drop eight to ten pounds. The magazine published recipes for a month of seafood dinners five times a week as well as suggestions for breakfast and lunch and "in between snacks". Altogether these add up to less than 1500 calories a day. The Nova Scotia Diet, says the article will keep the dieter from feeling deprived and unwanted as the pounds melt away. Let's Harlowize.

At a meeting of representatives of the three Maritime Provinces College Chapters held in Sackville, New Brunswick on the 16th of January the following appointments in the planning of this Assembly were made.

General Chairman - Dr. John Williston, New Glasgow, who is also President of the Nova Scotia Chapter of the College of General Practice of Canada.

Chairman of Exhibitors Committee - Dr. J. D. Carson of Bathurst, New Brunswick; in charge of registration, local arrangements and housing - Dr. John Gillis of Eldon, P.E.I., Dr. Kent Ellis of Hunter River, P.E.I.; Public Relations - Dr. Norman Glen, Amherst, Nova Scotia; Finance - Dr. Alan MacMillan of Charlottetown, P.E.I.; Entertainment - Dr. Marven Clark, Kensington, P.E.I.

To the following doctors, residents of Nova Scotia, who have won Certification from the Royal College of Physicians and Surgeons of Canada in their various specialties.

Anaesthesia -
K. C. Mathur, M.B., New Glasgow.

Internal Medicine -
D. M. Mehta, M.B., Halifax.

Paediatrics -
M. Y. Dincsoy, M.D.

Pathology -
W. H. Chou, M.D., Antigonish

Psychiatry -
H. M. Bacon, M.D., Dartmouth.
J. H. Gerlitz, M.D., Cornwallis.
R. P. Parkin, M.D., Dartmouth.

Public Health -
P. C. Gordon, M.D., Halifax.

General Surgery -
A. A. Moores, M.D., Dartmouth.
K. T. Song, M.D., Halifax.

Ophthalmology -
R. E. Forgie, M.B., Rockingham.

Urology -
C. E. Jebson, M.D., Kentville, N. S.

COMING EVENTS

DAY IN CANCER

This one day course, which has now become an annual event, will be held on April 15th this year, under the joint sponsorship of the Nova Scotia Tumour Clinic and the Postgraduate division of Dalhousie University. It is supported by a grant from the Nova Scotia Division, Canadian Cancer Society.

Place: Nova Scotia Tumour Clinic.

Time: Registration from 8.30 a.m.

Fee: $10.00

Subject: This course is designed to be of special interest to the practising physician. There will be presentations on Lung Cancer, Radio-isotopes, Nipple Discharge, Sigmoidoscopy, Oral Cancer, Prostate, Haematuria, Cytology, Uterine Cancer and Ovarian Cancer. The keynote address will be by the visiting Nuffield Lecturer, Dr. Alice Stewart from the University of London.

Dr. Alice Stewart, Reader in Social Medicine at Oxford, will be at Dalhousie during the month of April as the National Research Council - Nuffield Foundation Visiting Lecturer in Preventive Medicine. She is also spending a month as Visiting Lecturer at Queens and UBC.

Associated with Dr. Ryle, who founded the Department at Oxford, Dr. Stewart has a distinguished record of achievement in teaching and epidemiological investigation. Her publications include studies of tuberculosis in industrial workers; the spread of influenza in a factory; leukaemia and radiation in children; toxemia and obesity; comparisons of bottle and breast fed babies; perinatal mortality; influence of social and genetic factors on infant weight; characteristics of older persons in Dorset; some epidemiological aspects of acute rheumatism; and research aspects of social medicine.

Dr. Stewart will also speak during the "Day in Cancer", April 15th, and the Postgraduate Division will arrange for her to visit several community hospitals in the Maritimes.

Births

To **Dr. and Mrs. John B. Steele,** (Patricia Nickerson), a son, Eric John, at the Grace Maternity Hospital, Halifax, on March 8, 1966.

Obituaries

We regret to record the death of **Dr. Randolph Wilson Strickland,** aged 42 who died in St. Elizabeth's Hospital, North Sydney on February 27 after an illness of a few months. He was a native of North Sydney and was a graduate of Acadia and of Dalhousie University in Medicine, and had practised in Sydney Mines for the last twelve years. A memorial service was held by the local Masonic Lodge. We extend our sympathy to his wife, four daughters and his mother, and brother.

Clinical Staff Conferences

Effective April, 1966

We list below as many regular meetings, rounds, conferences and clinics as we have knowledge of in the Halifax area. This list does not pretend to be complete, but it will be revised as necessary and will be published periodically for the information of members.

All events listed are open to any interested physician, and a cordial welcome is promised in every case.

We hope to publish information of similar arrangements at other hospitals throughout the Province in the future. Chairmen or Secretaries of Medical Staffs are invited to send time tables for publication. Anyone spotting an inaccuracy is also begged to let us know.

THE CHILDREN'S HOSPITAL

Cardiology Rounds	Monday	10:30 a.m.
Neonatal Conference (Grace Hospital)	Monday	11:00 a.m.
Cardiology Conference	Monday	4:00 p.m.
Admission Rounds	Tuesday	8:00 a.m.
Medical Grand Rounds	Wednesday	9:00 a.m.
Admission Rounds	Thursday	8:00 a.m.
Metabolic Conference	Thursday	11:00 a.m.
Neurology Conference (alternates weekly)		
Case Presentation	Thursday	4:00 p.m.
Orthopaedic Ward Rounds (alternates with Orthopaedic Conference)	Friday	8:30 a.m.
Surgical Conference	Friday	11:00 a.m.
Radiology Conference (biweekly)	Friday	3:00 p.m.
Ward Rounds	Daily	9:00 a.m.

GRACE MATERNITY HOSPITAL

Staff Meeting Luncheon	Monday (Last)	12:00 noon
Obstetrical Conference	Tuesday (Third)	5:00 p.m.
Ward Rounds	Daily	9:00 a.m.
Journal Club Luncheon	Thursday	12:15 p.m.
Prenatal Clinic	Tuesday, Thursday, Friday	2:00 p.m.
Well Baby Clinic	Tuesday, Thursday, Friday	2:00 p.m.
Postnatal Clinic	Tuesday, Thursday, Friday	2:00 p.m.
Family Planning Clinic - by appointment		

HALIFAX INFIRMARY

Department of Anaesthesia			
Weekly Conference	Monday	2:00- 3:00 p.m.	O.R. Suite
Department of General Practice			
Monthly Conference	4th Thursday	8:30 p.m.	3C Clinic Room
Weekly Joint Conferences - attended by Department members as follows: -			
with the Department of Surgery	Thursday	5- 6 p.m.	
with the Department of Medicine	Thursday	11-12:30	
with the Department of Paediatrics	Friday	11- 1 p.m.	
with the Department of Psychiatry	Wednesday	9-10 a.m.	
with the Department of Obs.-Gyn.	Friday	12- 1 p.m.	
Department of Medicine			
Joint Conference with X-ray Dept.	Wednesday	11-12 a.m.	4C Clinic Room
Grand Rounds	Tuesday	12- 1:15 p.m.	4C Clinic Room
Intern-Resident Training Conference	Thursday	11-12:30 p.m.	4C Clinic Room
Department of Obstetrics & Gynecology			
Weekly Rounds	Friday	11- 1 p.m.	3C Clinic Room
Monthly Meeting	Wednesday	11-12 a.m.	3C Clinic Room
Interns Weekly Conference	3rd Friday	4- 5 p.m.	3C Clinic Room
Department of Ophthalmology			
Weekly Conference	Tuesday	6:30 p.m.	Outpatient Dept.
Monthly Conference	3rd Tuesday	6:30 p.m.	Outpatient Dept.
Department of Pathology			
Clinical Pathological Conference	4th Friday	12- 1 p.m.	Auditorium
Department of Pediatrics			
Grand Rounds	Friday	11-12 a.m.	Pediatric Dept.
Pediatric Conference	Friday	12- 1 p.m.	Pediatric Dept.
Department of Psychiatry			
Case Presentation	Wednesday	9 a.m.	3C Clinic Room
Weekly Conference	Wednesday	9-11 a.m.	3C Clinic Room
Monthly Conference	3rd Wednesday	9-11 a.m.	3C Clinic Room
Daily Ward Rounds		8 a.m.	Psychiatry Dept.
Department of Radiology			
Daily Conference	Thursday	3:30 p.m.	Radiology Dept.
House Staff Conference	Tuesday	1- 2 p.m.	Radiology Dept.
Department of Surgery			
Weekly Conference	Thursday	5- 6 p.m.	3C Clinic Room
Department of Urology			
Weekly Conference	Thursday	12 noon	Urology Dept.
Monthly Meeting	2nd Thursday	12 noon	Urology Dept.

VICTORIA GENERAL HOSPITAL

Department of Medicine

Cardiac Working Conference	Monday	1:00- 2:00 p.m.	X-ray Conference Room
Grand Medical Rounds	Tuesday	8:30-10:00 a.m.	4th Floor Class Room
Cardiac	Tuesday (1st & 3rd)	1:00- 2:00 p.m.	OPD Conference Room
Pulmonary	Tuesday (2nd & 4th)	1:00- 2:00 p.m.	OPD Conference Room
Haematology	Tuesday	2:00- 4:30 p.m.	3rd Floor OPD
Gastroenterology and Haematology	Wednesday	1:00- 2:00 p.m.	OPD Conferences Room
Neurosurgery-Neurology	Wednesday	9:00-10:00 a.m.	Pavilion Conf. Room
Rheumatology	Wednesday	9:00-11:00 a.m.	3rd Floor OPD
Metabolism Endocrinology Renology	Thursday	1:00- 2:00 p.m.	OPD Conference Room
Neurology	Friday (1st & 3rd)	1:00- 2:00 p.m.	OPD Conference Room
Cardiopulmonary Pathology	Friday 4th	1:00- 2:00 p.m.	OPD Conference Room
Cardiology	Friday	2:00- 4:00 p.m.	3rd Floor OPD

Department of Surgery

Weekly Clinical Conf.	**Saturday**	11:00 a.m.	5th Floor Clinic Room
Surgical Pathology Conference	Monday	4:00 p.m.	Path. Bldg.
Surgical Cardiovascular Conference	Saturday	8:00 a.m.	4th Floor Clinic Room
Ward Rounds			
Surgery A	Friday	8:00 a.m.	6 South
Surgery B	Saturday	9:00 a.m.	6 North
Surgery C	Wednesday	8:30 a.m.	6 South
Surgery D	Saturday	9:00 a.m.	6 North
Orthopaedics	Tuesday	11:00 a.m.	4 West
Out Patients Clinics			
Surgery A	Friday	9:30 a.m.	Outpatient Dept.
Surgery B	Thursday	9:30 a.m.	Outpatient Dept.
Surgery C	Wednesday	9:30 a.m.	Outpatient Dept.
Surgery D	Tuesday	9:30 a.m.	Outpatient Dept.

Department of Gynaecology

Ward Rounds	Daily	9:00 a.m.	5 West
Grand Rounds	Saturday	8:30 a.m.	5th Floor Clinic Room
Pathology Conference	Tuesday (First)	5:00 p.m.	Path. Institute
Tumour Clinic	Tuesday & Friday	11:30 a.m.	Outpatient Dept.
Gyn. Outpatient Clinic	Monday	2:00 p.m.	Outpatient Dept.
Gyn. Endocrine Clinic	Wednesday	2:00 p.m.	Outpatient Dept.

Department of Radiology

Therapeutic Radiology Ward Rounds	Thursday	8:30 a.m.	6 South
Diagnostic Radiology Conference	Daily	3:00 p.m.	Radiology Dept.
Proven Case Conference	Thursday	1:00 p.m.	Radiology Dept.
Clinical Conference	Thursday (3rd)	5:30 p.m.	X-ray Conf. Room
Departmental Conference	Friday (Last)	1:00 p.m.	X-ray Conf. Room

Department of Psychiatry

Ward Rounds	Monday & Friday	10:30 a.m.	Pavilion
Seminar	Friday	4:00 p.m.	West Annex Conf. Rm.
Child Guidance Clinic	Thursday	9:00 a.m.	Auditorium
Case Presentations	Monday, Tuesday, Friday & Saturday	9:00 a.m.	Pavilion Conf. Room

Department of Urology

Conference	Monday, Wednesday & Friday	4:30 p.m.	6 West
Seminar	Tuesday	4:30 p.m.	X-ray Conf. Room

Department of Anaesthesia

Conference	Friday (First)	3:30 p.m.	

Nova Scotia Tumour Clinic

Conference	Friday (Third)	12:30 p.m.	Tumour Clinic
Clinics			
Breast	Monday	2:00 p.m.	Tumour Clinic
Lymphomas	Tuesday	2:00 p.m.	Tumour Clinic
Paediatric	Tuesday (4th)	2:00 p.m.	Tumour Clinic
Gynaecology	Tuesday & Friday	11:00 a.m.	Outpatient Dept.
Ophthalmology	Tuesday	2:30 p.m.	Outpatient Dept.
Skin, Soft Tissue & Intestine	Tuesday	11:30 a.m.	Tumour Clinic
Head and Neck	Wednesday	11:00 a.m.	Tumour Clinic
Ear, Nose & Throat	Wednesday	11:00 a.m.	Outpatient Dept.
Urology	Thursday	10:00 a.m.	Outpatient Dept.
Breast	Thursday	11:00 a.m.	Tumour Clinic
Pulmonary & Gastric	Friday	12:00 noon	Tumour Clinic
Orthopaedic	Friday (2nd & 4th)	10:00 a.m.	Tumour Clinic

Chemoprophylaxis - - - -
continued from pg. 92.

mococci was significantly lowered in contrast to the increase in pneumococcal isolations among the patients receiving chloramphenicol.

The role of *H. influenzae* in patients with chronic bronchitis and emphysema is still controversial. That it may be an etiologic factor in the acute exacerbations of these patients was suggested by the fact that, although *H. influenzae* was present in only 11 per cent of the sputum cultures from patients receiving chloramphenicol, it was present as "persistent" flora in almost 23 per cent of the infections in this group. Furthermore, in the patients treated with chloramphenicol, the incidence of *H. influenzae* in the sputum, expressed as per cent of cultures, was twice as high in the patients having exacerbations as in those who had never had acute infections during the year. This relationship was not found in the patients receiving placebo.

Perhaps prophylactic chloramphenicol alters the sputum flora in such a way that, with acute exacerbations, *H. influenzae* is somehow allowed to assume more prominence than in patients whose flora has not been altered by a prophylactic antimicrobial, or perhaps the failure to eliminate *H. influenzae* with chloramphenicol identifies a group of patients who are at greater risk of recurrent infection.

That pneumococcus may be of importance in the exacerbations of chronic bronchitis and emphysema is suggested by the fact that, in the patients treated with the placebo, the infection rate in those who had pneumococci at some time was considerably higher than in those who had never had this microorganism isolated from their sputum. Furthermore, most of the patients who had acute infections had pneumococci at some time during the study, whereas only a third of the patients who had never had infections had the microorganism.

In the majority of patients, long-term chemoprophylaxis is probably not justified. If it is continued indefinitely, it is expensive. It has been found, too, that if it is discontinued after six months, approximately 50 per cent of the patients revert to their pretreatment state. Furthermore, evidence is accumulating to suggest a non-bacterial etiology of most acute exacerbations. □

The Ten Commandments for the Prevention of Alcoholic Addiction

TO ENJOY ALCOHOL SAFELY:

1. NEVER take a drink when you "NEED" one.
2. SIP SLOWLY. Space drinks: The second thirty minutes after the first; the third an hour after the second; NEVER a fourth.
3. DILUTE drinks - never on the rocks.
4. Keep accurate record of amount and number of drinks. Never drink every day.
5. Do not minimize the amount you drink. Instead, exaggerate it. If you say you drink twice as much as you think you do, this will probably be nearly accurate.
6. Do not drink on an empty stomach.
7. No signal drinking such as "luncheon," "Left office," "on the way home," "before dinner," "before bed," "meeting people," "celebrating," and "to get me through."
8. Tired or tense? Soak in a hot tub.
9. Never drink to escape discomfort.
10. Never drink in the morning.

The above is available in leaflet form, free of charge to any reader who desires on application to :-

William B. Terhune, M.D.,
The Terhune Clinic,
Valley Road,
New Canaan, Conn.

General Practitioner Wanted

"General Practitioner wanted in the Town of Port Hawkesbury, Cape Breton, N. S. A good opening for a third G.P. in a growing town and large surrounding area. Interested party may write c/o P.O. Box 339 or 399 Port Hawkesbury, N. S."

Can You Come to Our Rescue?

Maritime Medical Care Incorporated is in urgent need of a dozen or more copies of the 1963 Schedule of Fees of The Medical Society of Nova Scotia. Our staff find it difficult to use the small reprint edition now being issued by the Medical Society. It was felt that some of the original larger editions might be found among physicians who had no particular use for them and who would be willing to send them along to us. We would replace these with the smaller reprint edition if you so wish.

Please send the Schedule to Dr. A. W. Titus, Medical Director, Lord Nelson Building, Halifax, N. S., or, if you are in Halifax, just give me a telephone call and I will arrange to pick it up.

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