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Doctors and Their Critics

Elsewhere in this issue Dr. R. O. Jones is moved to defend psychiatry. After spending a long and rewarding life battling for the mentally ill, it is a bitter pill to find late in a career that one's profession is attacked for supposed lack of concern for the medical and legal rights of patients, for locking patients up and for not locking patients up.

The same Dean of Law he quoted has also said that all patients should be permitted to leave if they wish and, "if they have to be locked up, they should be in a jail, not a Mental Hospital!" At the same time I have personally attempted to defend the psychiatric hospitals against attack for releasing patients whom certain persons or agencies believed should be permanently detained. It is a damned if you do or damned if you don't situation.

Dr. Francis Braceland, a distinguished retired American psychiatrist, editor of the *Journal Medical Insight*, and former editor of the *American Psychiatric Association Journal*, claims that because of the over-reaction to the cries of the civil libertarians, we are in danger of returning the patients from whence they came over one hundred years ago, the jails, gutters, garrets and park benches.

Electroconvulsive therapy as described by Dr. R. O. Jones and psychotherapeutic medication have been a miracle for millions of people, both preventing untold suffering and self-destruction, etc. Lobotomy has returned to many patients the ability to live in the community, or at least more comfortably in an institution. Today, opposition to such treatments has produced so much anxiety and fear that the reaction is often perilously close to the abandonment of patients. In many jurisdictions lobotomy and electroconvulsive therapy are avoided and, as well, patients are too frequently returned to the community before they are well enough to cope successfully, or discharged with the full knowledge that for many patients the quality of life in the hospital far exceeds that available in the community.

It is ironical that psychiatry has laboured so diligently to be accepted as an equal member of the medical profession where it believed it would be comforted and protected by the wings of size and benefit from the respect and prestige accorded by society only to find in this age that the very word 'medicine' is a pejorative to many. It is almost unbelievable that reaching pinnacles of service and results never dreamed of in other times, medicine is faced with a crescendo of criticism. Perhaps, the success of medicine has created such a rise in expectations that nothing short of immortality will now be acceptable, incidentally to be provided without further increase in costs.

In this latter connection it is exasperating to have the finger of blame slanted, if not directly pointed at the physician for all the rising costs of health care at the almost total denial of the complex, social, political and cultural effects on the costs of care, not to mention major medical advances. Altruism is declared old fashioned; doctors are accused of accepting impossible workloads and responsibilities for money, a commodity that all others appear sanctioned to seek. As well, doctors are often forced to defend themselves against nebulous conceptions as to how they should practice by those who in many instances are jealous for

one reason or another of the acceptance and prestige accorded by society, however eroded it now may be. No longer is it fashionable to sit down with one patient in search of a solution to his physical and mental problems. Instead, the physician is expected to be an expert on numerous issues and criticized for working outside his field if he attempts to follow these expectations.

However, surely this age will pass, and Dr. Jones and psychiatrists can hope that the perspective of time will be in their favour as long as physicians continue to follow good medical practice which paraphrased from Dr. Vivian Rakoff is

the practice of consuming in the interests and service of patients all that the arts and sciences have to offer to assist the patient.

As Dr. Leon Eisenberg has said, "the fact that psychiatry (medicine) can be abused does not make psychiatry (medicine) an abuse. Scientists can be suborned, but science remains essential to human welfare. I join the call for ethical vigilance in medicine and science, not the Luddite appeal for wrecking the machinery in the vain hope of returning to a sinless Eden." □

F. Ralph Townsend, M.D.

Cancer Society and the Doctor

HOW DOCTORS CAN HELP THEIR PATIENTS BY REFERRING THEM TO:

Canadian Cancer Society, Halifax Unit, 1710 Granville St., Halifax, N.S.

SERVICES AVAILABLE TO CANCER PATIENTS IN THE CITY OF HALIFAX

It is the present policy of the Halifax Unit, Nova Scotia Division, Canadian Cancer Society, to help cancer patients within certain prescribed limits without overlapping the work of any other organization. Each case requiring financial outlay is treated individually on its merits.

All patients *must* register with the Halifax Unit.

Doctors should refer their patients to us at the above address.

1. Cancer Dressings

Cancer dressings are free to all Cancer Patients irrespective of income. They are made entirely by volunteers.

2. Bedside Nursing Supplies and Loan Equipment

Bedside nursing supplies and equipment of all kinds are loaned or given to patients irrespective of income (e.g.) vaseline, lysol, alcohol, gatch pads, linen, powder, kleenex, etc.

3. Transportation

The Halifax Unit in conjunction with the Department of Health will assist with transportation expenses to the Nova Scotia Tumour Clinic, Halifax (for check-up). This service is available to those persons in receipt of an income of less than \$5,200.00 per year.

4. Assistance in Payment of Certain Pain-Killing Prescription Drugs

The funds of the Halifax Unit may be used to assist in the purchase of certain pain-killing prescription drugs and compounds, for cases where there is great need. Applications for medications other than those included in the policy are given consideration when necessary.

5. Ostomy and Rehabilitation Equipment

Assistance is given under certain conditions towards the purchase of colostomy equipment and supplies as well as Rehabilitation and Prosthetic equipment.

M.S.I. Pharmacare will now make an allowance toward the cost of prescribed ostomy equipment (permanent or disposable) for persons 65 years of age or over.

6. Miscellaneous Services

- a. Moral Support Programmes, e.g. — Volunteer Mastectomy Service.
- b. Volunteer Services — Clinic.
- c. Home and Hospital Visiting.
- d. Christmas Boxes (all active services) and other services.

7. How to Apply

Anyone needing assistance should apply to the Halifax Unit at 1710 Granville St. Halifax, N.S.

NOTE: This Unit does NOT accept financial responsibility nor does it make funds available for the payment of the following: Hospital bills and treatment costs, X-Ray Plates, X-Ray or Radium treatment, or Doctor's fees. □

Psychiatry and Its Critics*

R. O. Jones,**, M.D., F.R.C.P. (C),

Halifax, N.S.

I have been aware of increasing hostility towards the branch of Medicine which I represent, Psychiatry, from many different individuals and groups, for some time. Generally I have been able to shrug this off, but a series of events over the last three months have made me feel that I should be a little more active in the defense of Psychiatry and its practitioners.

Some three months ago I came home, after I and four other Psychiatrists had spent 3½ hours, we thought planning better mental health services for this metropolitan area (with no pay involved incidentally), but through the eyes of our accusers I now realize that we were making plans to persecute more innocent Nova Scotians. I turned the television on to my favorite viewing channel, the CBC, to find an entrancing program on the penitentiaries of California. The question of penitentiaries and the rehabilitation of criminals has been something in which I have had a considerable involvement within the last couple of years, so I watched with the stars rapidly fading from my eyes, as Jessica Mitford — one of the famous Mitford family, whose sister Unity was prominent in the 1930's as a member of Chamberlain's Cliveden set and a good friend of Adolf Hitler's — revealed the terrible things that were done to prisoners in the penitentiary system in California by policemen, wardens, and worst of all, by Psychiatrists. She described, in gory detail, psychosurgery — prefrontal lobotomy. She charged that the wardens of the California penitentiary system went around saying to their unruly charges, "If you are not a good boy, I will have the doctor cut your brains out." I managed to take that in my stride and indeed, thought it rather amusing and told some of my staff about it the next morning. They showed little concern, claiming that my experience was mild and I really should have seen the 7 o'clock CBC show, "Here Today". I guiltily explained that I had only gotten home from the hospital at about 6:30 and, having a meeting at 7:30, had dashed my supper down to get off to my nefarious pursuits, and enquired what the show was about. It was filmed on the steps of Government House and was a display of a group doing a survey of mental health facilities across this country with the purpose of exposing the inhuman treatment and the violation of civil rights practised by such people as Dr. Clyde Marshall and myself, under the guise of recognizing and treating mental illness. Apparently, the tableau on the steps of Province House included another member of this group, swathed in chains and supported by a young civil liberties lawyer, able and willing to back up these accusations. What really annoyed me was that I had just paid my dues to the

Canadian Civil Liberties Association that very morning and it was too late to get the cheque out of the mail! Hardly had I digested this when my supervisor of nursing arrived with a newspaper that had been delivered to all the apartments in the large apartment building in which she lives, which carried an advertisement, "If you know of any person who is being improperly treated, wrongly confined, or brutalized in any way by psychiatry, let Freedom know." One felt in better company a few pages later where there was a similar advertisement headed "Police Abuse" inviting any person who "had ever had a false police charge placed against him, or had been victimized by the police in any way" to contact the publishers of the paper as well. Leafing through the paper I found one of my colleagues, Dr. Thomas Szasz, a leading member of the so-called radical psychiatric group, proclaiming "Psychiatry is communism by a medical name, that's all it is. It always has been for 300 years, long before there was communism." And he goes on to say "In my opinion mental illness is a myth. People we label mentally ill are not sick and involuntary mental hospitalization is not treatment, it is punishment. Psychiatrists are in the business of manufacturing madness."

Despite all this I could still sleep comfortably at night until a day or so later, the same nurse brought a letter to me from a 17-year-old Grade XII student, who had been a patient on the psychiatric unit of the Victoria General Hospital 9-A, of which I have had the honour and pleasure to be the Head since its inception a good many years ago. The letter read:

"I'm not writing to you today as patient to doctor, but to seek some information for a research project and also to make a request.

Things are going very well here on the home front. T.A. is still keeping the situation in balance and I feel quite at peace with myself and life in general. It's really great!

I'm attending high school now and enjoying every minute of it, and I'm not finding it too difficult, although it did take awhile to get used to regular study again.

Since school started in September, our Grade XII English class has been studying a novel concerning mental illness and the care and treatment of the insane. The wards we have been hearing about have been of the worst type and with a minimum of staff. So I've been telling the class of some of my experiences on 9-A last summer and trying to get the fact across that not all psychiatric wards are bad and patients can be helped.

Now comes the request I wanted to make. Do you think it would be possible for about five or six of us to pay a visit to 9-A at the V.G. some day after school (or on a Saturday to see conditions there and, perhaps talk to the staff on duty? The group would include our English teacher,

*This is a revision of a paper prepared for delivery to the Halifax Rotary Club recently.

**Professor and Head, Department of Psychiatry, Dalhousie University, Halifax, N.S.

myself, and three or four other students. If you cannot arrange this for us perhaps you could tell me whom to contact about the idea?"

This was indeed the final straw and I decided that if the defense of my profession had to be left to a 17-year-old schoolgirl, then we probably deserved all the nasty words that were being heaped on us. Equally, if children in the schools of Nova Scotia are being taught this kind of thing, then it seems to me that a good deal of what I regard as gain in improvement in attitudes about mental health, will be lost. Now what are the accusations made against psychiatry and what are the facts?

The accusations are —

that Psychiatry is not really a medical subject, but rather a tool of the establishment which has as its main purpose the preservation of the establishment against those who would destroy it. To state it simply but somewhat violently, Thomas Szasz, in an article in the *Encyclopedia Britannica* in 1974 says, "When such persons are said to be psychiatric patients suffering from mental diseases — the solution is to imprison them in buildings called hospitals and torture them in the name of treatment." He goes on to say that when patients have been committed to mental hospitals, they may be subjected to "the most brutal and injurious acts — called psychiatric treatments — imaginable to modern man and are permanently stigmatized as ex-mental patients. And finally, at every point psychiatry is used to deprive the accused of freedom and dignity in the name of protecting his mental health and treating his mental illness."

Just for the record and to give you a little pause for thought, the preceding article in that issue of the *Encyclopedia Britannica* is a passionate plea for the civil rights of animals!

Strong words, now what are the facts, and here I must ask your pardon for some immodesty in presenting these. Dr. Clyde Marshall and myself were the first of the new breed of Psychiatrists that came to Nova Scotia — both in 1941. This was the time when many of these so-called brutal treatments were being introduced and when much attention was being given to mental hospitals. Hence, it was natural that we should play a considerable role in this movement in Nova Scotia. One of the institutions, called a mental hospital, was the Halifax City Home, containing some 500 or more patients, who sat in institutional rags, on wooden benches, with their backs against dirty, unpainted or unpapered walls, staring listlessly at their counterpart across an eight-foot corridor, occasionally being taken out to shuffle around the courtyard on South St. and receiving medical attention only if they developed pneumonia, or cut their throats, or something of that kind. The critics I have mentioned would say they were lucky; they had never been stigmatized by a psychiatrist as mentally ill and they were not exposed to these treatments. Then, all that changed — we were able to reach agreement between Mr. A. Ettinger, then the superintendent of the City Home, Dr. Pat Grant, the Dean of the Medical School and myself, as a private psychiatrist, to purchase a machine to give electro-convulsive therapy. From that group of 500-odd

patients, we were able to select 63 who had been patients in that institution from 2 — 21 years, all looked on as hopeless, all terribly depressed, all highly suicidal, all apparently suffering about as much as it is possible for any human to suffer. Within six weeks, 54 of the 63 patients, including the man who had been there for 21 years, had recovered to the point where they could be released from the institution. I have followed the majority of those 54 patients — despite my "brutality" many of them stuck with me. To my knowledge, 28 of them had no recurrence of their mental illness and lived anywhere from 4 — 28 years. Of the remaining 26, I know that 14 relapsed after two or three years of health and, on this occasion were treated either at the Dalhousie Public Health Clinic, or at the Victoria General Hospital, without ever being hospitalized again. Four relapsed and were sent to the Nova Scotia Hospital; two relapsed and I felt that further treatment would not be useful and returned them to the City Home, and six I lost track of. Those that relapsed quickly came back on the second and sometimes on the third and fourth occasions asking for the same kind of barbarous treatment and not being dragged to the Victoria General Hospital by relatives or police. The trend that was started at the Halifax City Home has persisted and has led to the present situation in Nova Scotia.

Let me give you some of the statistical facts kindly provided for me by Ms. Nancy Fisher, the statistician for the Hospital Insurance Commission.

In the last thirty years a lot of people have been discharged from the mental hospitals of this province and a lot are admitted many more than previously.

In 1943 there were 339 admissions to the Nova Scotia Hospital; in 1973, 3,788. It would look as if we are being very successful in locking Nova Scotians up; however, in 1943, six admissions to the Nova Scotia Hospital were voluntary, i.e. with no legal commitment; in 1973, 2,047 were voluntary. Our critics say that going voluntarily doesn't mean anything; that we held threats over their heads to arrange a so-called voluntary admission. Be that as it may, those are the figures and they obviously can be open to interpretation. Perhaps more telling is the length of stay over the years. In 1947, 39% of patients admitted to the Nova Scotia Hospital stayed in less than a year, but 32% stayed in for five years or longer. In 1973, 92% of patients admitted stayed in less than a year and only 2% stayed for five years or longer. In 1973 the average length of stay at the Nova Scotia Hospital was 52 days, i.e. less than two months.

Turning to the municipal hospitals, we had 17 such institutions in 1955 housing 2,150 patients. In 1973, we had four municipal hospitals housing 792 patients. In 1969, 11% of admissions to the municipal hospitals were voluntary; in 1973, 45%. In addition to these figures from the Nova Scotia Hospital and the Municipal Mental Hospitals, there are about 200 beds in Nova Scotia in General Hospitals, all of whom have been admitted voluntarily with exactly the same admitting procedures as the rest of the hospitals, none of whom are confined in any way and any of whom are free to leave the General Hospital at any time they wish. As one with

responsibility for such a unit in the General Hospital, I can tell you that our problem is to get people out and we fight a constant battle to reduce our length of stay. As well as this, there are hundreds of people in this province who, until the fifties would have gone to one or the other of the hospitals mentioned, who are now treated in private offices of Psychiatrists, in Outpatient Clinics throughout the province. The major thrust of the psychiatric profession everywhere has been to get more community facilities; to have day hospitals; half-way houses and so on, so that more and more patients may be in the communities, not separated from their jobs and families.

Let me say here that a tremendous amount of the development of these community services, outpatient clinics and improvements in the Nova Scotia and Municipal Hospitals has largely resulted from the genius and devotion of Dr. Clyde Marshall, who was a pioneer on this Continent in the development of mental health services. Between us, I would venture to suggest that we have probably been responsible for getting more people out of psychiatric facilities and keeping them in the community than any other two Nova Scotians. We are also the most obvious targets of attack by people whose thought is portrayed above.

I think I am particularly concerned though about one issue that I would like to describe very briefly. There is no doubt that there is tremendous public concern about the increasing amount of violence in our communities and the part played by our penitentiary system and parole board. Many responsible individuals, including the Solicitor-General of Canada and the Attorney-General of British Columbia have posed the problem very well. In Canada we have more people locked up in penitentiaries proportionately than any other civilized country. Undoubtedly large numbers of the penitentiary population not only do not need to be there, but should not be there; are being harmed by being there and each one is adding to our tax bill to the tune of approximately \$11,000. a year. However, some individuals obviously have a great potential for danger and there is a necessity for a selection of the offender who is not dangerous, so that he may be paroled, and get back to the job of living and the confinement of the dangerous individual for the protection of his fellow society members. As must be obvious to you, prison officials are not very good at predicting dangerousness; lawyers and judges are not very good, and psychiatrists are very little better. Some would quarrel with that remark, but I do think that we, who have had some experience with this, are a little better, but not all that much so. This acknowledged inability to be very accurate in our predictions, has led to two extremes: a very few have said, "You must protect society. Keep everybody in." The opposite reply is "You are so poor at predicting dangerousness that you will do injustice to some that you call dangerous, so let everybody out." This is an attitude prevalent among younger lawyers, to wit the civil liberties type on the steps of Province House. That he is not alone in his opinion is shown by the Dean of a prominent law school, "If a kooky citizen wants to be kooky, he has a right to be kooky and no doctor, policeman, spouse, parent, child, neighbour or busybody has any right to do him out of his

kookiness." This remark highlights our current dilemma; a dilemma which is not resolved in the courts, who within the last few months, handed down a decision against a Washington psychiatrist, who released a patient after seven or eight months of treatment, who a couple of months later murdered a young boy. The maximum judgment in the District of Columbia was \$25,000. which was awarded to the parents. At the same time, the court has recently found judgment against psychiatrists in mental hospitals who have refused to release a patient because they believed he was dangerous and have ordered the patient released. On this occasion much larger judgment was found (dependent on the jurisdiction and not on the crime) against the psychiatrist. The easiest solution is to follow that suggested by the Dean quoted above, who contended that his aim was to close all the mental hospitals and let all patients walk around the streets. This would seem to be a return to the Seventeenth Century, when the mentally ill wandered about, ending up in jails, poorhouses, cellars or garrets, or they were warned out of town. Surely we have to find an in-between course combining permissiveness, justice and protection as best we can. Admittedly we are very bad at this now; equally, the courts are not better.

A most interesting paper at a recent American Psychiatric Association meeting was entitled, "*They Died With Their Rights On*", a report of five patients recommended for commitment by their physicians and refused by the courts, all of whom suicided within a few months — two burning themselves to death. Improvement in this vitally important function will only be by a collaborative effort of courts, parole boards, penologists, psychologists, social workers, psychiatrists and anyone else who can contribute. Despite all this professional activity there is a serious need for further study of the problem which will involve the setting up of experimental situations which on occasion will certainly prove to be wrong. The public must understand this and have some tolerance for failure if this kind of venture is to give better guidance than we have at the present time. Without such improvement, the alternatives seem to me to be the chaos of the Middle Ages or the police state of forty years ago. □

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Estate Planning Directed to the Medical Profession

Dr. H. Ian MacGregor* Talks to The Bulletin

Large group practices and community health centres will not take over from the solo physician or small partnerships — “Not in my lifetime at any rate,” according to Halifax doctor H. Ian MacGregor.

It's been a pretty productive lifetime, too, with 28 years of service to the city's north end residents, including duties with the visiting dispensary and, more recently, with the innovative North End Community Clinic, a neighborhood health care delivery and counselling project initiated by residents with the assistance of both the Medical Society and the Department of Health.

Dr. MacGregor agrees that large health centres may have some relevance in many densely populated urban areas, “but not so much in this part of the country; not in what is essentially a rural environment where people are accustomed to having their own doctor. And I don't think the doctors would go for it anyway.”

Still, he said, patients were becoming accustomed to receiving care from other than their personal physician within group practice settings.

The introduction of MSI has had an effect within his own practice — a three-man team effort involving Drs. Robert Brown and Philip Davis — but he has noticed a kind of obverse public reaction in a decline in the demand for housecalls.

“The housecall isn't really a very efficient or effective way to practise medicine. Sure, there are times when housecalls must be made; obviously, when patients are bedridden or simply can't get to the office. I don't think anyone would argue that point.

“But the housecall which could just as easily be handled in the office takes, in this city anyway, up to an hour to complete when you consider travel time, and more often than not the patient could have received quicker service if he or she had been able to get to the office.”

Dr. MacGregor feels the decline in housecall demands stems from a public realization that people can get quicker service in the physician's office; that they don't have to wait at home for upwards of three hours until the doctor is free of clinic responsibilities and, possibly, from a slowly growing realization that a publicly funded health care system will work more effectively to everybody's benefit if the physician's out-of-office time is cut to a bare minimum.

*Immediate Past-President, College of Family Physicians of Canada.

“Ideally,” Dr. MacGregor said, “housecalls should only be made at the doctor's discretion . . . but this isn't as easy as it sounds.”

If he had one piece of advice for patients seeking a physician's services, he said, it would be this: “Anyone calling a doctor's office should be prepared to provide as much information as possible to whoever answers the phone. General practitioners receive a tremendous number of calls from patients who, if the doctor isn't in, simply leave their name and number. Most of the time, the nurse or receptionist will do her best to elicit some information about the patient's complaint, but often — particularly on weekends — the patient will get in touch with an answering service which, understandably, is not in the business of obtaining diagnostic information. As a result, all the doctor gets is a name and a phone number. I'd say about 50 percent of our calls fall into this category.”

Dr. MacGregor feels that if a patient thinks a condition requires immediate attention, he or she should say so. “Sometimes it's far more efficient and convenient for both parties to meet at the local hospital's emergency clinic. This isn't ideal in terms of the hospital's priorities, but if a patient calls when I'm out and feels the situation is grave enough to require attention right away, all they have to do is to leave the message that they have gone to emergency and the odds are I'll pick it up and meet them there. Sometimes this is the best bet even if they do get in touch with me directly.”

He said that this procedure is probably advisable when a relatively serious medical condition presents itself on weekends. “Of course, in some ways it's not fair to tie up the emergency facility like this, but if I can get there to handle the problem there's really no drain on the department's manpower.”

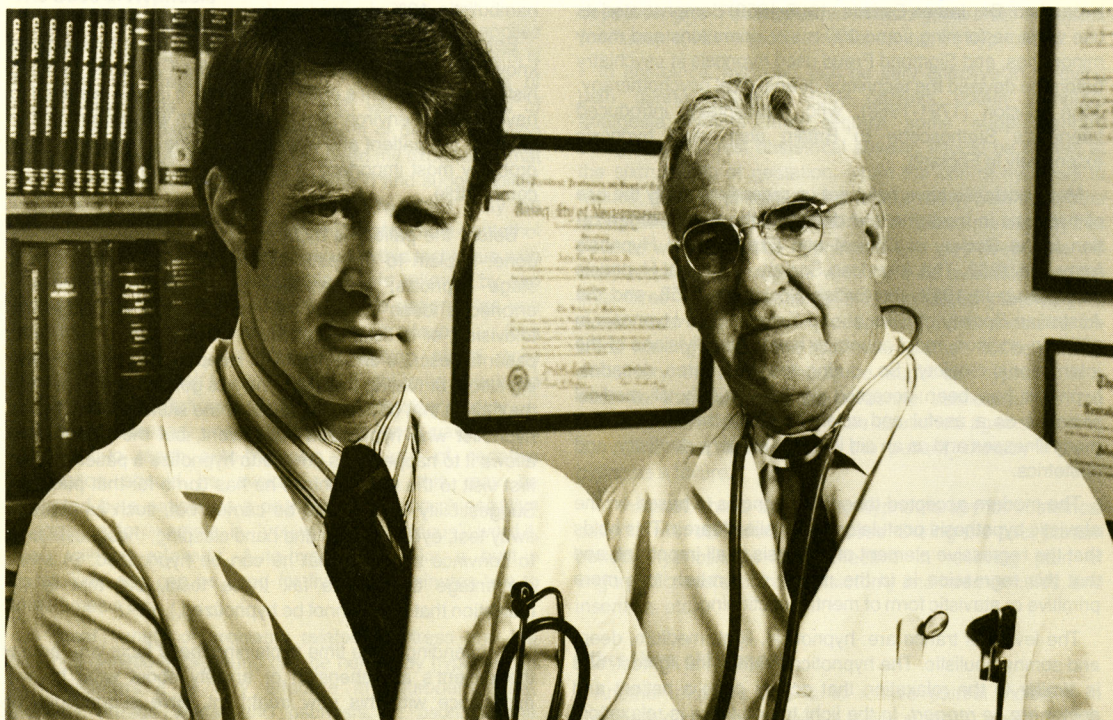
Dr. MacGregor concedes, however, that there is a vital need in Halifax for an ambulatory care unit in the Victoria General Hospital so that the emergency department can meet its real obligations and he pointed out that patients using the department for non-emergent conditions could experience frustrating delays because of their low priority status.

Still, he feels that patients could probably increase health care efficiencies by being more precise about their problems on the phone with messages which will help the absent physician to determine the degrees of urgency involved and to make the appropriate arrangements. □

When he (Axel Munthe), was a young man in Capri, Pacciale, a fisherman friend of his, lay dying. He was one of the truest and most pure-hearted of men. His wife and children had never known him to say an unfair word. The old priest had administered the Last Sacrament and now stood by the far side of the bed. Members of his family huddled silently in the shadows of the little room. Pacciale had fallen into a deep slumber and seemed to have left this world, when, slowly and for the last time, he opened his eyes. He gently stroked the hand of his doctor friend and whispered “Siete buono come il mare” — “You are good like the sea.”

Gustaf Munthe and Gudrun Vexküll

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Hypnosis in General Practice, Obstetrics and Dentistry

H. R. Phillips*, M.D., C.M.,

Halifax, N.S.

The origins of hypnosis are lost in antiquity. It is believed that this form of therapy was used by the physicians of Ancient Egypt and in the "sleep temples" of Classical Greece, and probably was the "Druidic sleep" practised by the Celts. Mesmer (1734-1815), who is thought to have been the first to study hypnosis scientifically, practised what was at that time known as animal magnetism. In fact, it was Dr. James Braid (1795-1860), an Edinburgh surgeon, who coined the word hypnosis. The true meaning of the word is sleep, but hypnosis is a waking sleep, not a physiological one. Many other important personalities of that era used hypnotism. Dr. James Esdaile (1808-1859) demonstrated its use while performing some 300 major operations and many minor ones, and Sigmund Freud used hypnosis in psychiatry before he devised the technique of analytical psychotherapy. John Elliston (1791-1868), who, incidentally, introduced Laennec's Stethoscope to Britain also used hypnosis extensively in England.

Many societies have been set up recently to study the use of hypnosis in medicine and dentistry; the parent organization is the Society of Clinical and Experimental Hypnosis formed in 1952. The American Society of Clinical Hypnosis was set up in 1957, the British Society in 1958, and the Australian Society of Clinical and Experimental Hypnosis in 1971; in addition, most countries have local divisions of the International Society. So, during the past three decades, hypnosis has been accepted by the majority of medical societies as a useful and scientific art in the treatment of many illnesses and as an aid in minor surgery, dentistry, and obstetrics.

The modern accepted theory of hypnosis is based on the atavistic hypothesis postulated by Ainslie Meares. This holds that the regressive element of hypnosis is all-important, and that this regression is in the nature of a return to a more primitive or atavistic form of mental functioning.

The levels of trance are: hypnotical, light, medium, deep, and somnambulistic. The hypnotical state is the lightest, and is similar to the relaxation that occurs once a patient and doctor are *en rapport*. In the light trance there is relaxation, eye catalepsy, eye closure, a deepening of respiration, immobilization of the facial muscles, a sensation of heaviness in the limbs, and an ability afterwards to perform simple acts suggested during the trance (termed post-hypnotic suggestion). A medium level is characterized by partial amnesia, slowed muscle activity, limb catalepsy, feelings of detachment, and an ability afterwards to experience simple illusions and hallucinations as well as to carry out more difficult suggestions. In the deep trance the patient can open his eyes without disturbing the trance, can

control certain organic functions such as the pulse, and can achieve total amnesia; positive and negative hallucinations, also are obtainable, together with age regression and the ability to mobilize meaningful information from the subconscious or forgotten memory. Surgical anaesthesia sufficient for major operations is often possible in the deep trance state. The somnambulistic state, the deepest state of all, can be exemplified by sleep-walkers, who have no recollection of their experiences. The percentages of a normal population sample able to gain the different levels of hypnosis are: hypnotical, 100%; light, 95%; medium, 55-80%; and somnambulistic, 10%.

Before using hypnosis it is essential to have an adequate knowledge of the subject, and to take an accurate detailed history of the patient's emotional status. It is also essential to have a proper environment. A quiet room with a comfortable chair for the patient and without telephone interference. It is probably most important of all that the patient's clothing be comfortable.

Before the patient is hypnotized, the following should be done. Explain to the patient that medical hypnosis is not stage hypnosis; discuss and dispel any preconceived, erroneous ideas on what he has seen on the stage, on television, or in fiction. Explain to him the feeling that most patients describe under hypnotic sleep: that is, a daydreaming sleep, or feeling that the mind has gone blank. Explain to the patient that he has full control of the situation. It is not the hypnotist who hypnotizes the patient, but the patient who allows it to happen. It is unwise to hypnotize a patient on the first visit to the office, unless he has come for that purpose. Suggestibility tests should be carried out, such as postural sway test, eye catalepsy and hand claspings; these tests help to convince a patient that he can be hypnotized. (A small percentage of patients fail these tests, but that is no indication that they cannot be hypnotized.)

By spending some time explaining these facts you reduce the patient's apprehension or anxiety about what he will experience with this new treatment. Give suggestions of relaxation to suggestible persons; one can take most such patients from a light, to medium, to deepest trance state in which auto- and post-hypnotic suggestions are possible and surgical procedures can be carried out. By auto-suggestion or self-hypnosis, the patient is instructed to hypnotize himself either in a waking state or when hypnotized. Erickson, in 1944, defined hypnosis as "an increased susceptibility to suggestion as a result of which sensory and motor capacities are altered so as to initiate appropriate behavior." A "suggestion" is defined as an idea that is accepted uncritically and favourably and results in the initiation of appropriate behavior.

*Mailing Address: 6178 Quinpool Rd., Halifax, N.S.

The Dangers of Hypnosis

The dangers to the subject include precipitation of a psychiatric illness, causing recrudescence of symptoms in a patient whose illness is in remission (e.g., schizophrenia), and worsening existing disorders (for example, some types of regressed patients may become suicidal after hypnotic intervention.) There are other dangers; the possible increase of dependence and sexual seduction and criminal activity; these are possibilities in motivated people. Apparently more problems are found in experimental hypnosis than in hypnosis used as treatment in family practice. There are certain dangers to the operator also, including the danger of grandiosity, or of the narrowness that can be applied to every professional person who becomes highly skilled in a special technique. In addition, psychiatric disturbance has been reported in some operators after their use of hypnosis.

The Uses of Hypnosis

One of the most important effects of hypnosis that applies to many conditions faced almost daily by family physicians is the relief of anxiety and tension. The medical use of hypnotherapy has been applied with various degrees of success in the diagnosis and treatment of disorders falling under every clinical specialty. It has been my experience that there is an inverse ratio between tension and suggestibility. In patients that are unable to relax, hypnosis may be obtained by the use of approximately 3cc of sodium pentathol injected slowly intravenously. I have used this technique with good results. In anxiety states patients are relieved by ego strengthening procedures. You say to the patient; "as you become . . . and as you remain . . . more relaxed . . . less tense each day . . . so you will develop much more confidence in yourself to do what you ought to be able to do . . . without fear of failure . . . without unnecessary anxiety . . . without unnecessary uneasiness . . ." In these patients it is important to teach auto-hypnosis. The use of negative suggestion should be avoided, because this may be accepted by a patient as a positive suggestion. A negative suggestion, for example, is, "you will not be anxious"; word it, "you will be relaxed." Auto-hypnosis is like a built-in tranquilizer and can be used for five to ten minutes two to three times a day.

A great variety of problems related to stress and the patient's genetic background can be helped by hypnosis. In skin disorders it is very effective in neurodermatosis, alopecia areata, warts, and psoriasis. In psoriasis the treatment must be repeated frequently to assist in controlling the condition. It is effective in insomnia, physical discomforts, emotional stress manifested as tension headache or migraine, pruritis vulvae, and in emotional asthma, etc. In these and other, similar long-standing problems it is necessary for the hypnotherapist to find the cause of the patient's anxiety and discuss it with the patient; then the patient may expect a cure. The more prolonged the complaint (e.g. migraine and tics), the less success there is in obtaining complete relief of symptoms. It is very necessary to discuss emotional problems with patients, and help them improve their ego-strengthening or image. In cases of

obesity, it is beneficial to help patients follow a proper diet, to lessen their apprehension when they do not lose weight, and to encourage them when they do. It is also effective in relieving or suppressing guilt, thereby making patients become much happier. In hypnotherapy the cause of guilt is suppressed and in some cases the cause forgotten; maintenance of the suppression may require repeated hypnosis. Phobias such as claustrophobia or fear of impending accident while driving a car are suppressed very effectively by hypnosis. Students with learning disabilities or poor concentration can be helped considerably to become more successful. People with inferiority complexes and inability to speak out freely are helped to improve their image by ego strengthening procedures. In patients with a genuine desire to stop smoking or drinking, hypnosis may be beneficial. Stammering may also be relieved, even cured, if hypnotherapy is instituted as early as possible after the onset of the habit. The incidence of stammering is much greater in boys than girls. Patients with certain organic brain diseases, for example, Huntington's chorea, cannot be hypnotized.

In obstetrics, hypnosis can be very effective in relieving pain during delivery. Many patients obtain complete analgesia; others may require some supplementary analgesia. The first obstetrical session should be started at the sixth month of gestation, when the use of hypnosis to reduce, perhaps eliminate, the fear, anxiety, pain syndrome is explained. It is essential during this session to explain that patients who cannot be hypnotized to a very deep state will likely require an analgesic which will be available. For the final three months, patients are hypnotized preferably at weekly intervals, eventually deepening the hypnosis to the sleep walking state. If the hypnotherapist will not be present at delivery, the patient should be taught self hypnosis. It is essential that inexperienced personnel associated with the case room and delivery room be cautioned against making comments that could disturb the patient, thereby making hypnosis a failure.

In the past, I have used group hypnotherapy for obstetrical patients with considerable success. During the post partum period, hypnosis is also effective in relieving pain of engorged breasts, painful episiotomy and haemorrhoids, and insomnia, etc.

Other Uses of Hypnosis

Another effective use is to relieve painful incisions in suggestible patients following major surgery. Anaesthetists may use hypnosis prior to induction with chemical anaesthesia to relieve the patient's anxiety regarding being put to sleep, and reassure the patients that when they wake they will be relatively free from pain, nausea, and vomiting.

In physiotherapy for whip-lash and cervical sprain, hypnosis is helpful in relieving pain and muscle spasm. It is also helpful in assisting active exercise of painful, stiff joints.

In children, hypnosis can relieve problems such as habit spasms, bedwetting, phobias, etc. The technique used in hypnotizing children is similar to that in adults except for the great reliance on children's imaginative powers and ability to

hallucinate. The blackboard technique is particularly effective with school age children.

In dentistry, hypnosis assists apprehensive patients who are good subjects, by relieving fear of dental procedures and in giving analgesia when indicated. I have used hypnosis on such patients and they have undergone extractions without experiencing any pain. The dental work may be done under hypnotic trance or be carried out under the influence of a post-hypnotic suggestion that the patient will be relaxed. Hypnotherapy is also useful to allow patients to become more familiar with or adapt better to dentures, to allow them to keep their mouths open more comfortably for longer periods of time, and to reduce salivation during dental work.

I use hypnosis extensively in my general practice. If a patient whom I have recently hypnotized should come with a new complaint, such as severe sunburn, I can give him immediate and prolonged relief by hypnosis, using a signal, like a touch on the shoulder and by post-hypnotic suggestion that he will be free of discomfort for a period of three days. This applies also in the case of dental extractions. Relief of pain following fractures, e.g. Colles', and adjustment to a cast can also be accomplished. Hypnosis is helpful in relieving intractable pain like that from cancer and in assisting the patient to accept his illness. Experience alone reveals the value of hypnosis in these situations.

Problems in marriage, for example, impotence and frigidity, are frequently relieved by hypnosis. The cause of these sexual disturbances may be deep rooted and information regarding the cause can be obtained with hypnotherapy and hypno-analysis. Patients are most grateful when they have overcome their problems. Since marital problems are frequently the primary cause of secondary complaints, hypnosis is valuable in revealing the primary cause.

Other benefits, hallucinating while under hypnosis, seeing and smelling flowers, result in a post-hypnotic happier mood; whereas, suggestions of sadness (i.e. they will become easily adjusted to the impending loss of a pet) may increase sadness.

Suggestions given to a patient to deepen hypnosis must be remembered and erased before bringing the patient out of a trance. If any are retained, the patient must be re-hypnotized and the suggestions removed. Patients should be wide awake, happy, alert, relaxed, and free of any discomfort, such as headache before they can be allowed to leave the hypnotherapist's office especially if they are driving.

I have not given case histories, but I have many patients with the problems discussed. I used hypnosis on one patient who feared heights, even when he was on a ladder and things such as shelves falling on him. By the use of age regression, I was able to learn that his fears resulted from a fall in childhood. After exploring and discussing that experience with the patient, I succeeded in relieving those fears.

A ten year old boy whose father fell against him when he died had difficulty sleeping for the seven years after his father's death because of persistent thoughts about his father. He was a nail biter and at age 17 had great difficulty

retaining a job. He experienced an abreaction during deep hypnosis and accepted his father's death after the abreaction in a normal manner. He is now sleeping well and has steady employment.

Conclusion

My aim in this article is to encourage general practitioners, dentists, and students in medicine and dentistry to become more aware of the uses of hypnosis. There are many other applications especially in family practise that are not mentioned in this article. Although hypnosis is becoming more widely accepted, there is a great need for educators in our medical and dental universities to organize hypnosis as a course. During 1973-74, three medical students selected hypnosis as an elective, and during 1974 Dalhousie University included a course in hypnosis during the refresher courses. This was a beginning; it is to be hoped that, in future, more students will become interested in and involved with hypnosis, and that the medical professional will make greater use of this increasingly effective form of therapy. □

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Brief Note

CMA ACTIVITIES

Several Nova Scotia doctors are involved in activities of the Canadian Medical Association through different committees. One of these several committees is that of the Conjoint CMA & CSRT Committee in the Approval of Nuclear Medicine Training Programs. This Committee is composed of physicians and technicians from the different regions of the country. The Committee is charged with the approval of Nuclear Medicine Technician Programs which are mainly either institute type training programs or those based in hospitals. The training of Nuclear Medicine technicians in Canada to a fairly uniform standard is due to the activities of this Committee. Doctor J. A. Aquino of the Victoria General Hospital is the physician representative while Mrs. Martha Pearce of the Halifax Infirmary represents the technicians for the Maritime Provinces. Both welcome inquiries related to Nuclear Medicine Training Programs. □

Dr. Jose A. Aquino
Associate Professor
Department of Radiology
Victoria General Hospital.

Our Family Physician

Bertha O. Archibald,*

Halifax, N.S.

It was in the year of 1907 that Dr. A. McD. Morton was elected President of what was then known as the Halifax and Nova Scotia Branch British Medical Association. His residence at the time was in the village of Bedford and he entertained the Branch at the Old Bellview Hotel where he made his presidential speech.

Dr. Morton's practice covered a very large area. Not only Bedford but Rockingham (occasionally), Birch Cove, Prince's Lodge, Mill View, Lower and Middle and Upper Sackville, North and South Beaver Bank, Lower, Middle and Upper Hammonds Plains, Pockwock, Yankee Town, Carney Road, Windsor Junction, Cobequid Road, Waverly, Fall River, Lucasville and even to Mount Uniacke. This was all done by horse power not motor power, as he labored during the "horse and buggy days".

He could have entertained the Branch with many an interesting experience pertaining to a country practice, but this he did not do. The many accidents from the lumber mills in his territory made him very skilful in minor surgery. He could have talked on that subject. He could also have entertained them with historic events pertaining to Bedford, as this village is rich in historic interest. How Champlain in his writings over four hundred years ago described the Basin and river, which is now known as Sackville River, and even the little Island known now as "The Island." He might have told them that it was Charles Fenerty of Sackville who was the second person in the world to have taken out a patent for making paper out of wood.

A man in Germany made the same discovery the very same year, but he registered first. This item is recorded in the British Encyclopedia. The history of the old Manor House would have been of great interest. However, the real subject of his discourse was "Some of the mistakes we are apt to make."

He wondered if the present day theories (1907) would be proven erroneous or questionable within the near or distant future. He recalled that Tartar-emetic had been used in the past for nearly every condition, and how seldom it was being used today. He said, "We go to extremes and often times do harm to some new idea or new therapeutic agent by devoting all our attention to it, and forgetting everything else. At present the Optomic Index is being brought to our attention." He continued his remarks by warning the Physicians against too much dependence on laboratory findings, instead of becoming more familiar with bedside symptoms. He then spoke on Expiricism. One should not be too hasty in adopting new methods. Perhaps he was thinking of the time that cupping-cups were so highly recommended for pneumonia. I recall one case where he tried out this treatment, only to resort in desperation to his own treatment, but it was too late.

*Pharmacist Retired — Victoria General Hospital, Halifax, N.S.



Dr. Angus McD. Morton, Bedford physician with his daughter Jean.

As a rule he was most successful in cases of pneumonia. Then the idea came of very cold fresh air. His success was due not so much to these methods but "good nursing".

He spoke at great length on Tuberculosis, "I think it is shameful that we have no system of vital statistics in the Province of Nova Scotia (1907). I believe that we have more Tuberculosis in Nova Scotia, particularly those of bone and joint, than almost any Province of the same population in the world. During the year thousands of dollars have been spent in Halifax, and thousands and thousands of dollars through the Province of Nova Scotia, to put down the epidemic of smallpox in which there was scarcely a death, but little had been spent on prevention of tuberculosis. I am glad to see that an Anti-tuberculosis league is about to be formed in Nova Scotia." I might say that Dr. Morton lived long enough to see his hopes for some of these changes accomplished.

He spoke of preventive medicine, and urged the physicians to put less faith in drugs, and to try and teach the patients rules of Hygiene. More information for the public should be available regarding sanitary and hygienic conditions. He quoted Dr. Burrell, who said "Keep Hammering the tenets of preventive medicine into them on every possible occasion, and finally we shall reach the golden age, when

disease shall be the exception and our efforts shall be largely spent in regulating the living conditions of the healthy and vigorous." Dr. Morton might have continued and suggested compulsory examinations monthly or quarterly for every person; then the early symptoms of cancer might be detected.

In those early days, Dr. Morton often found it most difficult to get his patients to the hospital, so the surgeon was brought to the patient, whenever the case was too difficult for himself.

His many experiences of "Kitchen-surgery" would fill a volume. Twice in his life he successfully delivered triplets. Although such a busy person he usually found time to be in his pew on Sunday and gave liberally to the Lord's work.

Dr. Morton came to Bedford in the year 1898, moved to Halifax, where he died in 1944. So his ministry covered many years and he was indeed beloved by his people, and respected by all who knew him. □

Inside Your Outside

THE ENVIRONMENT'S THE SAME

Negative external environmental pressures are always in the news these days; and that's a healthy sign if concerted corrective measures are to be taken.

Unfortunately, though, we still seem to have only one foot in the rapidly departing boat when it comes to considering our own "intimate" environments. We are, in fact, reluctant emigrants from the land of self-inflicted illnesses, and the lure of lethargy, alcohol abuse, tobacco addiction and societal stress along with the firmly entrenched conviction that physical fitness is the sole preserve of an elite few seems to guarantee that we will never leave dockside.

There's a reason for this, of course. It's always easy to rail against a corporate or government entity which can be seen to be abusing a common environment. And it's a helluva lot easier to wax indignant while counting dead fish in polluted waterways than it is to give up smoking or to commit oneself to the initial agonies of jogging and pushups.

Fortunately, the federal government's Participation program and the thrust of provincially inspired and, to a certain extent, funded recreation programs are there to serve as goads to the guilty and to keep our individual and collective potential before us. As with all such programs, they are open to criticism, but even the most vociferous critics would be hard put to deny that at least *something* is being done.

Still, the inertia of the conditioned human psyche is hard to overcome. Cancer may scare us, but we keep on smoking. Heart attacks always happen to someone else. Busy? You bet we are! But four or five stiff belts of what the bootlegger's daughter ordered helps us to unwind at the end of each day — and on the weekend we'll make up for the days we might have missed.

And so, our "intimate" environment — that microcosmic universe bounded by the epidermal layer — continues to suffer the kind of abuse which, if it were inflicted on a definable piece of real estate, would have citizens' groups up in arms on a 24-hour-a-day basis.

Perhaps the analogy has merit. Extrapolating (intrapolating?) from the outside world and relating conditions there to our own organic functions and dysfunctions might help us all to appreciate our own personal pollution problems a little better.

Is it inconceivable that instead of giving sage medical advice to a less than temperate patient a physician might elicit a more positive reaction by likening his or her overall condition to the Detroit River which — to the amazement of that city's residents — became so polluted several years ago that it actually caught fire? Possibly a lucid description of the terrain around Sudbury — where, believe it or not, U.S. astronauts undertook a short course in lunar exploration — might more appropriately define the hazards of smoking to an inveterate smoker.

Perhaps physicians themselves might profit from a short course in total environmental integration — even though there are some arguments which may have a more persuasive impact.

For instance, British research into smoking has revealed that the loss of productivity among British M.D.'s — owing to early retirement attributable to respiratory problems, deaths traceable to a similar cause, restricted ability to continue practice, etc. — about equals the immediate potential of one university medical graduating class per year.

If we assume that it costs about \$42,000 to produce a qualified physician (not necessarily including pre-med education), then the direct cost of smoking in the professional medical field alone, in both monetary and service-capability terms, could reach staggering annual proportions. Incidentally, that \$42,000 figure is an *assumption*. No doubt there are other escalating considerations involved.

It's always easy to preach about self-inflicted illnesses. Certainly, physicians are well-acquainted with the frustrations of providing simple advice on effective and health-inducing regimens of abstinence and/or fitness improvement. No doubt many would agree that only compulsion will ever lead to a truly healthy society (in the physical sense).

The problem is, short of throwing various constitutional guarantees, bills of rights and accepted practices out the window, you can't compel people to clean up their "intimate" environment in the same way that society can crack down on those who despoil our natural surrounds.

Or can you?

There's no price for the best answer, but if you have a way, the Bulletin has the will to print it. □

Pharmaculture '75?

W. D. R. Writer,* M.B., Ch.B., F.F.A.R.C.S. (Eng), F.R.C.P. (C),

Halifax, N.S.

C.P.S. '75 has arrived. This outstanding publication is a tribute to the Canadian Pharmaceutical Association and the Pharmaceutical Manufacturers who offered their support. Sadly, it is a blue oasis in the vast Pharmacological desert of North America.

The Problem: Drug Availability

Of the 42 therapeutic agents advertised in a recent U.K. Medical Journal¹ 50 per cent are not available in Canada.

Although some are newer drugs (e.g. benserazide and carbidopa, dopa-decarboxylase inhibitors) others (e.g. sodium fusidate and flucloxacillin, anti-staphylococcal antibiotics; *injectable* streptokinase, for clot lysis; oxprenolol, B-adrenergic blocker) have been available for some years — 14 in the case of sodium fusidate.

Canada's ethos is happily poised between British conservatism and American aggressiveness, and she is said to have eschewed the undesirable in both cultures. Pharmacologically, National characteristics are reversed and there is a danger of Canada sliding into the retrograde practises of her American neighbours who, for example, like alchemists still search for the ideal anaesthetic, which will anaesthetise, narcotise, and relax at the administrator's whim — an omnigas so to speak.

Patients in Canada are being denied drugs of therapeutic worth which have been available in Europe for several years. One reason appears to be thalidomide.

The Explanation: Drug Marketing

In Canada drugs are released with the approval of the Health Protection Branch of the Food and Drug Directorate. Despite the opportunity of liaison with the U.K. Committee on the Safety of Drugs and the American F.D.A., the F.D.D. insists on some experimental work being undertaken in Canada before a drug is marketed.

Before the thalidomide disaster, documentation of adverse drug effects was casual.² Thalidomide was marketed in Europe and Canada, but not in the U.S.A., a fact which has provoked America to self congratulation on occasions, but which may also explain her present pharmaceutical aridity.

Thalidomide was a pharmacologic ill wind (and a terrifying human disaster), which blew a lot of good into the Drug Houses, Hospitals, and Consulting Rooms of Europe. Afterwards, drugs were stringently tested for teratogenicity before use in man. Early warning systems of notifying

adverse reactions were developed, and Physicians became highly suspicious of a manufacturer's claims for his latest wonderdrug.

The present Congressional hearings into the running of the F.D.A. suggest that there may be 'cogent' reasons for the delayed marketing of some drugs in the U.S.A. Despite the 'Chloramphenicol crisis'³ it is tempting to propose that America's failure to experience a major therapeutic disaster has bred a mood of ultracautiousness and adherence to 'well tried remedies'.

In Canada the Federal Drug Directorate appears to have overreacted to thalidomide and to have assumed an overstringency since.

The Solution: Therapeutic Aggression

Recent pharmacological research aims to produce drugs fulfilling a particular biological role (e.g. l-dopa)³. It follows that with specificity, adverse effects will diminish. (All drugs have side effects and one lesson of aspirin is that an 'adverse' effect — diminished platelet adhesiveness — can be turned to therapeutic advantage in protection against postoperative thromboembolism.)

The popularly prescribed antiemetics in the Victoria General Hospital are dimenhydrinate and perphenazine. They are 'time honoured' drugs with unpleasant side effects of drowsiness, dry mouth and, in the case of perphenazine, extrapyramidal effects after long term administration. If Physicians habitually prescribe them, there will be no call for a drug with greater specificity.

The 'spin off' of aggressive prescribing is the incitement to manufacturers to produce drugs with a narrow spectrum of activity (antibiotics excluded!). Metoclopramide is an example of a specific anti-emetic without atropinic effects. It is not without adverse effect, in epileptics for example, but an improved drug can be expected to be produced by chemical manipulation of the parent compound.

To mature into aggressive therapists, Physicians require a determination to drop brand names. The inclusion of General Monographs under non-proprietary titles (e.g. Diazepam) in C.P.S. is welcome. Generic language is the Esperanto of Pharmacology, an essential in a world hindered by communication barriers. (C.P.S. lists 12 brand names for Diazepam alone.) Generics encourage the Physician to think pharmaco-economics — to prescribe drugs according to their price rather than to the beauty of the Manufacturer's calendar (or the cadence of his brand name).

Aggression needs Ottawa's support. The F.D.D. must show its preparedness to accept evidence from acknow-

*Assistant Professor of Anaesthesia, Dalhousie University. Staff Anaesthetist, Victoria General Hospital, Halifax, N.S.

ledged Overseas Centres. It has no obligation to attach significance to drug appraisal in the South Tibetan Prescriber⁴, but where a drug is in use after controlled clinical trials in reputable centres, its *early* release to University Hospitals (at least) in Canada would not be premature. (Pancuronium bromide, a significant advance in muscle relaxants, took a long time to cross the Atlantic.) A monitored Early Warning system of adverse reactions is a necessary part of this procedure, but a clean record after one year's intensive use should delay marketing no longer.

Summary

It is suggested that North America is a Pharmacological Desert. The view is expressed that Canada is not yet beyond cultivation and is capable of fertility if a policy of aggressive therapeutics is followed. The doctrine of specificity is commended.

Help is needed from Ottawa in establishing an irrigation system which will allow the Atlantic to bring therapeutic refreshment to Canada's interior! □

Brief Note

PRENATAL DIAGNOSIS OF MYELOMENINGOCELE

For some time now it has been possible to detect the presence of a number of genetic disorders prenatally, thus allowing the possibility of prevention by pregnancy termination in suitable instances. The principal indications for the utilization of amniocentesis has been previously summarized in these columns as:

1. Any pregnancy occurring in a woman aged 37 or more.
2. Pregnancy in a woman who has previously had a child with Down's Syndrome.
3. Pregnancy in a woman known to be a carrier of a deleterious X-linked trait.
4. A pregnancy for which the parents are presumptive carriers of a designated metabolic disorder (though not all of these can be reliably detected in utero).

A further important indication can now be added to those above which may be summarized as:

5. *A pregnancy in a woman who has previously borne a child with myelomeningocele, anencephaly, or other neural tube defect, or for whom there is a strong family history of such defects.*

The test which is done in these cases is the estimation of α -fetoprotein (AFP), the level of which is significantly raised in the amniotic fluid surrounding fetuses with an open neural tube defect.

The utilization of amniocentesis and AFP assay should lower the effective recurrence risk in the situations outlined

Acknowledgement

The author is indebted to Miss K. Kinley, Pharmacist, Victoria General Hospital, for her explanation of the complexities of drug marketing in Canada.

The interested reader is referred to the British Journal of Hospital Medicine 12, December 6, 1974, which helped to provoke this article.

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under number 5 above from about 5-10% or more (depending on the circumstances) to not more than 1%.¹

Counselling of patients likely to be at risk, together with amniocentesis and arrangements for AFP testing, are available through the Genetic Antenatal Clinic established at the Grace Maternity Hospital in Halifax. Further information may be obtained through either Dr. R. H. Lea or Dr. J. P. Welch, co-directors of the clinic, or appointments may be made by phoning 422-6501.

Readers interested in learning more about prenatal diagnosis and amniocentesis are referred to two previous articles on this subject which have appeared in previous issues of this journal^{2,3}. □

J. Philip Welch, M.B., Ch.B., Ph.D.
Associate Professor
Dalhousie University.

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Provision of Medical Services at Rock Concert

John P. Savage,* M.D.,

Dartmouth, N.S.

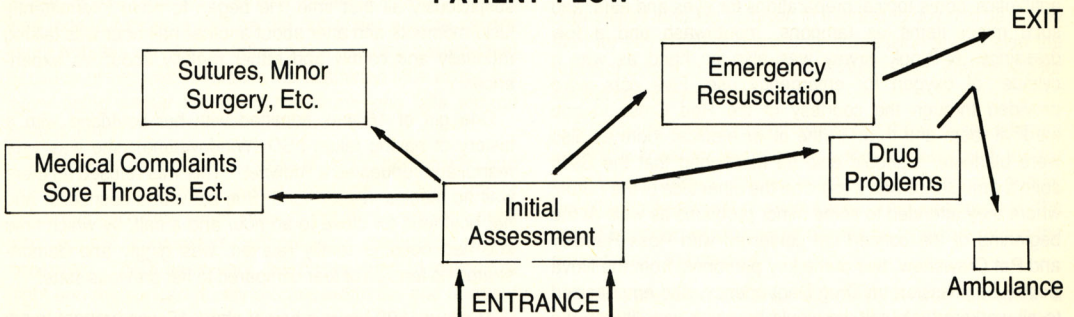
On September 22, 1974 a Rock Concert was held in the Halifax Forum. This Rock Concert was a scaled down performance of what had originally been planned: the original was to be a kind of Rock Festival which would be outdoors in the grounds of the Forum and which would have lasted from about midday to about 9 o'clock at night. This original idea was subsequently altered by moving indoors to the Forum itself, a decision which was taken I understand, because of poor ticket sales. I believe this was a very fortunate decision. The promoter had originally contacted a series of doctors with a view to attempting to find the least expensive medical services, an entrepreneurial exploit which was understandable when you consider that the cost of such medical services was thought to be high on first estimates and the promoters were expected to make at the most a very marginal profit. (In the end they made a significant loss). This decision to move the Festival indoors into a Concert was only made about seven days before the actual event: prior to that the anticipated attendance had been an expected 20,000 young people in an outdoor space and provision had been made in the initial phase for provision of medical services to cover such a crowd. For the initial planning of the Rock Festival I am indebted to Ross Ramsey of the Nova Scotia Commission on Drug Dependency. Mr. Ramsey had compiled a series of articles relating to the provision of emergency health care at Rock Festivals in the States and in England.

Levens and Durham¹ described the health services at an outdoor 24 hour event attended by some 40,000 people in England at which 490 patients were treated by First Aid personnel with only 81 referred to the doctors and only nine needing medical hospital emergency room care. Only nine were treated for drugs, a low number compared to the American experience. Ahronhein et al² gave medical

opinions following a festival at Goose Lake Park, Michigan, in August of 1970 which involved about 100,000 people. They emphasized the commercial nature of the event and also that the sponsor should provide the health service or pay for it. Hayman et al³ described the concert held on July the 4th, 1972 in Washington, D.C. at which some 47,000 young people attended: a total of 221 patients were treated at the five Medical Aid Stations and seven were seen first at the hospital emergency room. 84 patients were treated for various injuries of which 61 were lacerations, about 100 were treated for symptoms related to drug or alcohol intoxication, and six of these needed prolonged emergency treatment or observation.

Based on these articles and from our own suspicions of what a crowd of some 20,000 young people might do, Ross Ramsey had planned a Provisional Medical Service for the outdoor concert based on these articles and involving a system which would include an admitting or an initial assessment area, followed by dispersal to various places depending upon the type of case. People with lacerations would go to a suture area, people with drug problems would go to a different area, people with colds and sore throats, etc., would go to another area and this model seemed to be the best one to employ if we were to avoid any disasters. Accordingly we planned for the basement building of the Market Block in the Forum complex to be used as the Medical Services area and that this would involve seven doctors, ten nurses and in excess of 25 counsellors. The doctors originally scheduled included one medical officer in charge, one surgical resident skilled in emergency resuscitation procedures, one psychiatrist, two general duty doctors for suturing etc., and the rest of the doctors in various stations depending upon the need. (Table I.)

TABLE I
PATIENT FLOW



*Mailing Address: 176 Portland St., Dartmouth, N.S.

However, when the concert was moved indoors to the Forum itself, this elaborate Medical Service was obviously not necessary. There were several reasons for this:

1. The incidence of lacerations and injuries (a large number of them foot lacerations) would be significantly reduced or eliminated.

2. With the concert going indoors, entrance to the Forum being much more strictly supervised, it was felt that the incidence of drug entrance to the arena would be very much reduced because of the search that would be carried out by the police upon those entering the premises.

3. A belief I have, that many of the problems that arise from so called "soft" drugs in a concert as opposed to an outdoor festival, are not likely to need medical assistance so much as talking down facilities which would be provided by the Nova Scotia Drug Dependency Commission staff.

Accordingly everything was altered just one week prior to the event so that in effect one doctor and one nurse would be the sole medical personnel on duty with approximately 12 counsellors. Because of the prolongation of the concert which had originally been scheduled to run from 3 until 10 p.m., it looks wiser in retrospect to have had two doctors, since in effect a medical service had to be available until the concert finally finished at about 2:30 in the morning. However, this could not have been foreseen as it was due to the late arrival of performers and/or instruments from New York. The Medical Room was designated to be in the old Blazers' dressing room on the right hand side of the Forum as you go in. This a large room about 40' x 20' and we had another room two or three rooms away which could be used as a quiet room. An ambulance was to be kept outside and available at all times and should this ambulance be in use another one was to replace it straight away. The V. G. Emergency Department was contacted and Dr. W. MacRae's cooperation was very much appreciated. The Police Department was informed that we would be coping with most drug emergencies and were asked not to interfere, if at all possible, because of the danger that occurs in the confrontation by police of a young person temporarily way-out on drugs. A small dispensary was assembled consisting mainly of parenteral Chlordiazepoxide, Diazepam, Sparine and Chlorpromazine, assorted drugs for headaches, toothaches, dysmenorrhea, etc., a minor collection of antibiotics, some topical preparations for eyes and ears, and such minor items as tampons, mouthwash and a few dressings. A Brook airway was also on hand as was a cylinder of oxygen for emergency use. Five cots were provided through the courtesy of the Red Cross in one medical room and three in the other medical room as also were blankets. It should also be mentioned that the Saint John's Ambulance had a room on the other side of the Forum where they attended to some minor problems as well. At the beginning of the concert we conferred with Ross Ramsey and Pat Crawshaw, two of the key personnel from the Nova Scotia Commission on Drug Dependency, and emphasized to all workers that I felt we would be using very little in the way of medication for drug problems and we hoped that most

of the work would be done by the counsellors and most of the therapy would in effect be reassurance and "talking down" rather than medication. As it happened this turned out to be very true.

The concert itself attracted about 5,000 people who were jammed in the Forum, mainly on the seats and bleachers but with a good 500 or 600 people down on the floor surface which is normally taken by the ice. Records were kept on all people coming in and from these records it is possible to say that some 18 people were treated for various drug overdosage and toxic effects, mainly from LSD ingestion. We had anticipated that there would be two main times of treatment — that there would be an initial number of patients who had consumed drugs before coming in and then, later on a second rush either from fatigue, the effects of the music, the ingestion of further drugs, or all three, as the concert wore on. In fact, ten people were arrested on trying to enter the Forum for either possession or trafficking in drugs and there is no doubt that without this removal of drugs by the police before entering, we would have been in much more trouble if the amount of drugs that were apprehended, had got into the Forum and been consumed by young people. Ten of the people who were treated were treated for the effects of taking LSD, mainly in the form of what was called "Raspberry" or "Windowpane" and in most of the cases that we saw there was probable multiple drug use involving either marijuana or hashish as well as acid and also our old friend, alcohol.

Our first case was admitted five minutes after the concert started and this young man about 20 years of age had ingested, about three hours prior to the concert some LSD (Raspberry plus Windowpane) and some marijuana as well. This boy was extremely frightened, was having visual hallucinations and kept saying that "things were coming at him". He muttered that his head was "all frigged up", he was confused and extremely suspicious of anyone who came near him. Physically the only signs were a tachycardia of about 150 when he came in which dropped over the next three hours back to a normal 80 odd. He also had some conjunctival injection. His only contact with reality, which turned out to be invaluable, were two friends who stayed with him so he stayed in touch as it were through the good offices of these two boys. At about 1600 hours he began to calm down, began to talk a little rationally, although he was never violent, and he just lay there and glanced about him very suspiciously all that time. He began to have intermittently lucid moments and after about another half hour was talking rationally and calmly and rather ruefully about his experiences.

One girl of 16 was admitted with her boyfriend with a history of having taken LSD (Windowpane); she was very fearful and requested a "downer". This was refused as there was no medical reason for it. She sat with a counsellor and her boyfriend for close to an hour and a half, by which time she had become totally relaxed, was giggly and demonstrated no tension or fear compared to her previous state.

At about 1800 hours a boy of about 17 was brought to my attention outside in the foyer. He kept announcing in a loud

voice, "I want out, I want out". He was extremely confused, held his head in his hands, so I took him outside in the company of a girlfriend who fortunately had known him when he was in Port Hawkesbury. He was extremely upset, kept saying that he wanted out even though by this time we were outside. He was disorientated and certainly very fearful of anyone coming near him. Treatment of this boy was unfortunately complicated by an overzealous policeman, (most of the policemen were extremely cooperative with us in our efforts to cope with these kids) but this particular policeman kept wishing to run the boy in. The boy got very frightened when he saw the uniform of the policeman; he wandered around the compound for the best part of an hour, hanging onto the girl as if she was his only means of support. We were able to keep him away from the police for the rest of the time and two counsellors stayed with him, watching him carefully for about an hour as he wandered around the Forum grounds. We eventually managed to persuade him to come in and he entered the second medical room where he was left with a counsellor and his girlfriend. Again no drugs were used and after about 45 minutes he was completely rational and was able to look to his friends to return to Cape Breton.

About one hour after the concert started a young 20 year old boy from New Brunswick was seen to be staggering around, protesting that all people needed to get together and that he was demonstrating the need for love and understanding. He could not be approached or reached by anyone. He maintained this monotonous, high pitched message of brotherly love and eventually climbed the plastic wall which separates the rink from the spectators. While we were watching him he fell over backwards, falling about ten feet and hit his head hard against the stone base of the seat. He got up right away and we were able to take him straight to the examining room. The examination there showed he had a small laceration on the back of the head, not enough to require a suture, with a fairly large hematoma. We watched him closely for about two hours and he maintained the same pattern of confused, disorganized and disorientated conversation and thought. Eventually it became obvious that we could no longer cope with this boy since I was unable to decide whether his main problem was head injury or the possible ingestion of alcohol and drugs or a combination of both. Accordingly he was shipped off to the Victoria General Hospital after a phone call to the Emergency Department where he was detained overnight following X-rays. This boy was indeed fortunate that he did not suffer a more severe injury with this very heavy fall and one can only assume that because of his total relaxation he sustained little injury, his injury being similar to that of the drunk who falls without serious injury.

There were several other cases of young people who had ingested LSD, showed varied amounts of fear, minor hallucinatory states, disorientation, but these were all dealt with by the counsellors without any medication being necessary. There were very few cases after 11 o'clock at night and the concert noisily progressed to the end at about 2:30 in the morning. We had several complaints from youngsters who had headaches and who were suffering from

partial deafness but these were not investigated. This latter complaint of deafness was hardly surprising since the noise volume was horrendous and this condition may be assumed normal at such gatherings.

Conclusions

The vast majority of those present were healthy, normal youngsters who were there to enjoy their particular brand of music and had come from such places as Moncton, Cape Breton and from Yarmouth. Although this type of concert may be passé across North America it is possible that there may be more in the coming summer in the Maritimes and some suggestions are made for those doctors who may be involved.

1. Use the resources of the Nova Scotia Commission on Drug Dependency. The Commission has people of the caliber of G. Ross Ramsey, Coordinator Human Resources, Pat Crawshaw, and other people who have the time and the know-how and have collected material which would be invaluable to any doctor involved in such performances. The average doctor does not have the time nor the expertise to devote to the setting up of medical facilities and it would have been very difficult to have provided anything without the assistance rendered by Ross Ramsey and his workers of the Commission.

2. Insist wherever possible that Rock Concerts be held *indoors* in quarters that can be closely scrutinized by the police. You may be sure that the police will be in on most of this, as permission has to be sought from them first, and this enables the quantity of drugs getting in to be minimal and reactions therefore reduced.

3. Do *not* expect to use much in the way of medication when dealing with kids who are high on drugs. Most, if not all of these can be dealt with by the counsellors such as the people from the Nova Scotia Commission on Drug Dependency who can talk down kids in trouble with much happier results than with the indiscriminate use of Valium or Librium. Of the 17 cases which we came across in this particular concert we did not use tranquilizers in a single case.

4. Treat the patient, not the drug. Many kids who are in trouble have got that way from a combination of drugs, or more commonly a combination of their particular drug plus alcohol, plus an expectancy of getting into trouble. Warn the counsellors who are involved in the talking down to be on the alert for any signs of respiratory depression and to alert the nurse or doctor in charge if this should occur. Watch also for certain changes in consciousness.

5. Provide an airway and oxygen for those cases where a severe respiratory depression appears likely and in this connection always make arrangements with a nearby hospital for treatment of such cases. This also involves the use of transport which should always be available during the entire time of the concert.

6. Be prepared to ship out anyone who presents a complication in diagnosis or in treatment. It is seldom that there is adequate room and space and diagnostic facilities,

and where there is any risk at all the patient should be shipped to the nearest medical facility.

7. Use several small rooms in preference to one large one if you can. These rooms should have no bright lights overhead although some emergency lighting may be necessary particularly if head injuries are suspected.

One or two final comments may be made. A person involved in planning treatment for such a Rock Concert is said to expect approximately 0.01 percent of the people attending to develop drug related problems. Our incidence was slightly lower than this but there may have been other problems that never presented themselves for treatment. A personal observation was that I thought that the commonest drug in evidence was alcohol, although there was little evidence of any significant abuse, compared to, say, a hockey game at the Forum.

For more detailed hints on the management of drug abuse in young people the Nova Scotia Commission on Drug Dependency has a summary which is well worthwhile obtaining, dated May, 1973 with some updating.

Acknowledgements

It is a pleasure to acknowledge the assistance in editing and typing, of Mrs. W. H. Jackson, and the comments of Ross Ramsey, N.S. Commission on Drug Dependency.

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NEW MEMBERS

The Physicians listed below have joined The Medical Society of Nova Scotia between January 1, 1975 and March 31, 1975. A most cordial welcome is extended by the Society.

Dr. John D. Franklin	Dartmouth, N.S.
Dr. Eric L. Hansen	Halifax, N.S.
Dr. Doris L. Hirsch	Halifax, N.S.
Dr. John C. Hyndman	Halifax, N.S.
Dr. Gordon R. M. Jones	Halifax, N.S.
Dr. Charles P. Joulos	Halifax, N.S.
Dr. Peter L. Loveridge	Pubnico, N.S.
Dr. Herbert Orlick	Halifax, N.S.
Dr. Raymond G. Petrie	New Waterford, N.S.
Dr. Edith J. Pink	Mahone Bay, N.S.
Dr. Jeffrey Rees	Halifax, N.S.
Dr. John L. Sapp	Halifax, N.S.

Physician Self - Assessment

Lea C. Steeves, M.D.,

Halifax, N.S.

The following questions have been submitted by the Division of Continuing Medical Education, Dalhousie University, and are reprinted from The American College of Physicians **Medical Knowledge Self-Assessment Test No. 1** with the permission of Dr. E. C. Rosenow, Executive Vice-President.

It is our hope that stimulated by these small samplings of self-assessment presented you will wish to purchase a full programme.

DIRECTIONS: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the ONE that is BEST in each case.

4. Which of the following procedures provides the highest degree of accuracy in establishing a diagnosis of bronchogenic carcinoma?
 - (a) Cytologic examination of a deep cough sputum specimen following bronchial lavage
 - (b) Cytologic examination of gastric aspirate
 - (c) Cytologic examination of bronchoscopic aspirate
 - (d) Cytologic examination of deep cough specimens following bronchoscopy
 - (e) Biopsy of supraclavicular fat pad in which there are no palpable nodes

(Please turn to page 64 for answers)

□

Street Drug Analysis in the Maritime Provinces of Canada

Mark Segal,* Ph.D., Herman A. Ellenberger,** Ph.D., and Elsa Susnik,***

Halifax, N.S.

In response to the growing trend of non-medical drug use, numerous medical, educational, social and other services have been established. One of the most controversial of these services is that of street drug analysis. The controversy deals directly with the service's potential benefactor(s). Who is it to be? Is the information from the street drug analysis service to benefit the educator as a tool towards prevention, the physician faced with treating an adverse reaction, or the interests of users and traffickers by providing an effective quality control for potential products?

Unfortunately, the numerous street drug analysis services that have been established throughout the world and their resultant literature, ripe with data outlining misconceptions and fraud, have not yet led to a resolution of the original controversy.

The following report outlines data from the street drug analysis service established in Halifax, Nova Scotia and then goes on to discuss and speculate upon the relevance of the data to the existing non-medical drug use issue.

First, it is pertinent to reiterate the original objectives for establishing the project:

(1) To gain insight into the non-medical drug use issue in the Maritime Provinces of Canada by qualitatively and quantitatively analysing the drugs sold on the streets of urban and rural areas; and

(2) To provide street drug analysis data to physicians, emergency treatment units, poison control centers, educators, and to all other persons or places playing a role in the non-medical drug use issue.

The basic concept was to provide a potentially useful information service. Strict attention must, however, be paid to the manner in which samples could be collected. In accordance with federal legislation, samples could only be accepted from a licensed physician who was in the process of treating a patient.

Did the project fulfil its objectives?

*Associate Professor, Department of Pharmacology, Dalhousie University, Halifax, N.S. Present address: Department of Psychiatry, Hadassah Medical Organization, P.O. Box 499, Jerusalem, Israel.

**Assistant Professor, Department of Pathology, Dalhousie University, Toxicologist, Pathology Institute, Province of Nova Scotia, Halifax, N.S. Please address inquiries to Herman A. Ellenberger, Ph.D.

***Elsa Susnik, Technician, Dalhousie University, Halifax, N.S.

Methodology

Qualitative and quantitative procedures used in street drug analysis include: thin-layer chromatography, UV spectrophotometry, and gas chromatography; these are adequately detailed in the literature^{1,2}.

Results and Discussion

The data are outlined in Tables 1 and 2. From the small number of samples (mainly from the Halifax area) submitted for analysis, it is impossible to draw broad-based conclusions concerning non-medical drug use in the Maritime Provinces of Canada. However, some trends and factors can be mentioned and speculated upon.

From the data outlined in Table I, it is seen that all samples alleged to contain constituents of *Cannabis sativa* (marihuana, hashish, hashish oil) were analysed to contain one of its active ingredients, i.e., delta-9- tetrahydrocannabinol. None of the samples alleged as mescaline turned out as mescaline, but as phencyclidine (PCP), lysergic acid diethylamide (LSD), 2,5-dimethoxyamphetamine, or no drug. 75% of the samples alleged to contain LSD, contained only LSD. This figure is rather higher (by about 30%) than that reported for other parts of Canada, the U.S.A. and Europe^{3,4,5}. In some cases the alleged sample contained more than one active ingredient, neither one being the ingredient that the sample was alleged to contain. In agreement with data from other parts of the world, phencyclidine played a prominent role as a master defrauder. It appeared in samples submitted as unknowns, LSD, mescaline, peyote, "Angel Dust", tetrahydrocannabinol (THC) and *amanita pantherina* (the mushroom). Three samples of alleged mescaline were analysed as the compound 2,5-dimethoxyamphetamine.

Of extreme importance was the large range in potency within the same family of substances analysed (Table II). The widest ranges were observed with marihuana where the percent of active ingredient ranged from 0.06 to 2.35. A wide range in active ingredient content was also observed with hashish (1.00 to 8.07%). Wide ranges were also observed with the samples being analysed as LSD (18 to 175 μ g) and phencyclidine (from 0.12 to 5.8 mg). The range of analysed methadone was also large (26 to 148 mg).

It is, indeed, unfortunate to have to speculate on the basis of 82 submitted samples but this, in itself, might be reflective of a very important trend within the non-medical drug use issue in the Maritime Provinces of Canada.

TABLE I

Chemical Identity

Alleged Content	Total Number	Contains			Mescaline	Nothing	Heroin	Cocaine	MDA ³	Methadone	Methaqualone	2,5-DMA ⁵	Diphenhydramine	Caffeine	Barbiturates	Methamphetamine	Morphine	Other
		THC ⁴	LSD ¹	PCP ²														
Marihuana including hashish & hashish oil	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LSD ¹	8	—	7 ^a	2 ^{a,b}	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mescaline	9	—	1	4	—	1	—	—	—	—	—	3	—	—	—	—	—	—
Unknowns	25	2 ^c	3	7	—	9	—	—	—	—	—	—	—	—	1	—	—	—
Heroin	6	—	—	—	—	—	1	—	—	4	—	—	—	—	—	—	1 ^e	1 ^e
Cocaine	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
MDA ³	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
Mandrax	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—
Peyote	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Angel Dust	2	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
THC ⁴	2	19	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Amanita pantherina (mushroom)	2	—	—	2	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Miscellaneous	2 ^f	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Totals	82	23	11	19	—	12	1	1	2	4	2	3	1	1	1	1	1	4
% of Alleged		100	75	0	0		16	100	100	0	50	0	100	0	0	0	0	

¹ Lysergic acid diethylamide, ² Phencyclidine, ³ Methylene-dioxyamphetamine, ⁴ Tetrahydrocannabinol, ⁵ 2,5-Dimethoxyamphetamine

^a 1 sample alleged to be LSD contained both LSD and PCP.

^b Another sample alleged to be LSD + PCP analysed as a mixture of PCP and Methamphetamine.

^c Marihuana.

^d These included cold remedies and valium.

^e Morphine and ⁶ monoacetylmorphine in this sample.

^f These included an alleged "Snort sniffing compound" and a stink bomb.

^g This sample contained a green moist plant material in a red capsule which assayed 8.05% THC⁴.

TABLE II

Potency Range of Samples Analysed

Sample	Range of Potency
Marihuana	0.06 — 2.35% THC ³
Hashish	1.00 — 8.07% THC ³
LSD ¹	18 — 175 µg
PCP ²	0.12 — 5.8 mg
Methadone	26 — 148 mg
2,5-dimethoxy-amphetamine	77 — 114 mg

¹ Lysergic acid diethylamide

² Phencyclidine

³ ⁴ Tetrahydrocannabinol

It is almost unbelievable that in an area where non-medical use has been purported to be so widespread, that a mere 82 samples were submitted for analysis by local physicians over a one-year and two-month period. This may reflect one or more of the following! It is possible that non-medical drug use has markedly decreased in the region over the past year. On the other hand, it may mean that relatively few drug-using individuals required treatment by a physician. This has been reported. It may also mean that existing legislation intimidated both patient and/or physician to avail themselves of the service.

In order to obtain data on samples existing within an area at a given point in time or in order to assess the flow of materials from area to area, it is absolutely necessary to draw from a very large population; i.e., there must be a free flow of samples into the service. This cannot be done within the

existing constraints of the law. This is one area in which existing legislation hinders the free flow of information among personnel working within the non-medical drug use field.

A major factor to consider in non-medical drug use is the wide range in potency observed within a family of alleged compounds. Not only are users unaware of what compound they may be ingesting but they have no knowledge of the potency of the substance being administered. Ignorance in quantity can lead to severe problems as well as ignorance in quality. The two extreme political views emanating from the above statement are: (1) let the buyer beware; and (2) provide a quality-quantity control service for the community in order to decrease potential dangers and fatalities.

The scientist is in a position to provide valuable information to the public if the public, indeed, wants it. In relation to non-medical drug analysis, there is a vast literature of available data relating to qualitative-quantitative control, existence of dangerous substances and mixtures, misconceptions and fraud. This report adds an extra small portion from Eastern Canada.

The objectives of the project were fulfilled. However, the impact or significance of the findings on the non-medical drug use issue in the region or elsewhere is still, itself, an issue. □

Acknowledgements

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DOCTOR REQUIRED

Full time doctor required for a community health care clinic in north end Halifax. Applicant should be interested in team care approach and local citizen input into basic health organization of clinic. Interested applicants should send curriculum vitae to: Health Advisory Committee, 2172 Gottingen St., Halifax, Nova Scotia, before April 30, 1975.

Orientation to the System

A HALIFAX YOUTH CLINIC GOAL

"Special clinic services for young people have been successfully attempted in Montreal and there's no reason why a similar operation in Halifax shouldn't be successful," according to Dr. Wayne Longmore, medical director of this city's fledgling Halifax Youth Clinic.

The clinic, in operation since November 7, 1974, owes its existence as much to a former drug crisis intervention and med-aid service, operated by youth workers and medical professionals out of the Victoria General Hospital, as it does to the seven year old Montreal project. The now inoperative local service was organized under the name of Halifax Interaction and placed most of its emphasis on intervention, counselling and information in the drug abuse field, although by the end of 1973 nearly fifty per cent of its 4,288 clients fell into the medical aid service and health information category.

Dr. Longmore said the new clinic is geared to provide direct health services to youth, to promote the preventive aspects of health care and to act in an advisory capacity to, or in co-operation with, any individual or organization engaged in services to young people.

"The two primary focuses for the clinic," he said, "will be to provide a comprehensive service to young people by recognizing them as a distinctive group within society and by attempting to meet their physical, social and psychological needs, using health care as the basis. At the same time, we'll attempt to co-ordinate with existing agencies by orienting young people to the traditional network of services which may be of use to them but which, for one reason or another, they are reluctant to use."

Clinic staffing is predicated on one fulltime general practitioner — Dr. Longmore — two registered nurses who will assist in screening, the provision of medical care, health

counselling and follow-up; two health workers whose primary role will be to bridge the gap between young people and the traditional health services, and a secretary-receptionist.

Statistics from the Montreal Youth Clinic — with upwards of 9,000 patients currently on file — show that by far the largest percentage of young people availing themselves of the service were in the 16 to 25 year-old bracket. Proximity to the McGill University campus probably affected the statistics but, as Dr. Longmore pointed out, "The definition of 'youth' is in itself a pretty nebulous thing and the Montreal clinic was also seeing patients in the 30-plus range."

Halifax, he said, with two major universities, a college of Art and Design, technical and vocational schools and a complex of high schools all within easy reach of the clinic's downtown location should produce the same kind of service pattern.

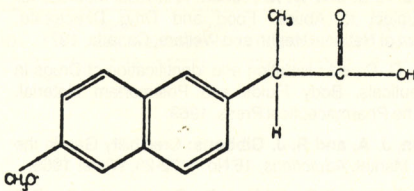
Meanwhile, offers of moral and technical support are flooding in from the community — including offers from the Student Health Services at Dalhousie University, the Izaak Walton Killam Hospital for Children, the Nova Scotia Council of Health, Nova Scotia's Provincial Youth Agency and from individual youth and social workers.

Dr. Longmore is encouraged.

"We have been making grant applications to a variety of agencies and foundations and we're seeking direct assistance from local businessmen involved in construction. We have a viable clinic in operation at 1588 Barrington Street and our patient files are beginning to grow. Patient coverage under The Medical Services Insurance Act is helping us to achieve initial financial stability and I'm pretty sure we'll be moving ahead dramatically in the next few months." □

NAPROXEN

(Naprosyn®) -Syntex Ltd)



Approved Indications

Oral therapy for rheumatoid arthritis and ankylosing spondylitis.

Note: Although not approved uses, naproxen has shown potential for the treatment of osteoarthritis, acute attacks of gout, and pain associated with inflammation.

Pharmacology/Mechanism of Action

Naproxen, a non-steroidal agent, has demonstrated anti-inflammatory, analgesic, and antipyretic properties. Its anti-inflammatory activity occurs over a wide dosage range, appearing to act directly rather than via an intermediary corticoid or other released substance.¹ Several studies^{2,3} postulate that the anti-inflammatory activity of non-steroidal agents rests with their ability to inhibit prostaglandin synthesis. The analgesic effect occurs only with pain associated with an underlying inflammatory reaction. Naproxen does not alter the course of the underlying disease.

Biopharmaceutics

Following oral administration, naproxen is rapidly absorbed from the stomach and small intestine. Its high affinity for plasma protein ($\geq 99\%$) confines distribution to the liver and blood plasma compartments. The half-life ($t_{1/2}$) in man is about 14 hours, making twice-daily dosing possible. The major route of elimination is urinary ($\geq 90\%$), with 10% unchanged, 60% conjugated glucuronide, and 30% demethylated metabolite.⁴ Naproxen crosses the placenta and appears in the milk.

Toxicology

Acute or chronic toxicity has not been reported as a clinical problem. Acute treatment should include prompt evacuation of gastric contents (oral activated charcoal has resulted in decreased plasma levels of naproxen) and general supportive care. It is suggested that central nervous system depressants, such as phenobarbital, may be useful to counteract acute intoxication.⁵ Since the drug is acidic and is excreted in the urine, urinary alkalization and induced diuresis may also prove useful. Chronic administration may induce gastrointestinal irritation and ulceration. Animal and human studies have failed to demonstrate teratogenic effects.

*Assistant Professor of Pharmacy, Dalhousie University, Halifax, N.S.

Summary of Clinical Trial Results

Several double-blind, controlled studies^{6,7} have shown naproxen to be more effective than placebo in the treatment of divergent rheumatic diseases. The daily administration of 500 mg of naproxen has been shown to be as effective as 4 Gm of aspirin or 100 mg indomethacin daily for rheumatoid arthritis and ankylosing spondylitis. Additionally, unwanted effects were less frequent and less severe with naproxen. Similar results have been reported for patients with osteoarthritis, gout, and pain of inflammatory origin treated with naproxen.

Side Effects/Adverse Drug Reactions (ADR)

Several controlled studies report an overall incidence of side effects at about 15%. Central nervous system reactions (headache and dizziness) were seen in 50% of the cases while gastrointestinal distress (epigastric pain, nausea, and heartburn) was seen in 40%.⁸ Gastrointestinal bleeding was reported infrequently although frank hemorrhage has been seen. Cross-sensitivity to aspirin and other non-steroidal agents has been demonstrated. ADR are most common in patients prone to gastrointestinal tract irritation, inflammation or ulceration, and close supervision is necessary within this population.

Drug Interactions

Displacement interactions with highly protein-bound drugs may exist. The rate and extent of absorption has been shown to be enhanced by sodium bicarbonate and decreased by magnesium and aluminum-containing antacids.⁸ Urinary alkalizers may increase excretion. Naproxen's effect on platelets may enhance concomitant anticoagulants. The coadministration of other anti-inflammatory, analgesic or antipyretic agents may result in synergistic therapeutic and adverse effects.

Laboratory Modifications

Naproxen decreases platelet aggregation and prolongs bleeding time. Occult blood tests may be positive secondary to gastrointestinal bleeding. Transient elevations in serum transaminases have also been seen. Falsely elevated urinary values of 17-ketogenic steroids have been reported.

Evaluation of Therapy

1. Physical examination of joint mobility, swelling, stiffness, local temperature, diminution of pain, and grip-strength.
2. Procedural examination by means of arthroscopy, synovial fluid/tissue analyses, and/or isotopic joint scans.

Patient Instructions

1. Gastrointestinal discomfort may be minimized by taking naproxen with or following meals, or with a full glass of water.
2. Do not take aspirin-containing products while taking naproxen unless so instructed by your physician.

Dosage/Administration

Adults: Two tablets (swallowed whole) twice daily. Dosage may be increased to three tablets twice daily. Therapeutic response is usually observed by two weeks. Clinical experience has shown that concomitant anti-inflammatory therapy may often be decreased and sometimes eliminated.⁵

Naproxen is *not* recommended for pregnant and lactating women, nor in children under 16 years of age.

How Supplied/Drug Identification

125 mg tablets/pale green, oval, biconvex, "N" imprint on one side, "SYNTEX" imprint on the other side.

Cost: \$9.66 per 100 wholesale.

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*Detailed bibliography available from Dr. W. A. Parker, Dalhousie University, College of Pharmacy, Halifax, N.S.



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The Cool Joys of Ice Yachting

Basil J. S. Grogono,* M.D., F.R.C.S. (C),

Halifax, N.S.

*Give me only one second
stretched
under the lonely sky
racing precariously
life rushing by
poised
in fantastic tranquility
portentiously high,
what a magnificent second,
..... aye.*



Wintertime in Nova Scotia can be a depressing experience for anyone enjoying outdoor sports. Skiers fit themselves out about Christmas time, set out for the ski slopes with enthusiasm only to return dejected as the snow flurries turn to rain.

Snowmobiles dash across the countryside after each snow storm, but a fair toll is taken from accidents, dropping over cliffs, or pounding into unexpected obstacles. Only the curler who participates in an enclosed rink is assured of stable conditions. The ice yachtsman, however, is always optimistic. Each rain storm brings the chance of fresh glistening ice that follows a clear frost. Each snow flurry has a chance of blowing clear. He is always conscious of the changing temperature, the wind changes, and the precipitation, and of the sporting chance that a weekend will bring the right combination that will turn half a dozen lakes into a superbowl of smooth ice.

*Chief of Orthopaedics, Halifax Infirmary, Halifax, N.S.

Early Days

Ice boating has been going on for a hundred years or more. You can talk to many older inhabitants, and they will tell you how they fashioned an old boat out of a few faggots of timber, got the blacksmith to fasten three skates and with the help of an old sail, took off at great speed across the lake. For some reason or another, the weather in the old days was colder and the ice more plentiful and there are stories of people sailing around the harbour, and this certainly hasn't happened for quite a few years. The early sophisticated boats were enormous. From European origins, Dutch settlers' boats were sailed on the Hudson River in New York from 1790 onward. A backbone replaced the hull and the sail and mast shifted forward so that the speed of over 100 miles an hour was achieved! The sail area was reduced from 600 square feet to 175 square feet. Most of the early boats were stern steerers and one of the most successful carried a lateen rig, shaped like a triangle, double boomed, hoisted on a pair of shear legs. It is said that one of these early boats covered a distance of 1.2 miles at over 140 m.p.h. and that was fast for 1908!

Gradually a number of classes evolved: Class "A", up to 350 square feet; Class "B", up to 250 square feet; and Class "C", up to 155 square feet and in the early 1930's, the first bow steerer appeared, reversing the traditional role of the runner plank and steering runner, and obviating the dangerous spinning characteristics of the stern steerers.

From Skeeter to D.N.

Seventy-five square feet of sail proved more than adequate to propel a boat, and with the development of a cat rig, one with a freely rotating mast, and a backward rig, the skeeters were more successful and outsailed all previous monsters, and still are some of the fastest boats in the world. In 1937, the first of the D.N.'s were built. D.N. stands for Detroit News, and they carry 60 square feet of sail. They were designed to be built at home, easily portable, easily handled, and they were used with immediate success. There are now over 3000 boats in North America, all built to very strict standards.

Beginners' Luck

I had been contemplating the joys of ice boating for at least 10 years. However, in Manitoba, the grim temperatures of 30° below zero and masses of persistent snow dampened my enthusiasm.

In Nova Scotia, my son and I at last decided to go to work and we took our old plans for a "Frost Fish" (a winter version

of a Sun Fish) to the hardware store, and ordered everything. Twenty-four hours after submitting our order, we heard of Dick Vine and the Nova Ice Yachting Club. We were set in a non-stop program of constructing a D.N.

Spruce was selected, glue, screws, nuts, bolts, clamps, numerous nightly visits to Dick to see how they were constructed. Starting with patterns, we cut out the side panels and assembled the hull over a frame in the basement. By Christmas Day 1973, we bored the bow block and had the main hull assembled. We purchased all metal fittings and skates from Dick Vine and Barry Snell, two local experts on ice boats and a magnificent mast was matched to a 60 square foot sail purchased from Stevens in Lunenburg. Then came the runner plank. Detailed work was done by my son at school, and gluing together two prime pieces of spruce to fashion a laminated plank with a two and a half inch wow. This was our first endeavor to build a boat, but the basement proved adequate and when assembled, she was our pride and joy. It is not quite so light as the competitors, but then when you are 14 years old and fifty pounds lighter than anyone else, who cares?

We launched her on William Lake while the sun was strong and the ice firm and clear. All the other members looked so professional, coming in as the wind died down. Still there she was, wind or no wind and as Matthew pushed off behind the runner plank and jumped aboard, my wife, the dog and I sighed and it was my heart that hiked just a little.

Since then, we have had some exhilarating and exasperating moments. One Saturday, all conditions were perfect and a dozen boats lined up on the ice. It is difficult to describe your feelings as you take off for the first time. You know this machine can accelerate faster than any motorcycle, and you know you can turn in any direction and as you take off, a gust suddenly drives you at horrendous speed across the ice and you wonder, what am I going to do to get home again? (Or will it ever happen?) Then there are the more frustrating moments for a novice, to get up to a critical speed, you must first push the machine as fast as you can, then jump aboard heading in the correct direction. You are very clumsy at first, the sheet gets tied up and the carefully prepared carpet in the cockpit rolls out of sight, and if you are facing down wind, you will never get her going at all, and all your pals come sailing past while you just sit panting in the boat wondering if your coronaries will stand the strain!

Another exciting adventure occurred one day. In a heavy snow storm I came to a halt; I knew I was lost. Eventually I found some fishermen tending a hole in the ice and asked them which way was home, and carefully nursing the boat over a pressure ridge, I set sail once again and at last reached the base.

Hiking

The gentle hike of a D.N. is like a flamingo loosing one of its long limbs from the mother earth. A gust of wind accelerates, and the ship responds in a carefully controlled lift and then rests gently back again. To the inexperienced, this gentle lifting of the weather wing is a highly alarming

feature, and one responds by letting the sail go promptly, so that the runner plank bangs smartly on the ice. I only saw one boat actually capsize this year, and that was me! Just as I was gaining confidence on the ice, a gust caught me and I was ejected onto the ice and sat for a few moments under the boat contemplating the damage. Our rules say if you are not injured get up so that those on shore know that you are well. My misdemeanor was not capsizing, but was remaining so long dormant on the ice! There is a fine spirit of comradeship in our club. New ideas are swapped, tips bantered, and although there is a healthy rivalry, we share our adversities.

National Championships — 1974

For the first time these were held in Nova Scotia, but not without difficulty. Originally scheduled for February 22, a band of enthusiasts gathered around William Lake and Miller's Lake discussing conditions. Some two inches of warm rain had been deposited on top of the ice leaving undesirable holes where the water drained off. Competitors had travelled from Sarnia, Ontario and Newfoundland and there was much heated debate upon the ice of Miller's Lake; eventually it was decided to postpone the competition, but hold it in Nova Scotia on a suitable weekend.

So it was that one of the most beautiful and spectacular events took place on March 9th 1974 on Miller's Lake.

Spike Boston and his family had motored again from Sarnia, Ontario, travelling some 23 hours nonstop. He was determined to keep the title of Canadian Champion. He is a stocky, athletic man with quick reflexes, but the first two races were fast, even for his experienced touch. The course was laid out on two markers two miles apart. With a 15 knot wind, Barry Snell and Dick Vine whisked around like a whirlwind, first and second, and Spike was actually seen thrown out of his boat for a few fleeting moments. By the third race, however, he was leading and the competition was strong for all eight races. Eventually he won by two points. Dick Vine and Barry Snell took second and third places, with Tom Foote fourth. Thanks to our Nova Scotian practice and careful attention to detail our club had nearly won the National Championships.

Role of a Novice

Sheltered behind a small wooden fence in the middle of a vast arena of ice is far from dull, but is a little chilly. I kept busy with a camera, watching the timekeepers and officials clock the contestants. It reminded me of the pits at Silverstone, or Debert Race Track and was just as exhilarating.

The Novice Race was held at the end of the National Championships with five contestants. My son was weary after eight races and the boat was free. My heart raced and I sensed excitement that "Toad" encountered when he first took to his motor vehicle.

The starter's gun went off and I pushed and jumped into the cockpit, pulled in the reigns and she seemed to accelerate like a maniacal warhorse. I was making the same

general direction as my competitors and I had to round that buoy — that meant a gybe; a turn contrived at 60 miles an hour is a little alarming to the uninitiated. There was a grinding, cutting noise as the outer skate bit its way into the ice and we went over on the other tack; my heart leapt once more, but my head was in the air, I had forgotten that damn boom, as it swung across and banged me on the head ('compulsorially' protected by a strong helmet,) no time to reflect and so on to complete the first lap.

The second lap was an anticlimax. The wind died down and as I swung around the last downward course, I meandered to a halt. I jumped out and pushed — I knew I should have headed up-wind to get up steam again, but I was confused about my direction and by the time I arrived at the finishing line everyone else was waiting to start the next race. Still I had completed my first race ever and handed over gratefully to my son, who completed two more races and placed third in the Novice group in the Canadian Class. Considering his age, that we had started from scratch and built his own boat, honour was satisfied.

1975 Season

This started with a big effort under Dick Vine's guidance; a consortium of D.N. enthusiasts bought sufficient wood and materials for eight boats. By careful design of jigs these enthusiasts have each managed to built an improved model and complete them in various basements between Halifax and Dartmouth.

Specifications: Fuselage — 144 inches; Beam — 21¹/₂ inches; Sail Angle — 45 degrees; Runner Plank — 95 inches; Mast — 192 inches; Weight approximately — 50 pounds; Sail Area — 60 square feet; Skates — 3 × 29 × 5 inches.

My son has just completed his boat. She looks beautiful, sleek as a greyhound, graceful as a swan. So we wait — a novice father and an experienced son. We now have two boats, but outside there is snow, snow and more snow. So far the D.N. enthusiasts have not mastered the art of sailing high on a mountain of fluff.

My thanks and gratitude to all D.N. Nova Ice Yacht Club members who have provided one of the most enjoyable sports in the world. If you are interested why don't you join the gang and suffer the same excitement as me! □

CANADIAN HEMOPHILIA SOCIETY
ANNUAL GENERAL MEETING
May 30, 31 and June 1, 1975
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On Friday, May 30th, there is an all day joint medical symposium on hemophilia by:

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and
Blood Transfusion Services of
The Canadian Red Cross Society

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HOME CARE	Dr. Hanna Strawczynski Montreal Children's Hospital
DIAGNOSIS FOR VON WILLEBRAND'S DISEASE	Dr. J. Hirsh, McMaster University
OVERVIEW OF CONCENTRATE USE	Dr. P. Levine, Tufts University, School of Medicine, Boston
ACTIVATED FACTOR CONCENTRATES	Hyland Laboratories
ANTIGENIC vs BIOLOGIC FACTOR VIII	Dr. P. McClure, Hospital for Sick Children, Toronto
PRODUCTION OF FACTOR IX CONCENTRATE	Dr. A. Tosoni, Connaught Laboratories, Toronto
MICRO-ASSAY SYSTEMS IN HEMOSTASIS	Dr. B. McSheffrey, Saskatoon
VARIABLES IN CRYOPRECIPITATE PRODUCTION	Canadian Red Cross
A BLOOD BANK LOGISTICS PAPER	Dr. Roger Perrault, National Blood Transfusion Services, Canadian Red Cross Society.

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More Than Just a Smoke

No doubt Dr. Norman Delarue's report on the findings of the Canadian Council on Smoking and Health (CMAJ, December 31, 1974) provides a great deal of food for thought. However, some specific conclusions arrived at by a tobacco addict might help those physicians who feel frustrated in their attempts to dissuade patients from smoking.

Incidentally, these are lay opinions and observations. They have no basis in formal research, nor could the conclusions be validly ascribed to "clinical experience." They are simply — and not so simply — impressions of an addiction and of the "multiplicity of factors affecting the adult smoker's decision. . ."

Granted, peer group pressure and the desire to integrate with one's immediate society are important factors in determining the child's decision to start smoking. Others include the desire to send up smoke signals indicating that childhood is over and that adults had better take notice. In so-called primitive societies these expressions of integration and the achievement of adulthood may be manifested by beating a large animal into submission with a knobby stick or even by doing in a member of a neighboring tribe — acts which for a variety of complex reasons have been promoted as desirable and ethical and which, when you come to think of it, present about the same degree of risk as lighting up that first cigarette.

But once physical addiction is achieved, other factors reinforcing the smoker's actions come forcefully into play, notwithstanding his or her knowledge of the health hazards involved.

First of all, smoking is an excuse not to do something else. In fact, it's a commonly used excuse. While the right hand is holding a cigarette it cannot be conveniently engaged in some other, probably onerous task.

Secondly, while tobacco is not a physically relaxing agent, the act of smoking does provide one with a sort of mini-holiday once the commitment to other efforts has been made. In many cases it is the *only* holiday the smoker is apt to get. Some may find this hard to believe, but there are many people — housewives might be a good example — who simply do not get a true holiday from their working world. The cigarette becomes a microcosmic physical and psychological substitute.

Thirdly, the smoker is in a position to offer gifts on an ad hoc basis. There is probably a deeper significance to the proffered cigarette pack than would at first appear. Ancient tribal rites and signals of non-aggressive intent come immediately to mind. Of course, one might argue that the same gift-giving or appeasement impulse could be satisfied with candy, peanuts and other relatively cheap foodstuffs. For some reason or other, however, these commodities seem to be reserved for more formal social interchanges. Anyway, they too have their drawbacks and tend to elicit expressions of opprobrium from dentists and nutritionists. The added hazard of having one's offer of a breath-freshener misunderstood must also be borne in mind.

Smoking is also an antidote — albeit not a very good one — to boredom and frustration. When the smoker wants to do something and there just isn't anything to do, the cigarette comes into play.

It could be argued that this is a matter of willpower: that there is always something else to do if one puts one's mind to it. Sorry. Domestic and other constraints can and often do prevent people from following a non-smoking personal activity desire. For instance, it is demonstrably easier to supervise and control the activities of a rambunctious pre-schooler with a cigarette in hand than it is while engaged in playing solitaire, painting, playing the guitar or, for that matter, washing the dishes.

So, where does this leave the smoker who comes up against the stop sign? In many cases, totally frustrated because although he or she is being asked or is forced to cease reacting to the immediate environment in a certain way, the environment itself does not exhibit change. The pre-schooler does not disappear; simple breaks in work patterns are still required — the Protestant work ethic notwithstanding — and, quite possibly, a little bit of procrastination before buckling down to the job at hand is healthy.

Efforts at group abstinence do modify desire because they introduce a new element to the individual's environment. However, it is important to note that the environment itself is not in any way modified. This leads one to the conclusion that in combination with whatever clinical and personal therapeutic regimen the would-be non-smoker embarks upon, a concomitant effort toward significant environmental change must also be made. And there, as the oft-quoted bard would say, is the rub.

Unfortunately, one's overall environment is imposed rather than selected. For all but the very wealthy a choice of lifestyles is extremely limited. The interdependency of individuals within domestic, societal and income-earning groupings plays a large part in conditioning the individual to accept evolving life patterns in which he or she has little say. Departure from the established norm can create feelings of guilt (and hostility) while subjecting the departee to the varied pressures his or her disruption of the pattern has induced.

A corporate executive who finds a job at a local filling station more conducive to not smoking (and therefore healthier) can expect to see circling index fingers at his peers' temples and hear muttered rumours about his fiscal competence — possibilities which would hardly encourage the lifestyle shift.

Okay. That's a relatively extreme example, but it is worthy of some consideration in that we are all too prone to recommend certain health-inducing steps — not only in the field of tobacco addiction — without considering overall personal environmental contraindications.

Perhaps, then, remedies for self-inflicted illnesses should be considered within the context of significant societal changes and not merely as isolated steps toward better health. □

Correspondence

To the Editor:

One month ago, we decided to restrict smoking in our Clinic. "No Smoking" signs were placed in the patients' waiting room areas. Physicians and staff will not smoke in corridors, waiting rooms or in work areas. Doctors may smoke in their lounge or in their own office when patients are not present. Staff may smoke in the coffee room.

Co-operation to date has been good.

"No Smoking" signs are available from the Fire Chief. Anti-smoking cartoon posters may be obtained free of charge from the Department of Public Health.

Sincerely

J. R. Muir, M.D.
Woodlawn Medical Clinic
Dartmouth, N.S.

To the Editor:

Re: Clindamycin-Lincomycin

We wish to draw attention to some additional data concerning the usage of these two antibiotics. In a submission made by Dr. Wm. N. Hubbard, Jr., President of the Upjohn Company at Washington, D.C. on 29th January, 1975, to the Monopoly Subcommittee of the Senate Small Business Committee, chaired by Senator Gaylord Nelson, the following points were established.

Mild uncomplicated diarrhoea is not uncommonly associated with Clindamycin and this condition usually subsides on discontinuing the drug. Since 1970, an estimated 17.9 million patients have received Clindamycin in the U.S.A. 340 cases of all types of colitis have been reported to Upjohn, of which 77 were reported to be pseudomembranous colitis. Thus the probability of the drug causing colitis is less than one in 50,000 cases treated.

From a study of 85 patients who developed colitis, and whose clinical course terminated in death, there was agreement that in 20 patients, diarrhoea was probably a major contributing factor in the fatal outcome. In most of the 85 cases death occurred in patients severely ill with a multiplicity of serious or terminal underlying diseases, many of which are associated with colitis regardless of drug therapy, and for which in many cases a number of other potent drugs were also being used.

In view of these facts, we are of the opinion that considered judgement should be exercised in treating patients with Clindamycin, as also with many other antibiotics. More attention should be paid to simple rules prior to embarking on antibiotic therapy, in particular that of long term therapy. These may be summarized as follows: —

- (a) Accurate identification and speciation of the causal organism.
- (b) Careful determination of its antibiogram.

- (c) Supervision of the patient during course of therapy and prompt discontinuance of the drug in the event of diarrhoea developing.
- (d) Special care should be exercised in the choice of dosage and duration of treatment in difficult cases of extreme chronicity, e.g., osteomyelitis; where assessment of all factors involved and the calculated risks entailed, should be considered.

For the present, the use of Clindamycin-Lincomycin should be restricted to the following situations: —

- (1) Serious infections involving sensitive anaerobes, especially Bacteroides. All other anaerobes are in general susceptible to penicillin.
- (2) Chronic staphylococcal osteomyelitis.
- (3) Any infection caused by sensitive organisms when the patient is intolerant to alternative antibiotics.

C. E. van Rooyen, M.D., F.R.C.P. (c)
Consultant
Victoria General Hospital.

E. V. Haldane, M.B. Ch.B., F.R.C.P. (C)
Associate Bacteriologist
Dept. of Microbiology
Victoria General Hospital.

To the Editor:

On 26th August 1974, I issued a letter concerning adverse reactions associated with two products, Dalacin C (clindamycin) and Lincocin (lincomycin), both of which are available in capsules, as sterile solutions and in a pediatric formulation. Since that time, some additional reports of adverse reactions to both drugs have been received in Canada and elsewhere. Cases of pseudomembranous colitis (and other forms of colitis) have been associated with the administration of either of these drugs, in accordance with the normal therapeutic regimens and the condition has, on occasion, been observed up to several weeks following cessation of therapy with these antibiotics. This is a potentially serious reaction, and in some cases, death has occurred. Although the incidence of these adverse reactions appears to be low, the true incidence is unknown at this time.

At present, there is no satisfactory explanation for the infrequent occurrence of pseudomembranous colitis observed in association with the administration of lincomycin and clindamycin. However, the reports suggest that the elderly bedridden patient with severe underlying disease is at a higher risk of developing serious colitis. On the other hand, cases of colitis in patients under 30 years of age have occurred. The Upjohn Company of Canada is endeavouring to define more clearly the circumstances under which such reactions occur and what precautions should be taken to prevent them. Until further information becomes available and in view of the observations noted, the following recommendation has been developed in consultation with

the Health Protection Branch, Health and Welfare Canada in order to reduce any possible risk to a minimum.

Lincomycin and clindamycin should be prescribed only when the use of these drugs is considered necessary and alternative measures are inappropriate.

This situation might arise in the treatment of serious infections involving sensitive anaerobes, osteomyelitis, or in any infection caused by sensitive organisms when the patient is intolerant to alternative antibiotics, or where the organism is resistant to other antibiotics.

If lincomycin or clindamycin therapy is instituted, the patient should be closely observed and consideration given to discontinuation of the drug at the first sign of persistent diarrhea and/or blood or mucus in the stools. It is possible that drugs which reduce gastro-intestinal motility such as atropine and opiates may exacerbate the condition.

Yours sincerely

Edward L. Masson, M.D., F.C.F.P.
The Upjohn Company of Canada
865 York Mills Rd.
Don Mills Ont. M3B 1Y6

carcinoma of the breast. To expect, or even to desire, homogeneity of practice patterns by *general* practitioners is to deny the essence of the individual human being, either as patient or as doctor, and opens the door to totalitarian control.

Perhaps some tender Canadian feelings may be outraged by unsolicited Australian interference in your domestic matters, but your scheme is being vaunted as *our* government's panacea for health insurance problems. There is a solid core of nearly half of Australia's general practitioners who would not and will not brook such totalitarian interference in our human relationships.

Yours most sincerely

Peter C. Arnold, B.Sc., M.B., B.Ch. General Secretary
The General Practitioners' Society in Australia
P.O. Box 451, Parramatta, N.S.W. 2150

To the Editor:

As one who has followed medical politics in Canada at a distance, I do not know details of the functioning of the Medical Review Committee.

Nevertheless, being closely involved in medical politics in Australia over the past seven years, I can see only too clearly the spectre of big brother looming behind every practitioner's shoulder in your Province, in the form of this Review Committee. (Nova Scotia Medical Services Insurance Physician Profiles, Nova Scotia Medical Bulletin, October 1974, pp. 173-6).

"The profile . . . is intended primarily as a screening process for the Medical Review Committee . . . It will be used as a means of selecting out those physicians whose pattern of practice might be subject to closer scrutiny."

The authors invite practitioners to acquiesce to their own professional execution by making a "written personal request" to the insurers for details of their own "deviance".

This scheme of computerised scrutiny is quite repugnant to any professional man who considers himself capable of determining his own limits in the light of his knowledge, training, experience and medical ethics.

To refer to "overservicing of patients" on the basis of exceeding the average of an allegedly homogeneous group of doctors is to deny the individuality of medical practitioners, especially in general practice where one's concern is more with the patient than with his illness. In no field of medicine is the Roman dictum "Quot homines, tot sententiae" more pertinent than in general practice. Specialist surgeons may or may not (and I suspect the latter) be able to decide which is the best surgical technique for duodenal ulceration or

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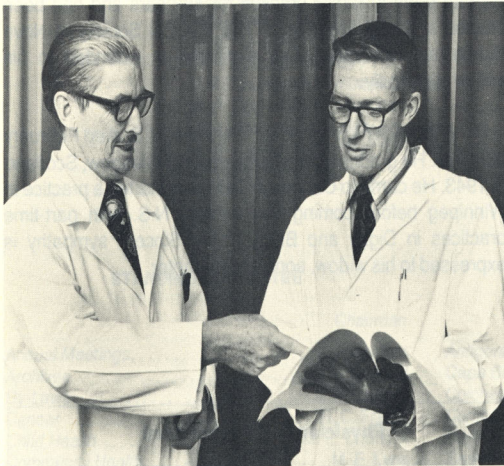
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Personal Interest Notes

The Sandoz Pharmaceutical Corporation and the Canadian Association of Professors of Psychiatry have announced that **Dr. R. O. Jones**, Professor and Head of the Department of Psychiatry at Dalhousie University, has been appointed the **Sandoz Visiting Professor in Psychiatry** for the year 1975/76.

This award was first initiated by the Sandoz Pharmaceutical Company in the 1950's to enable the Professor of Psychiatry from one or other Canadian Medical Schools to visit other Departments of Psychiatry in Canada. It was felt that such visits would greatly increase shared knowledge between the various teaching departments in Canada.



Dr. James R. Standen has been appointed professor and head of the Faculty of Medicine's Department of Radiology, it has been announced by the president, Dr. Henry D. Hicks.

Dr. Standen succeeds **Dr. J. S. Manchester**, who is stepping down to become acting director of postgraduate medical education for New Brunswick. Dr. Manchester was head for 20 years.

Born in Boissevain, Man., Dr. Standen got his elementary education in Lethbridge, Alta., and attended high school in Swift Current, Sask. After one year of pre-med at the University of Saskatchewan, he studied mechanical engineering at Royal Roads and the Royal Military College.

He completed his pre-med and medical education at the University of Toronto and after an internship at Toronto Western Hospital, did residency training in psychiatry at Regina General Hospital.

Dr. Standen studied diagnostic radiology at the Royal Victoria Hospital, Montreal and in 1965 obtained his diploma in radiology from McGill University, the same year he received his certification from the Royal College in diagnostic radiology. In 1966 he became a Fellow of the RCPS(C).

Dr. Standen's hospital appointments have been at the Royal Victoria, Montreal; staff radiologist, Kitchener-Waterloo Hospital; and staff radiologist at Sunnybrook Hospital, Toronto.

While in Montreal, he was a demonstrator with the Faculty of Medicine at McGill University, and in Toronto, since 1967, has been a clinical teacher, an associate, and an assistant professor with the university's Faculty of Medicine.

As acting director of postgraduate medical education for New Brunswick, Dr. Manchester will co-ordinate the medical school's nine training programs there. In addition he will assist the Division of Continuing Medical Education in promoting its programs throughout the province.

Dr. Manchester is a 1941 Dalhousie medical graduate with specialty training in diagnostic and therapeutic radiology.

In 1953, he was appointed chief of radiotherapy and associate, diagnostic radiology at the Victoria General Hospital. In 1955 he was named to two posts; head of the hospital's radiology department and professor and head of Dalhousie's department.

He has served as consultant to teaching hospitals in the area and to the provincial Health Services and Insurance Commission.

His papers have appeared in *The Nova Scotia Medical Bulletin* and in the *Journal of Canadian Association of Radiologists*. He has been active in committee work for the advancement of radiological standards and has maintained close connection with the Association of Canadian Professors of Radiology, serving as president of that organization in 1971-72. In addition Dr. Manchester has been an active participant on a number of local, provincial and university committees. □

The *Margaret and Norman Gosse Lecture* was given on Friday, February 21, 1975 at 4:00 p.m. **Dr. Dennis P. Burkitt**, External Staff of the Medical Research Council of Great Britain, Fellow of the Royal College of Surgeons, London, England was the lecturer and spoke on "Epidemiology of Cancer of the Colon".

Dr. J. Franz Ingelfinger gave the *First Robert Clark Dickson Lecture in Medicine* on February 27, 1975. Dr. Ingelfinger who is Editor of the *New England Journal of Medicine* and Professor of Medicine at Boston University entitled his lecture "Medical Education: Algorithms or Algebra?"

Dr. Frank W. Lovely, Head of the Oral Surgery Division of Dalhousie University's Faculty of Dentistry, has been appointed to the Medical Research Council of Canada.

**HIGHLIGHTS FROM THE 44TH ANNUAL MEETING
OF THE ROYAL COLLEGE OF PHYSICIANS AND
SURGEONS OF CANADA.
Winnipeg, January 22-25, 1975**

Hulbert K. B. Silver, M.D., Ph.D., F.R.C.P.(C) was the recipient of the 1975 Medal of the Royal College of Physicians of Canada for his investigation into "The Clinical Significance of Alpha 1-Fetoprotein."

Dr. Silver's studies provided a radioimmunoassay approximately 500-fold more sensitive than the double immune diffusion detection technique for AFP currently in general use. In addition to the clinical application of the AFP radioimmunoassay in detection of primary liver cell cancer, the assay may be able to define populations at risk of developing hepatoma and is a valuable tool for the investigation of the biological behaviour of liver cell cancer. He discussed the incidence of AFP in other liver diseases.

Steven M. Strasberg, M.D., F.R.C.S. (C) was awarded the 1975 Medal of the Royal College of Surgeons of Canada. His paper was on "Bile Flow Studies in the Primate", in which he presented a method to confirm and quantify the four components of bile flow. This method was applied to the study of unilateral hepatic duct obstruction in the primate.

The first Royal College lecture, "The Fat Cell and the Fat Patient" was given by Dr. Charles H. Hollenberg, F.R.C.P. (C), Professor of Medicine, University of Toronto. He outlined the physiology of fat absorption and the mechanism of fat production in the body and pointed out that the pattern of obesity is established in childhood. There is no increase in the number of fat cells in the adult but the cell is capable of a marked increase in size. Surgical treatment with by-pass operations carries an increased risk of morbidity, causing fatty infiltration of the liver and medical treatment by dieting is disappointing and frustrating. He recommended that psychologists, psychiatrists and dietitians should take over the treatment of obesity.

The second Royal College lecture, "Cutting the Gordian Knot in Breast Cancer", was given by Dr. M. Vera Peters, F.R.C.P. (C), Assistant Professor of Therapeutics, Radiology and Biophysics, University of Toronto. She provided statistics over a 30 year period to show that local excision of a malignant mass in the breast with radiotherapy gives a better prognosis than radical mastectomy with radiotherapy, except in the over 60 age group where mortality is comparable in the two groups. She claimed that there was less disturbance of the circulation of blood and less seeding of cancer cells in the minor procedure, with a reduced risk of metastases.

Dr. Donald R. Wilson, F.R.C.P. (C), Professor of Medicine, University of Alberta, gave the third Royal College lecture on "Assessment of Clinical Skills — from the Subjective to the Objective."

The R. D. McKenna lecture on "Chronic Hepatitis", given by Dr. William H. J. Summerskill, Professor of Medicine, Mayo Medical School, Rochester, Minnesota, reviewed the unconjugated and conjugated hyperbilirubinaemias, the clinical features and methods of diagnosis.

Other prominent lectures were the Edward Dunlop Annual lecture, "Behind the Scenes with Cortisone", by Dr. Howard F. Polley from the Mayo Clinic, and the Gallie Memorial lecture "A Model for the Future Care of Acute Spinal Cord Injuries" by Dr. E. H. Botterell, O.B.E., M.S., F.R.C.S. (C), Consultant Neurosurgeon from Queen's University, Kingston. The Canadian Red Cross Society lecture "Clinical Utility of Marrow Culture in the Myeloid Leukaemias" was given by Dr. Malcolm Moore from the Sloan Kettering Institute for Cancer Research, New York.

In addition to the numerous symposia, there were 182 individual papers read, with a significant contribution from Dalhousie University. J. H. H.

OBITUARIES

Dr. Herbert B. Whitman, 70, Westville, N.S. died January 24, 1975 at the Victoria General Hospital in Halifax. Dr. Whitman graduated from Dalhousie Medical School in 1928. He had been in family practice for 40 years and had been elected a Senior Member of The Medical Society of Nova Scotia last November. Our sympathy is extended to his widow and family.

Dr. Alexander Lindsay, 57, Kentville, N.S. died February 23, 1975. He graduated from University of Glasgow, Scotland in 1943. He came to Canada in 1951 and started a practice in Winnipeg before coming to Kentville, N.S. with part-time practices in Digby and Bridgewater. Sincere sympathy is expressed to his widow, sons and daughter.

Physician Self-Assessment

Question No. 4

Correct Answer A

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