Guest Editorial

Community Hospitals — Their Value and Purpose

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"Though by far the greater part of a General Practitioner's work can be done and is done in his office and in his patients' homes certain types of cases if they are to be managed competently and safely require the facilities of a hospital."*

This simple statement made by Kenneth F. Clute in his book The General Practitioner in 1963 would still seem to be true. However in Nova Scotia and in the Halifax Metropolitan area, increasing numbers of General Practitioners are practising without hospital privileges or very little hospital connection. With the establishment of Dartmouth General Hospital in 1975, this trend was significantly reversed in Dartmouth, at the same time demonstrating that a small community hospital can serve many purposes that are sometimes forgotten as a simple bed per patient population ratio is examined.

Some of these functions include furthering the understanding and sense of community, fostering community pride and well-being, and giving auxiliary services to more specialized hospitals and facilities, including in Dartmouth's case, the Nova Scotia Hospital, the local detoxification unit and industrial sites. The community hospital in general may also serve as a planning facility for a wide range of activities such as personnel needs, health education and physician education and upgrading.

While all this is being accomplished a standard of high quality of care must be maintained. A constant review of clinical practice is of highest priority and Dr. M. P. Shannon's article in this issue, on the functioning of the quality care committee at Dartmouth General, demonstrates how this may be done.

In particular, the family physician benefits from this process. Clute pointed out twenty years ago that hospitals bring family physicians, many of whom would otherwise be practising in almost complete isolation, into touch with their local colleagues and consultants. While the continuing medical education system has improved greatly in twenty years, auditing of hospital care has proved to be one of the most effective educational tools available.

Dartmouth General Hospital is one of 29 public and general "Lay" hospitals in this province according to the 1981 Canadian Hospital Directory, and its 114 beds are a small part of the 1821 beds provided by this group. Despite its small number of beds, the Dartmouth General Hospital's uniqueness has much to add to the philosophical base of hospital treatment in its area. It is a small island where family practitioners admit, treat and follow patients in cooperation with excellent consultants in a way that does not seem to happen in the rest of the Halifax-Dartmouth Metropolitan area to any great extent.

For many reasons this role model, whether good or bad, has not always been welcome in an area where tertiary care is dominant. Despite this, perhaps some beneficial attitudes might be learned even as the Halifax area revamps its hospital setting with the new Camp Hill Medical Centre.

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Welcome or not, an “Act to Incorporate the Dartmouth Hospital Commission” was passed on December 13, 1975 and established a 13-member Board. Medical doctors were not specifically included or excluded from membership and, at present, two of the Board members are physicians, having been appointed in accordance with the Act. The opinion of many would have us believe that medical staff should not be on the Hospital Board for reasons of conflict of interest. However any other Board member who lives in a community using the hospital and relating to it as one of the community’s largest industries may also have a conflict. Everyone benefits as long as domination of the Board by any interest group is prevented.

If doctors as professionals are to diagnose and treat the community as a whole, it is not logical that the planning and setting of objectives of community health be taken completely out of their hands. Physicians can be an aid in communication to prevent difficult situations between Board, Medical Staff and Administration.

In Ontario and elsewhere, especially in rural areas, the hospital is becoming the leader and coordinator of long term health services in their community. It would seem that doctors on boards should have as much right to vote on these very important community issues as any other person.

Whether for or against medical participation on Boards of Community Hospitals, it is important for every practitioner to understand the political structure of his own hospital. Mr. John Young’s article in this issue may lead to a better understanding of realities that doctors all too often ignore. With the knowledge of how his own hospital functions, a physician will be much more useful to not only the Medical Staff but to the whole community as it attempts to identify priorities and a philosophy for the hospital. Dartmouth General Hospital has been more than a little influenced, of course, by the philosophy of family practice since most of its active staff are of that breed.

Dr. Ian McWhinney has written in the Canadian Family Physician, most clearly about “the values, attitudes and methods” that family practitioners bring to medical care. He delineates “nine principles of family medicine, none of which are unique to family medicine” but when taken together could add a distinctive approach to hospital care. These principles include the idea of a doctor assuming continuing responsibility for all ages of patients, over long periods of time. An episode in hospital then is made part of the continuing relationship that can be made more manageable and understandable to the patient and his family. Unfortunately, the value of this continuity is often not understood in a tertiary care setting where most doctors receive their training. The complexity of treating one episode of severe illness gives a low priority to an understanding of the patient’s situation relative to the rest of his life. It does not have to be so. When it is possible for the family physician to be involved on a continuing basis, nothing need be lost from the armamentarium but something immensely valuable to the patient can be gained.

The functioning of the Grace Maternity Hospital in Halifax is probably one of the better examples of this, with the majority of patients have their own family doctor while having the latest and most comprehensive good consultant care. It is proof that things militate against this interaction, i.e. control of
Beds, power politics and fear of inadequate care do not necessarily have to keep family physicians out of hospital. The Dartmouth General serves as a further reminder that the family practitioner can serve in hospital in a useful role. There consultants and general practitioners play complementary roles despite the small number of beds and limited facilities.

Applicable to this situation, McWhinney sees the family physician as a manager of resources, who understands his patient in relation to a population at risk, using a community-wide network of supports to achieve his ends. A recent Community Health Fair in Dartmouth demonstrated the use of multiple resources, both medical and paramedical, while Dr. B.J.S. Grogono's article describes the sudden emergence of a new risk factor in the Dartmouth population. Much more use of the "at risk" concept will prevail as Dartmouth General and other small hospitals proceed to the use of computers.

Dartmouth General is the first hospital in Nova Scotia to computerize its patient information system. Plans to establish a Physician's Computer Committee have been laid, in order to consider issues such as confidentiality, effect on practice routine, and to education Medical Staff with regard to unfamiliar technology and language. Physicians, concerned as they are with better patient care, cannot afford to ignore the implications of this valuable tool as it moves into our community hospital system.

Having mentioned some of the things a community hospital can be, it is important to say that a small active community hospital is not a chronic care institution. The public and some physicians will certainly attempt to make it so if a strong utilization committee is not maintained. That is not to say the community hospital should forget the interests of the dying patient needing palliative care. Certainly studies at hospice units show that continuity of community care and the best of medical practice can be integrated and with good planning lead to the enhancement of the quality of the patient's remaining life.

Douglas P. Black in his paper, "The Place of Small General Hospitals in Canada's Health Care System", has stated that community hospitals can go wrong when its role is not appropriate to the facilities or competence of its staff. Inappropriate referral and treatment will not occur when Board, Administration and Medical Staff understand where their hospital fits in the health system. Limitations are not necessarily deficiencies but hopefully part of good planning. With the acceptance of this responsibility the small community hospital then has a unique and valuable role to play in the health care system.

References

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References:
1. Abstract R7, Page 178, from the APhA Academy of Pharmaceutical Sciences, 23rd APS National Meeting, Phoenix, Arizona November 12-17, 1977

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The History and Philosophy of the Dartmouth General Hospital and Community Health Centre

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Shortly after 11 a.m. on July 7, 1976, a gentleman with a sprained ankle limped through the doors of the Emergency Department of the Dartmouth General Hospital and Community Health Centre, and he became the first patient to be treated in this institution.

Simultaneous with this event, the Dartmouth Emergency Hospital, which had operated since 1970 in the old Dartmouth Medical Centre on Portland Street, ceased operation. On that same date, July 7, 1976, the facilities which had operated at the Dartmouth Emergency Hospital i.e. Emergency and Out-Patient facilities, Laboratory, Physiotherapy and Radiology, moved from an antiquated facility which had served the citizens of Dartmouth and surrounding areas, became operational in a modern new building located on Pleasant Street across the street from the Nova Scotia Hospital. This date marked the culmination of efforts which began in 1916 for the building of a hospital in Dartmouth.

In 1916, the first Financial Campaign was held and, in fact, some of the monies from that campaign were still in a bank account which contributed towards the construction of the new facility. In 1947 another Campaign was held, but again the building of the hospital did not materialize. With the opening of the Angus L. Macdonald bridge in 1955, Dartmouth developed very rapidly from a small town with a population of approximately 20,000 people to a city which contains the highest concentration of industrial facilities in Nova Scotia. It has one of the most rapidly growing population areas both within the city itself and including the rapidly developing Forrest Hills and Colby Village areas in Cole Harbour.

With all this development taking place the need for a hospital became more obvious. In 1967, the idea of building a new hospital was again raised but a public referendum was rejected by the citizens of Dartmouth as being too expensive a venture. In 1973, a new financing formula for hospitals was developed by the Provincial Government and approval was given for construction of a new 114 bed general hospital for Dartmouth. It was intended that it would be built in three phases and construction for the first phase began in 1973. In 1975, an Act of the Legislature established the Dartmouth Hospital Commission as an independent Corporation responsible for the operation of the hospital.

Following the opening of the initial facilities, in July 1976, the Official Opening took place on January 14, 1977. The first patients were admitted on March 2, 1977 and the Operating Theatre opened on March 14, 1977.

From the beginning, the concept and philosophy behind the development of a hospital for the City of Dartmouth was quite different from the other hospitals in Metropolitan Halifax. First of all, it was designed according to the Friesen Concept, where the philosophy is one of patient centred care, with centralized materials management. At the time of the opening it was the only Friesen designed hospital in Eastern Canada. This system is unique in many ways including such areas as the removal of the traditional Nursing Station and incorporation of a "Nurse Server" into each room, where the patient's individual charts, drugs, nursing care plan, etc. are kept.

The second unique feature about the Dartmouth General Hospital was that this was planned to be a facility providing primary and secondary care, to the residents of the City of Dartmouth and the surrounding catchment areas comprising a total population of about 130,000 people, with the emphasis on being a Family Physician oriented hospital. The involvement of the Family Physicians in this Hospital is central to its operation. They constitute the Active and Associate Staff, and all Medical and Surgical Specialists are classified as Consultant Staff. All patients must be admitted through the service of a Family Physician, either alone or in conjunction with a Consultant. On their own, Consultants do not have the privilege of admitting patients and, in this way, the Family Physicians have been able to maintain their primary role in the Hospital.

The response of the Family Practitioners in Dartmouth to their "sudden immersion" in an active hospital role has been quite dramatic and rewarding. Having been virtually excluded from the Halifax Hospitals for years, many Dartmouth physicians spent little or no time in a hospital setting, instead confining their practices to their offices and to the homes of their patients. A sense of pride and deep involvement rapidly evolved to the point where the Family Physicians have established themselves as competent primary care physicians and they have made remarkable strides in improving their own clinical knowledge and techniques. A dramatic change from near apathy to extensive involvement occurred over the short time span of two or three years after the initial opening of the hospital.

Following the appointment of a new Executive Director in 1978, the hospital expanded its sphere of facilities and community services in many areas. Application for an Accreditation Survey was made and, in the early spring of 1979, the first survey at Dartmouth General took place. The result of this was full Three-Year Accreditation — an honor seldom granted to any new hospital on its first survey, which can only speak of the extensive work, dedication and pride with which all members of the hospital staff, professional and non-professional, involve themselves.

In September 1979, the Intensive Care Unit opened — a four bed Unit staffed by six Internal Medicine specialists on a 24 hour rotation basis and by Nurses who have special critical care training. With the opening of this Unit, the

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demand for beds rose drastically because the majority of cases, which previously had been sent to Halifax Hospitals for treatment, such as myocardial infarctions, high risk post-operative cases and other critically ill patients were now, for the most part, treated in Dartmouth. In 1981, approximately 450 patients were treated in the I.C.U., a figure far in excess of the national average for a Unit this size. The mortality rate was about 4% and there were only 14 patients requiring transfer to tertiary care facilities in Halifax (mainly for the insertion of pacemakers).

The rapid and unanticipated increase in the demand for services at Dartmouth General Hospital of necessity led to planning for expansion and this was officially launched in September of 1980, just over four years since the first patient walked through the doors of the Emergency Department. The Emergency Department is staffed 24 hours a day by 35 Family Physicians, all of whom have ongoing education in emergency medicine and who now must have successfully completed the Basic and Advanced Cardiac Life Support courses. The expansion is already well underway and it is anticipated that the expanded Emergency Department, Out-Patient Department, Operating Theatre, and Radiology Department, will be completed by September of this year.

The medical staff consists of the majority of the Family Physicians in Dartmouth plus many Consultants in many different specialties. Some of the Consultant Staff are based solely in Dartmouth, while others have commitments to Dalhousie Medical School and to private practice in Halifax. At the time of writing this article, the Medical Staff consists of 44 Active, 5 Associate (i.e. new Family Physicians who are given a "probationary period" prior to their appointment as Active Staff), and 2 Honorary Staff. Amongst the Consultants are 19 in the Department of Anaesthesia (services of the Victoria General Hospital group of Anaesthetists are utilized at Dartmouth General Hospital due to the scarcity of specialists in this field); 12 Internists including the specialists in Gastroenterology, Neurology, Cardiology, Respiratory Diseases, Rheumatology, Physical Medicine and Hematology. There are 3 members in the Department of Laboratory Medicine, 6 Psychiatrists and 3 full-time Radiologists including 1 with special training in Ultrasound (the hospital having acquired Ultrasound equipment one year ago). In the Department of Surgery there are 4 General Surgeons, 1 Neurosurgeon, 4 Otolaryngologists, 3 Gynecologists, 4 Ophthalmologists, 4 Orthopedic Surgeons, 2 Urologists and 2 Dental Surgeons. It is anticipated that several new Consultants will be coming on staff within the next several months including another Gynecologist and a Cardiologist. It is planned to start performing procedures such as the insertion of temporary pacemakers when the I.C.U. is increased to 8 beds.

The Hospital expansion plans call for 50 extended care beds and 25 acute care beds, and it is hoped that these will be completed by late in 1983. Involved also is expansion in the various support systems within the hospital such as Laboratory, Dietary, Physiotherapy, Education and Staff Development, Pharmacy and other areas.

What has all of this meant to the average Family Physician practising in Dartmouth? I believe it is not unreasonable to say that he or she is a much better physician today than prior to the opening of this hospital. The active involvement in Hospital Committees, the one-to-one relationship with patients in an in-hospital treatment setting, the day-to-day close contact with colleagues, consultants and members of other disciplines involved in the treatment of patients, the active continuing medical education programs and above all the feeling that Dartmouth General Hospital and Community Health Centre is "our Hospital" where we treat "our Patients", can lead only to an ongoing sense of pride, dedication and self satisfaction. Looking at it from the patient's perspective, the patient now feels that "my Doctor" is directing treatment and the benefits of this aspect of their hospital stay need no elaboration.

In closing, I think that "our Hospital" might well serve as a basis for the development of other community hospitals and health centres.

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NEW MEMBERS

The Physicians listed below have joined The Medical Society of Nova Scotia between January 1, 1982 and March 31, 1982. A most cordial welcome is extended by the Society.

ABBOTT, C.M. Halifax
ALLEN, C.T.B. Halifax
*ATKINSON, A.R. Bridgewater
BERNARDO, A.I. Halifax
BLAIR, W.H. Barrington Passage
*BOONE, W.M. Halifax
CLARK, A.J.M. Halifax
GILLIES, J.H. Dartmouth
GOLDEN, V.R. Canning
GREENLAW, W.E. Halifax
*HAMILTON, K.R. Halifax
JUNEK, R.W. Halifax
KELLY, F.B. Amherst
LEA, D.E. Kentville
LEE, M.G. Halifax
LEE, W.R. Yarmouth
LIVINGSTON, J.B. Halifax
MADHVANI, A.K.S. Halifax
MURRAY, T.J. Halifax
PUGSLEY, D.G. Hilden
ROBERTS, T.M.F. Halifax
STUBBS, S.S. Kentville
SWEET, L.E. Halifax
*THOMPSON, D.L. Halifax
THOMSON, D.H. Halifax
THOMSON, E.G. Windsor
TULLE, L.K. Antigonish
WILLIAMS, D.L. Sydney River
*WOOD, W.C. Bedford
*ZILBERT, A.W. Halifax

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THE PHYSICIAN — ALONE?

Physicians appreciate the opportunities and difficulties confronting those who carry on practice in community hospitals throughout Nova Scotia. However, the physician may not be aware that he has no right of any kind of practice in a community hospital or any hospital in Nova Scotia.

PRIVILEGES

Practising medicine in a hospital is a privilege, a privilege granted, amended, or, as the case may be, withdrawn by the Board of a hospital in its absolute discretion, subject only to the provisions of the hospital by-laws and the general rules of "natural justice".

While obtaining a licence from the Provincial Medical Board to practise medicine in the Province is a necessary prerequisite to being granted privileges in the hospital, physicians should be aware that their skill, talent, education, and medical experience may not be the sole nor necessarily the most important criteria considered by the Board of a hospital when granting privileges. In community hospitals where permanent medical staff may be limited or nonexistent, questions such as the distance the doctor resides from the hospital, his ability to serve on weekends or nights, his congeniality, or the ease with which he works with other physicians become, not only relevant, but of prime importance. The finest of doctors may have his application for privileges rejected simply because he is perceived not to be a "team player" or even a "nice guy". Simply put, being an excellent physician may not be enough to ensure the success of an application for privileges in a community hospital.

Not only do non-medical criteria play an important role in the granting, withdrawal or amendment of privileges, but the basic decision, a decision which can have a lasting impact on the professional reputation and economic circumstances of the physician, is made by the non-medical people who constitute the voting majority on the Boards of Directors of community hospitals throughout the Province. The duty of the Board is to the patients and not to doctors of the hospital and as long as the Board proceeds in accordance with its by-laws and the general tenants of natural justice or fairness, the exercise of discretion by the Board in making its decision in each case will be absolute. No court or other tribunal can be counted upon to seek out or re-examine the facts giving rise to a decision by the Board in the case of an individual physician.

The importance for a physician of having privileges in a local community hospital is self-evident. That such decisions are taken by Boards composed of non-medical personnel, applying criteria which may not have a significant medical component, and for which, if proper procedures are followed, there may be no recourse on the part of the physician may not be well understood. Therefore, it is essential that physicians familiarize themselves with the legislation, by-laws or other documents constituting and governing their community hospitals for a rejected application for privileges may result in a lonely and perhaps futile struggle by a physician ill prepared to battle with the law.

NEGLIGENCE

The physician cannot expect to be protected by the hospital in the event of a suit commenced by a patient alleging negligence on the part of either or both of the doctor and the community hospital. While it is true that the interests of the hospital and the physician may be similar, they will not be identical and the difference may be critical when liability is determined and damages assessed.

Generally, the community hospital will not be liable for the negligent acts of a general practitioner with hospital privileges. Thus, in the absence of any specific negligence on the part of the hospital or its employees acting under its direction, it is the physician caring for the patient who would be found liable for the negligent act.

The physician cannot depend upon the community hospital to defend him from patients alleging negligence. The hospital will leave the physician to his own devices and his own defence. However, fortunately for the medical profession, organizations such as Canadian Medical Protective Association provide comprehensive and extensive representation. When negligence is alleged, however unfounded, the physician should immediately advise his insurers in order that they may quickly act to protect his interests.

STAFF ASSOCIATION

Physicians may take comfort from the existence of staff associations in community hospitals which can be counted upon to represent the collective and individual interests of the profession. These associations, while important as a "lobby" and significant with respect to the quality and kind of medical care being provided in the community hospital, are, nevertheless, subservient to the Board of Directors of the hospital. The medical staff association, therefore, is often in the position of merely recommending changes in medical organization or other matters affecting medical care to a Board of Directors composed of non-medical personnel who shall make the final decision.

At the same time, a medical staff association may not be in a position to assist or represent an individual physician before the Board of Directors, for there are circumstances where the medical staff association may be acting in consort
Quality Care in the Community Hospital

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Dartmouth, N.S.

The experience of the Dartmouth General Hospital in developing a Quality Care Programme may be of interest to those of our colleagues who are testing the water or have already taken the plunge.

We do not suggest that our particular approach to Quality Care can or should be adopted, without modification, by other community hospitals. Indeed our own programme has undergone changes in response to our particular situation.

In 1978, after our hospital had been in operation for two years, a decision was made to introduce a programme of patient care evaluation and a small working committee was established. After three years of experience we are taking a critical look at the way in which we started our programme and our subsequent performance.

OBJECTIVES

The primary purpose of the programme was to evaluate, on a continuing basis, the quality of patient care provided by the hospital in order to maintain a high standard. Important secondary objectives were identified at the same time:

(a) To reinforce the concept of a multidisciplinary, team, approach to patient care;
(b) To increase awareness, among staff, of the need for critical evaluation of techniques;
(c) To identify unmet needs within the community;
(d) To improve utilization of our facilities; and
(e) To meet accreditation standards.

It was appreciated that the programme needed the full support of the Board, administration and staff, and that the benefits of the programme would have to be demonstrated.

MECHANISM

Careful attention was paid to the formation of a committee that would attain these objectives. While recognizing that patient care depends on the attitude and expertise of all hospital staff, from commissionaire to Board member, we wished to avoid a large, unwieldy committee. Our committee consists of a Chairman and seven members representing key departments and particular expertise or interest. The composition of the committee follows:

Diagnostic Radiologist (Chairman)
Executive Director
Director of Patient Services
Director of Medical Records
Pathologist
Family Practitioner (Chief of Medical Staff)
Family Practitioner (Head, Department of Family Practice)

*Radiologist, Department of Radiology.
**Director of Medical Records, Dartmouth General Hospital and Community Health Centre, Dartmouth, N.S.

The Committee, labelled the Quality Care Committee (Q.C.C.) meets monthly and reports to the Medical Advisory Committee.

Four important decisions were also made at this time:

1. Departments would be encouraged to suggest their own topics for survey and would be allowed to establish their own survey criteria.
2. Departments would be primarily responsible for correcting any deficiencies identified by surveys and for initiating any improvements.
3. The Quality Care Committee would have final responsibility for monitoring and ensuring that any necessary changes were being implemented at the Department level.
4. Confidentiality would be maintained. Survey results would be discussed only within participating departments and the Q.C.C. The Hospital Board would be informed of Q.C.C. activities only in general terms and all committee records would be secured.

OPERATION

The perfect scenario occurs when a department decides that a particular aspect of patient care should be examined, either in prospect or in retrospect. The department submits the suggestion to the Quality Care Committee, which endorses the idea. Other departments ask to become involved and add their particular facets to the survey. The departments decide on the scope of the survey, establish criteria and expected compliance rates. This process should be assisted by the Medical Records Department.

When the protocol has been established the necessary patient information is extracted by a Health Records Administrator, relieving the departments of this essential but time-consuming process. The results are given to the participating departments which compare actual performance with anticipated compliance. The departments present their results and recommendations to the Q.C.C. The survey is repeated, after a suitable interval, to ensure that any corrections have proved effective.

This is the ideal sequence of events for several reasons. Not only has the survey resulted in confirmation of good patient care or even improved standards, but it has reinforced the team concept. Moreover, it has removed much of the burden from the participants and has imposed less strain on a busy Medical Records Department than a series of unrelated single discipline surveys.

During our three years of operation, over forty surveys have been conducted in the hospital and reviewed by the Q.C.C. Many of these, particularly in the early stages, were relatively simple audits confined to single departments. The trend, however, has been towards the ideal and we have encouraged departments to combine their efforts.

Survey topics have ranged widely from medication errors, patient falls, examination delays, rollerskating injuries and
cholecystectomies to head injuries. Recent topics include an antibiotic survey, a study of I.C.U. and an audit of hospital committees. The last survey showed that we have over forty hospital committees and gave us a clear indication that we need more meeting places, improved terms of reference, tighter meetings, clearer lines of communication and the elimination or consolidation of some committees. These changes should result in reduced committee hours for everyone concerned.

We now feel that the level of acceptance of the Quality Care Programme in the hospital allows us to adopt a more structured approach and we have introduced a programme requiring every hospital department, medical and non-medical, to present the results of at least one survey a year to the Q.C.C. on a scheduled basis. This approach is recommended by the Canadian Council on Hospital Accreditation.

ROLE OF THE MEDICAL RECORDS DEPARTMENT

The Medical Records Department is an essential element in the Quality Care Programme. Health Record Administrators are trained to assist physicians in developing criteria into a workable format that can be tabulated statistically. Medical records staff will also assist in extracting information from patient records or computerized data printouts and in compiling information statistically. The results are then discussed with the physicians involved in the survey so that a joint report can be compiled.

It is extremely important that a good working relationship exists between physicians and the medical records department and that physicians realize the value of a medical records staff in a Quality Care Programme.

SUMMARY

A successful Quality Care Programme starts from the realization that, as professional providers of health care, we have an obligation to stand back and take a critical look at our performance. Provided that a Quality Care Committee is well-chosen and has clear objectives it can earn the support of hospital staff. The medical records department is a key element in the success of a Quality Care Programme.

Our own short experience in a community hospital has seen a natural transition to multidisciplinary surveys and a structured approach to quality care.

THE DOCTOR'S LEGAL STATUS IN A HOSPITAL

Continued from page 38.

with or in support of the Board of Directors in its dealings with a particular physician.

While it is difficult to generalize with respect to each and every community hospital, I trust the comments contained herein will be of interest and that they will stimulate more detailed inquiries by physicians carrying on the practice of medicine in community hospitals in the Province of Nova Scotia.

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Pulmonary Rehabilitation in a Community Hospital

Lynn Sawyer,* R.R.T. and Thelma Cashen,** M.C.P.A., B.T.T.,

Dartmouth, N.S.

The most frequent lower respiratory diseases which the health care worker encounters are asthma, chronic bronchitis and emphysema. Grouped under the broader title of chronic obstructive pulmonary disease, these diseases present a therapeutic challenge to the physician and associated health care personnel. As a result of physiological changes and general debility accompanying the disease process, patients with C.O.P.D. experience a deterioration in the quality of life as well as emotional disturbances. Nearly all patients can be helped to achieve higher levels of independent function whether this be in the area of job retraining or in the performance of tasks related to activities of daily living.

Due to frequent admissions, the hospital is often the place where programs designed to educate the patient in his disease process are initiated. These programs aim to provide training in the therapeutic measures which help control many of the symptoms of respiratory impairment and which enable the patient to obtain the maximum level of function allowed by his disease process.

Pulmonary rehabilitation need not involve any new expense but does require existing hospital personnel to co-operate in a co-ordinated team effort. Available space such as hospital corridors, stairs and the physiotherapy Department can be utilized for training. As well, the treatment regimens of drug therapy, respiratory therapy and physiotherapy can be utilized to maximum advantage with no added expense required.

At the Dartmouth General Hospital, physician referrals for respiratory patients were directed to each department separately. Difficulties in communication and co-ordination of the patient's total care became apparent amongst the various health disciplines. A program was advised to help the respiratory patient cope with hospitalization, improve independent function and educate the patient and family in home management of the disease. The professions in constant contact with the patient — namely Nursing, Respiratory Technology and Physiotherapy — agreed that a more co-ordinated effort between the three disciplines would have many advantages to both patient and staff.

The patient, as the focus of the staff's efforts, receives and participates in treatments organized throughout the day to meet his particular needs. The staff reinforce the efforts of the other disciplines with renewed direction to the betterment of the patient.

Sessions to form guidelines for a program were attended by representatives from Nursing, Respiratory Technology and Physiotherapy. Each discipline outlined their involvement with the respiratory patient and contributed ideas toward the overall structure of the program. The treatment techniques already in use were reviewed and the importance of a unified approach, under the direction of the physician, became more obvious with each meeting. The importance of the patient achieving independent performance of the activities of daily living required the attention from everyone treating the patient. Guidelines for the teaching of diaphragmatic pursed lip breathing, administration of aerosol medication and techniques of postural drainage were documented to allow for a limited overlapping of treatments between the staff disciplines. When postural drainage or an exercise program to improve or maintain the patient's fitness level was indicated, the physiotherapist was to assess the patient initially and provide instruction in the appropriate treatment. After the patient was confident with his treatment, other staff could then supervise part of his daily program.

Once the guidelines for the respiratory program were outlined, a submission for approval was made to the Respiratory Care Committee and the Medical Advisory Committee of the Dartmouth General Hospital and Community Health Centre. To inform the hospital medical staff, a presentation was made to a meeting of the Family Practice Physicians informing them of the program available. The physician referral of the patient to the program is directed to Physiotherapy.

Very often, Respiratory Technology is already involved with the patient in the administration of aerosol medications and oxygen therapy and, therefore, is aware of the referral. An assessment and treatment plan is devised for each patient in accordance with his condition and the physician's orders. The treatment plan is finalized at a team conference attended by all health care personnel treating the patient. The physician is welcome and is invited to attend the conference if it is possible for him to be available. These conferences provide excellent communication between the staff disciplines and serve as a teaching vehicle to staff members unfamiliar with the rehabilitation of the respiratory patient. The conference ensures that reinforcement of the principles taught will occur to make the necessary impact on the patient. Effective lung clearance, prescribed use of oxygen, breathing retraining and relaxation, thoracic mobility, co-ordination of breathing with activity, improved exercise, tolerance and education in the disease are the main objectives with many patients.

Very often at the team conference, the patient's day is reviewed and a schedule for the various treatments and activities is outlined. We have found that patients show more interest in their hospital treatments and are enthusiastic about their progress. A copy of the schedule is given to the patient with requests for feedback and suggestions.

Prior to discharge, family support is encouraged and community resources such as Public Health, V.O.N., Homemakers, and Physiotherapy are contacted if necessary. The personnel concerned are invited to a discharge

Continued on page 42.
A comprehensive care program for the management of patients affected with chronic airflow obstruction (chronic obstructive pulmonary disease) is important in assisting patients affected to, adapting as well as, improving their disease process.

A working definition for pulmonary rehabilitation was adopted by the American College of Chest Physicians at its annual meeting in 1974: "Pulmonary rehabilitation may be defined as an art of medical practice wherein an individually tailored, multidisciplinary program is formulated which through accurate diagnosis, therapy, emotional support, and education stabilizes or reverses both the physio- and psychopathology of pulmonary diseases, and attempts to return the patient to the highest possible functional capacity allowed by his pulmonary handicap and overall life situation."

Patient and family education are most important in the general management of patients affected with chronic obstructive pulmonary disease. The understanding of the disease process by the patients as well as the help of the family members in understanding the management principles is emphasized in a comprehensive care program. Personalized instructions can be provided by the physician; however, as can be seen in the following article, health science professionals can also play a major role in the educational process of both patient and family.

The proper use of pharmacologic agents such as antibiotics, bronchodilators, corticosteroids, and preventive therapy against infections is most important in the overall management. When appropriately prescribed these can have an overall benefit for the patient.

The use of breathing retraining and physical reconditioning as instructed by a physiotherapist has been widely used for many years in the rehabilitative care of patients with obstructive airway disease. Increased physical exercise will improve exercise tolerance in patients with marked shortness of breath on exertion and will help in attaining a more normal lifestyle in many of these patients.

Use of supplemental oxygen has recently been studied and in specific patients this may be an important adjunct to their therapy.

The impact of pulmonary rehabilitation program has resulted in an overall reduction of the patient's symptoms, and an overall improvement in their exercise tolerance which is then translated into improved activities during daily living. In addition, various studies have shown a reduction in the number of hospital days spent by patients enrolled in pulmonary rehabilitative programs.

To set up this type of program requires only a minimum of space and people. A person interested in chronic airway obstruction could become a co-ordinator of this type of program, using facilities and services which are already available in the small community hospital.

It is hoped in future that more co-ordinated programs will be available in the small community hospital for patients affected with chronic airflow obstruction and that an overall improvement and achievement of goals as outlined in the definition of pulmonary rehabilitation can be achieved.

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PULMONARY REHABILITATION IN A COMMUNITY HOSPITAL

Continued from page 41.

conference to inform them of the patient's response to hospital schedule and outlines areas of difficulty. Patients who require O₂ therapy at home will have been referred by the physician to a Home Oxygen Program while in hospital. Delivery of O₂ to the home is arranged prior to discharge. Instruction in the operation of oxygen and aerosol equipment is given to the patient and family also. The patient is free to contact the Respiratory Department should any problems develop with his or her home equipment.

The program, although in its early stages, seems to be achieving its goals. Patients are receiving more co-ordinated care and the staff are becoming more effective and knowledgeable in the treatment of the respiratory patient. We emphasize the fact that such a program can exist and succeed using existing personnel and facilities if a team approach is used.

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THE NOVA SCOTIA MEDICAL BULLETIN

APRIL 1982
Role of the Family Physician in the Emergency Room

E.G. Nurse,* M.D.,
Dartmouth, N.S.

Physicians in Halifax/Dartmouth area, in conjunction with our colleagues across Canada, have recently become embroiled in a debate regarding the training needed and the role of the Family Physician in the Emergency Room. The debate is largely promoted by three significantly differing positions.

The Royal College of Physicians and Surgeons believe that the only physicians working in an Emergency Room should be fellowship trained. This would presumably involve the usual four-year fellowship course which they are now establishing and would produce an Emergency Room Physician (E.R.P.). The opposite end of the spectrum is that of the College of Family Physicians. This College, as part of its certification program, is currently setting up a Special Competency in Emergency Medicine Examination, and the first examinations will be held in 1982. This Special Competency in Emergency Medicine would not be part of the hospital's standards but would serve (as is the present certification in Family Medicine), as a method of self-evaluation by the physicians concerned.

The third position—that of The Canadian Medical Association supported by the Canadian Federation of Medical Students (C.F.M.S.)—is rather middle of the road. The main objection that the C.M.A. and the C.F.M.S. have to the College of Family Physicians position is that the Examination in Special Competency can be written only by physicians who hold the certification in the College of Family Physicians and this certification, subsequent to 1980, can be held only by physicians who have taken the two year residency training program in Family Medicine. The C.M.A. objects as it disqualifies a large body of physicians who may not have taken the two year residency training program or who may not wish to do so. The central objection this author has to all their positions is that qualified physicians may be excluded for practising in the Emergency Room by their limitation on the number of hours required to sit the various examinations.

I would now like to share with my colleagues practising in the Province of Nova Scotia our experiences at the Dartmouth General Hospital in staffing our own Emergency Room. Prior to 1970 there were no Emergency Room facilities in the City of Dartmouth. This City of approximately 60,000 with a catchment area of another 60,000 was entirely without Emergency Room facilities and any emergencies occurring on a day-to-day basis were generally handled in the physician's office. The situation was entirely unsatisfactory and, in 1969, the Dartmouth Medical Society began an active promotional campaign with both the Provincial and Municipal governments to establish a qualified and staffed Emergency Room in Dartmouth. In July 1970, the Dartmouth Emergency Hospital, a renovated Medical Clinic opened its doors. The Municipal Government assumed the cost of renting the facilities and providing structural care. The Provincial Government was responsible for the cost of staffing and providing our X-ray and Laboratory facilities. The Dartmouth Medical Society assumed the responsibility of physician staffing.

At that time the Family Doctor population in Dartmouth was approximately 40. Several meetings of an organizational nature were held, attended by 25 of the Family Doctors on a consistent basis. It became obvious that there would be a hard core group of approximately 20-25 Family Doctors who would be willing to staff the Emergency Room on an ongoing basis. Various systems were devised and discussed, and it was finally decided that the Emergency Room would be staffed on a 24 hour day, 7 day week basis, with each day divided into two 12 hour shifts beginning and ending at 8 o'clock. The physicians, in alphabetical order, would work a day shift and a night shift. Since there were nearly 25 physicians who had indicated their desire to be on the roster, the situation was quite easy to arrange on the basis of approximately one day shift and one night shift per month. Various Internal Medicine and Surgical specialists practising already in the Community were contacted and were asked to provide back-up service if called upon. There was an intense level of co-operation by the specialties in establishing the Dartmouth Emergency Hospital. The situation in regard to Laboratory and X-ray were handled by making the Dartmouth Emergency Hospital a quasi-satellite of the Halifax Infirmary which provided back-up for these two services.

The Dartmouth Medical Society indicated to the Provincial Government of Nova Scotia when they opened service at the Dartmouth Emergency Hospital that they wished to have it clearly understood that they were providing a service for the people of the City of Dartmouth and, as a condition of this service, the Provincial Government would begin immediate plans for a General Hospital in the City of Dartmouth. Negotiations were begun with M.S.I. so that the Physician working in the Dartmouth Emergency Hospital would be paid on a fee-for-service basis, and accordingly three fee codes were created in the M.S.I. Manual: A072 and A077 to compensate the Physician working the day and night shifts; with A075 covering the holidays and Sunday shifts. The negotiations in regard to a new hospital were carried on over the next year or two and definite plans were put forward.

Construction was begun and the Dartmouth General Hospital opened its doors in March 1976 and with it a brand new Emergency Room and 114 beds. The support facilities i.e. Laboratory, X-ray, etc. were in place within our own hospital and also Operating Rooms, Intensive Care beds and Out-Patient facilities. The back-up became more readily available as various medical and surgical sub-specialists became interested in the in-patient care that was available on this side of the water. Dartmouth soon began to attract a small contingent of primarily Dartmouth based specialists, rather than having to borrow primarily Halifax based specialists on a time-to-time basis. The Family Physicians population decided to carry on with the 12 hour shift.

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arrangement that was already in place. The Duty Roster was set at 35 and it was felt that it should never exceed this figure as the time spent in the Emergency Room by each physician would then be so brief that the Physician would tend towards incompetency in this area.

A very active C.M.E. program was started that was essentially mandatory for all Physicians working in the Emergency Room. An active Basic Cardiac Life Support course was established and promoted on a mandatory basis. In addition, physicians were encouraged to participate in C.M.E. courses that had an Emergency Room "flavour" in various areas across Canada. The physicians using the Emergency Room were also required to spend time in the C.R., learning or refreshing themselves on the art of intubation. The Advanced Cardiac Life Support course was brought to Dartmouth in 1981 and all Physicians on the Emergency Roster were required to attend.

The approximate population using the Emergency Room steadily increased and in the late 70s and early 80s, with approximately 40,000 patients per year being seen in the Emergency Room. Certain critical areas became so heavily utilized especially on Saturdays, Sundays and holidays that one Emergency Room Physician could no longer handle the workload. At this point, an additional shift from 2:00 p.m.-10:00 p.m. was created and the Emergency Room Roster rotated through this in alphabetical order as well. Established from the time we entered the Dartmouth General Hospital was also what is known as a Back-Up Physician. The Back-Up Physician makes himself available on a 24 hour a day basis to be called into the Emergency Room should the Emergency Room Doctor or Doctors become so heavily involved that additional hands are required. In addition to this, the Back-Up Doctor is the recipient of all admissions to the hospital through the Emergency Room who do not have a Family Doctor of their own.

It should be mentioned that the Dartmouth General Hospital has no affiliation with Dalhousie University and, therefore, has no house staff. All admissions to the Dartmouth General Hospital are through the Family Doctor with or without a Consultant as a co-admitter. Consultants cannot admit primarily and must admit in conjunction with the Family Doctor. Since there are no teaching units or house staff all patients admitted must have a Family Doctor. For this reason, the back-up list had to be made available as patients from time to time present themselves in the Emergency Room indicating either they have no Family Doctor or who have a Family Doctor who is not on the staff of the Dartmouth General Hospital. In both of these situations, if the patient requires admission, they are admitted to the services of the Back-Up Physicians.

We, at the Dartmouth General, are extremely proud and pleased about the level and quality of care that we have established in our Emergency Room over the last ten years, and in the Dartmouth General Hospital over the last five years. Through intense co-operation between all of the Family Physicians in Dartmouth and, with an on-going excellent relationship with our Consultants, we have established an Emergency Room capable of handling 40,000 visits per year with a staff in most cases of only one physician and at most two physicians, usually with three or four R.N.s and one or two Cast Technicians. From the beginning, in 1970, we established a policy at the Dartmouth Emergency Hospital which was carried on at the Dartmouth General Hospital, that patients, unless absolutely unavoidable would not wait longer than a two hour period. This was the purpose of establishing the position of Back-Up Physician and should the last patient checked in be waiting longer than two hours, the Back-Up Physician must be called to the Emergency Room to lend a hand. In most cases back-ups occur because of life threatening situations that require long periods of the Duty Physicians time such as C.P.R.s.

The Dartmouth General Hospital, in general, and the Emergency Room, in particular, have established a rapport with the hospitals on the Halifax side of the harbour, so that patients which fall into several categories are transferred directly from our Emergency Room to the Halifax Emergency Rooms. The categories that are transferred immediately after basic stabilization procedures are carried out are: neurosurgical problems, significant burn problems and multiply-traumatized patients. It was felt that the tertiary care facilities on the Halifax side of the harbour were best suited to dealing with these patients. The opening of the Intensive Care Unit at the Dartmouth General Hospital was a landmark as far as the Emergency Room was concerned. From that point on we were able to keep some life threatening situations such as cardiac emergencies, that prior to that time required transferring to one of the Halifax institutions.

The last ten years in Dartmouth has demonstrated the ability of a group of dedicated Family Physicians with proper continuing education and the co-operation of consultants to meet the needs of an expanding Emergency Department in a Community Hospital. This fact should not be ignored when the Royal College, College of Family Physicians and the C.M.E. attempt to meet the educational needs of Physicians working in Emergency Departments in this country. ☐

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THE NOVA SCOTIA MEDICAL BULLETIN

APRIL 1982
Viral Hepatitis in the 80s

John J. McKeehan, M.D., F.R.C.P.C., Halifax, N.S.

Hepatitis has been present since the age of Hippocrates. It was the chance discovery by Blumberg in 1965 of an antigen, in the serum of an Australian aborigine, which opened the door for the proliferation of research developments in the past decade. These have so greatly enhanced our knowledge of viral liver disease that an effective vaccine is now on the immediate horizon.

Viral induced liver disease includes hepatitis A virus, hepatitis B virus and a third category designated Non-A, Non-B hepatitis which excludes A and B hepatitis, and other recognizable diseases such as Epstein-Barr virus, Cytomagalovirus and herpes simplex virus.

HEPATITIS A VIRUS has an average incubation period of four weeks and is primarily spread by the fecal-oral route. It is thus responsible for most epidemics, especially where sanitation is sub-optimal. Virus A produces a prodromal illness characterized by nausea, anorexia, fatigue and general malaise followed by dark urine and jaundice. Virus excretion in the stool decreases rapidly following exposure and patients are usually not infective ten days after the onset of symptoms.

Hepatitis A is usually a benign disease which does not evolve into chronic hepatitis and is rarely, if ever, associated with the development of a fulminant form of hepatic failure. A carrier state, either fecal or serum, does not develop and the diagnosis may be confirmed by the detection of antibody to hepatitis A virus (Anti HAV) in the patient’s serum. Standard gamma globulin is effective in the prevention of clinical hepatitis A and should be given to close family contacts in a dose of 0.02-0.04 ml per kg of body weight.

As mentioned already, virus A excretion in the stool rapidly decreases after the onset of symptoms and most patients are not infective by the time a clinical diagnosis is established. No specific precautions are necessary other than the usual “stool precautions”, with careful washing of hands and the use of gloves when handling bed pans or fecal contaminated material such as bed linen. Isolation in a private room is not necessary and it does nothing to enhance the psychological well-being of the patient. There is no evidence that diet or exercise affects the morbidity or prognosis. Patients can be allowed activity as tolerated and encouraged to eat a palatable balanced diet. Alcohol intake is curtailed as long as liver function tests remain abnormal and drugs with potential hepatotoxic properties are to be avoided. Hospitalization is not necessary unless the patient develops a complication such as dehydration or intercurrent bacterial infection.

HEPATITIS B VIRUS has an average incubation period of four months and is spread by means of blood and blood products, or occasionally by saliva and semen. Fecal-oral transmission does not occur and therefore enteric precautions and isolation are unnecessary. Hepatitis B produces a clinical picture similar to hepatitis A but fulminant hepatitis with a mortality rate of 80% is more likely to develop and, unlike Virus A disease, patients infected with B virus may develop chronic hepatitis in 12% of cases, which may progress to active cirrhosis and death. A carrier state manifested by persistance of hepatitis B surface antigen (HB, Ag) in the serum longer than three months occurs in about 10% of cases.

Hepatitis B patients may also develop antigen-antibody complex disease with the additional clinical manifestations of polyarteritis nodosa, membranous glomerulonephritis, cryoglobulinemia, arthritis and urticarial skin rashes. HB, Ag may be detected in the serum as early as three weeks after exposure and long before the development of clinical symptoms or abnormal liver function tests. HB, Ag usually clears from the serum several weeks after the onset of symptoms but occasionally may persist for up to three months. Persistence beyond this time indicates the development of a carrier state and/or chronic hepatitis.

The appearance of hepatitis B antibody (Anti HB,) in the serum indicates the development of immunity and heralds the onset of clinical recovery. Anti HB, may persist for years and, if it is the only serological marker, it indicates previous infection with B virus and probable immunity. Other serological markers such as core antigen and core antibody, e antigen and e antibody, may also occur at variable stages of hepatitis B illness but they are not readily available from all laboratories and usually are of limited clinical value, with the exception of hepatitis e antigen (HB, Ag) which if present in a chronic carrier indicates increased infectivity of that person’s blood.

The same general principles of management of hepatitis A disease apply also to hepatitis B infection. However, the latter patients must be followed more closely for a longer interval because of the increased incidence of chronic hepatitis and a carrier state. HB, Ag usually clears from the serum before three months and persistence beyond this time indicates the development of one or both of the above complications. A suggested follow-up program is to have HB, Ag and Transaminase determinations performed three months after onset of illness and, if HB, Ag is positive or SGOT elevated, a liver biopsy is performed.

A normal liver biopsy with positive HB, Ag beyond three months indicates a healthy carrier state and the determination of HB, Ag would be helpful in evaluating the degree of serum infectivity. Patients with persistent HB, Ag have an increased risk of developing primary hepatic cell carcinoma and should be followed with this fact in mind.

The liver biopsy may show a range of histological abnormalities from chronic hepatitis to active cirrhosis and the former may be divided into two categories for clinical purposes. The first category is chronic, persistent hepatitis (CPH) with histological evidence of inflammation in the portal zones and preservation of normal liver cell architecture. The prognosis is excellent and no specific treatment is indicated.

*Chief of Medicine, Dartmouth General Hospital and Community Health Centre, Dartmouth, N.S.
other than reassurance and continued observation. The second category is chronic active hepatitis which is a serious condition manifested by piecemeal necrosis with the formation of intralobular septa and, untreated, this form of chronic hepatitis may progress to cirrhosis and death.

Chronic active hepatitis is best treated with corticosteroids and several treatment programs have been recommended. The Mayo Clinic protocol is as follows: Prednisone 30 mg. daily for two weeks, 20 mg. daily for two weeks, 15 mg. daily for two weeks and then a maintenance dose of 10 mg. daily. Imuran is added to Prednisone in a dose of 50 to 75 mg. daily. This program has the advantage of fewer corticosteroid side effects.

The patient with chronic active hepatitis should be followed with liver function tests on a monthly basis and a liver biopsy performed six months after starting therapy. If a remission has occurred, steroids may be gradually withdrawn. If no remission has occurred and the patient is HB, Ag negative continue maintenance dose therapy for an additional six months. If no remission has occurred and the patient is HB, Ag positive, stop therapy! The above follow-up program is outlined in Figure 1.

3. Infants born to mothers who contact hepatitis B during the third trimester of pregnancy. Two-thirds of infants born to mothers who developed hepatitis B during the last two months of pregnancy will develop hepatitis and should be given HBIG. One suggested program is as follows: HBIG 0.5 ml. per kg. of body weight within 48 hours of birth and repeat 0.16 ml. per kg. every month for six months.

Hospital personnel, especially in renal dialysis units, are at risk to hepatitis B virus exposure and a planned course of action in the event of such an incident is as follows:

2. Assay blood from the exposed contact for HB, Ag and anti HB.
3. If the blood source is HB, Ag positive and the contact is negative for HB, Ag and anti HB, give HBIG 0.06 ml. per kg. of body weight and repeat in one month.
4. If the contact is positive for HB, Ag, HBIG should not be given. If the contact has anti HB, he is immune and prophylaxis is unnecessary.

NON-A, NON-B VIRAL HEPATITIS behaves somewhat similar to hepatitis B, with the possible development of chronic hepatitis and a carrier state. The average incubation period is two months and this illness now accounts for over 80% of post-transfusion hepatitis. No serological markers are available and it is therefore a diagnosis of exclusion at the present time. Standard gamma globulin in a dose of 5 cc. and repeated in one month may reduce the incidence of this disease in post-transfusion patients.

SUMMARY

Hepatitis A is usually a benign self-limited disease with complete recovery the rule. Patients are usually not infective by the time a clinical diagnosis is established and prophylaxis with standard gamma globulin is recommended for close family contacts. Hepatitis B has a similar clinical presentation but may develop fulminant hepatitis or progress to chronic hepatitis and/or a carrier state. Hepatitis B immune globulin should be given to sexual contacts and persons accidentally exposed by needle prick. Non-A, Non-B hepatitis has a course similar to hepatitis B and now accounts for most cases of post-transfusion hepatitis. Standard gamma globulin may prevent this form of disease in multiple transfused patients.

In closing, one should again mention the explosive research developments since the mid-60s which have now reached the stage where vaccine development programs now under progress will undoubtedly make this article redundant in the near future.

References

Roller Skating Injuries
A NOVA SCOTIAN REVIEW

Halifax, N.S.

SUMMARY

A total of 141 Roller Skating Injuries, treated at the Dartmouth General Hospital during the period from October 1980, to July 30, 1981, were reviewed. One hundred persons who had sustained injuries were interviewed by telephone. Questions included experience in skating, reason for accident, and recommendations for avoiding them.

Ages of Roller Skates were from the range from 6-67 years. Particularly susceptible were novices — especially young women over 25 years old, though very young children and adult men skating for the first time also sustained injuries.

Fifteen injuries occurred on the “street” and 85 in indoor rinks. Upper limb injuries were four times as common as lower limb injuries. Particularly common were injuries of the wrist and hand.

A visit to one of the rinks revealed that nearly 180,000 skaters participate each year and that the rink was well organized. The incidence of injury is probably about two per thousand skaters, but there are no accurate records available.

Recommendations are given, that could reduce the number of accidents particularly amongst novices and references made to the findings of other authorities who have reviewed injuries in this very popular and exhilarating sport.

INTRODUCTION

Enthusiasm for Roller Skating has recently returned. Over a century ago Roller Skating Injuries flourished in New York, Chicago and San Francisco thanks to skate inventor James Leonard Plimpton whose ingenious “rocker” skate allowed the exponent to turn. After many periods of alternating enthusiasm and neglect roller skating, both in rinks and on the streets, has become as popular as skate board riding a few years ago.

Probably some thirty million Americans are currently participating and, in many cities in the United States, young skaters can be seen on the streets or in the parks enjoying freedom of low friction action obviously making joggers look like plodders.

In Canada, roller skating received a burst of activity when “The Saints” opened two modern rinks in Winnipeg and Halifax. Whilst the Abba’s Ark and Centennial Arena provided adequate basic facilities for young participants, the opening of the “Saints” arena in Dartmouth allowed several hundred people to skate in pleasant, clean, well supervised surroundings at the same time. Skaters of all ages are now attending regularly and families can skate together.

Inexperienced skaters or people who have only ice skating proficiency are attracted to the sport. It was the advent of this roller skating bonanza and the steady trickle of roller skating injuries treated at the Dartmouth General Hospital that prompted an investigation and review of the Nova Scotia roller skating situation in 1981.

MATERIAL AND METHODS

Records from all patients treated for roller skating injuries at the Dartmouth General Hospital between the period of October 1980, to July 1981, were reviewed. Information including age, sex, nature of the accident, radiological features of the injuries were examined.

Table I shows the distribution of different types of trauma. Contusion of the wrist, hand and arm were commonest soft tissue lesions, usually resulting from a fall on the outstretched hand. Fractures of the wrist and radial head were the commonest bone injuries.

Although injuries of the upper limbs were nearly four times as common as those of the lower limbs, knee disorders were also a common occurrence. There were some bizarre injuries of the trunk and head and spine. One skater suffered from hyperventilation, resulting from nervousness and anxiety, and a number of skaters fell backwards onto their heads. A few fell onto their coccyges and one man injured his nose.

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TABLE I
ROLLER SKATING INJURIES
DARTMOUTH GENERAL HOSPITAL

(A) UPPER LIMB INJURIES

<table>
<thead>
<tr>
<th>Condition</th>
<th>Fracture or Dislocation</th>
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<tr>
<td>Shoulder</td>
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<tr>
<td>Elbow</td>
<td>11</td>
</tr>
<tr>
<td>Wrist</td>
<td>30</td>
</tr>
<tr>
<td>Hand</td>
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<tr>
<td>Arm</td>
<td>11</td>
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(B) LOWER LIMB INJURIES

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<td>Knee</td>
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<tr>
<td>Ankle</td>
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<td>3</td>
</tr>
<tr>
<td>Leg</td>
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</tr>
<tr>
<td>Total</td>
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(C) HEAD AND TRUNK INJURIES

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<th>Injury</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>Spine</td>
<td>8</td>
</tr>
<tr>
<td>Head Injury</td>
<td>4</td>
</tr>
<tr>
<td>Nose</td>
<td>1</td>
</tr>
<tr>
<td>Laceration</td>
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<td>Hyperventilation</td>
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<td>Abdomen</td>
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</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>

Telephone Survey

One hundred people out this group answered a questionnaire which included the following:

- **Age**
- **Sex**
- **Site**: rink or street
- **Experience**: novice, some experience, much experience, champion
- **Cause of Accident**: fall, tripped, pushed, too fast, attempting new trick
- **Conditions at the Rink**: few people, easy flow, crowded
- **Attitude after the Accident**: stopped skating altogether, more cautious, same as before

Results

Most people answered the questions with considerable enthusiasm and with constructive suggestions resulting in several useful recommendations.

Age and Sex

Figure 1 shows the age and sex distribution of the skaters interviewed in the Halifax-Dartmouth area. It will be seen that the skaters' age range from 6 to 55. The peaks occurred in the 11-15 and 16-20 age groups, although a significant number of injuries occurred in the 31-40 decade. Girls outnumbered the boys four to one, although there were no figures to show whether more females than males participate in this sport.

Site

Fifteen injuries occurred in the street and 85 occurred in the rinks. During the period of the study skaters interviewed used one of four different rinks. Abba's Ark (one of the first rinks to start in the Halifax-Dartmouth area) subsequently closed. The Centennial Arena continues to provide skating facilities during the summer — probably for some 20,000 skaters in a season. The "Saints" arena has recently changed its name to the "Wheelers" and entertains 20,000 skaters per month or more than 200,000 per year. Injuries occurring at this rink would probably be treated locally and not at the Dartmouth General Hospital. (See Table II)

One skater was injured at the Kentville rink and later came to Dartmouth for treatment.

TABLE II
SITE OF ROLLER SKATING INJURIES

<table>
<thead>
<tr>
<th>Location</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abba's Ark</td>
<td>1</td>
</tr>
<tr>
<td>Centennial</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Saints&quot;</td>
<td>80</td>
</tr>
<tr>
<td>Street</td>
<td>15</td>
</tr>
<tr>
<td>Kentville</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

"The Street Guys"

This smaller group of accidents occurred to skaters on their way to the rink or during a spell of skating other than in...
the rink. One eight year old boy and a 50 year old man were included in these injuries, and both were skating for the first time. Not all of these skaters were novices. Table III shows that there were 15 skaters including six novices, four with some experience and five with considerable experience. These accidents occurred after a fall or after tripping, usually the skater was either alone or with a friend, without the hazard of a crowded rink.

Rink Folk

This includes a wide variety of individuals of all ages. Family nights encourage a mixture of experience and novices, with fathers, mothers and even grandparents joining their active energetic teenagers. On other occasions teenagers and young adults enjoy a rich assortment of manoeuvres which are part of the repertoire of an accomplished skater.

Table III shows the distribution of experience of these skaters. There were 46 novices compared with 53 who had some experience. One champion skater was a young girl who demonstrated the art of figure skating in various shopping centres and was subsequently interviewed on the radio concerning the secrets of roller skating. Many skaters fell nervous particularly if skating for the first time and fell before they could gain their balance. Experienced skaters sometimes fell as a result of trying a new trick or tripped.

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**Table III**

<table>
<thead>
<tr>
<th>RINK SKATING INJURIES</th>
<th>EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novel</td>
<td>46</td>
</tr>
<tr>
<td>Some</td>
<td>27</td>
</tr>
<tr>
<td>Much</td>
<td>26</td>
</tr>
<tr>
<td>Champion</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

**RINK SKATING INJURIES**

**Novices**

In view of the high incidence of injuries amongst inexperienced skaters a study of novice accidents was made. This revealed that of the 46 novices there were ten men and 36 women. Particularly prone were young housewives between the age of 25 and 40 who responded to the advertisements and went skating for the first time. One young boy of six was pushed over and a man of 52 was similarly injured on his first acquaintance with roller skating though he was an experienced ice skater.

Figure 2 shows the age distribution of these novices sustaining accidents in rinks. There were 22 women between the ages of 26 and 40 who were novices and sustained injuries — the commonest age being 31-35. Probably these ladies were enjoying their first leisure roller skating and escaped from the burden of housework, office hours and children’s demands.

![Figure 2](image)

**Figure 2**

**Cause of Injuries**

Faulty skates or attempting new tricks were uncommon causes of injury. By far the commonest cause was an unexpected fall or tripping over another person. A few admitted that they were pushed. Many amateurs and inexperienced skaters simply fell over before they had learnt to balance. Some experienced ice skaters succeeded in the change of technique required for roller skaters. (Table IV)

**Table IV**

<table>
<thead>
<tr>
<th>Causes</th>
<th>RINK</th>
<th>STREET</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fell</td>
<td>44</td>
<td>7</td>
<td>51</td>
</tr>
<tr>
<td>Tripped</td>
<td>22</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Pushed</td>
<td>12</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>Bumped into another</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>skater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too fast</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Attempting new trick</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Faulty skate</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Hit wall</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>85</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>
Conditions of the Rink

Conditions at the "Saint's" rink vary considerably for on some nights relatively few skaters participate. There is plenty of space and most of the skaters are young teenagers who are elegant and comfortable skaters. At other times there are two or three hundred skaters who fill the floor and the situation becomes more crowded. Added to this there may be considerable variation in standards and capability of individuals. When a few inexperienced skaters mix with fast experts, small children and adults intermingle and the situation becomes more prone to accidents.

Questions were therefore asked as to whether the rink was crowded or a relatively easy flow of skaters was possible. If the street skaters are excluded conditions were crowded almost as often as when a easy flow was present. Probably many accidents in novices occurred not so much from the conditions as total inexperience and lack of necessary equilibrium. (Table V)

### TABLE V

<table>
<thead>
<tr>
<th>Rink</th>
<th>Street</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Easy Flow</td>
<td>35</td>
<td>—</td>
</tr>
<tr>
<td>Crowded</td>
<td>35</td>
<td>—</td>
</tr>
<tr>
<td>No information</td>
<td>8</td>
<td>—</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>85</td>
<td>15</td>
</tr>
</tbody>
</table>

Attitudes of Roller Skaters who Sustain Injuries

Direct questioning of roller skaters who have been injured revealed (as might be expected) that, for the most part, the young healthy teenager who was injured returned to the rink as soon as the injury had been treated — some even returning to skate wearing their casts. To the young housewives, however, a roller skating injury is more serious, jeopardizing their career, interfering with household duties, and causing serious inconvenience. This group tended to give up their idea of further skating. (Table VI)

### TABLE VI

<table>
<thead>
<tr>
<th>ROLLER SKATING INJURIES — ATTITUDES AFTER ACCIDENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stopped</td>
</tr>
<tr>
<td>More cautious</td>
</tr>
<tr>
<td>No change</td>
</tr>
<tr>
<td>No information</td>
</tr>
</tbody>
</table>

Most women gave up after injury.
Young kids keep skating.

DISCUSSION

The results of this review are very similar to other studies carried out recently in the United States, reflecting the local conditions and the relatively recent resurgence of roller skating amongst adults, as compared with teenagers who have been skating regularly in the older established rinks.

Upper limb injuries in girls were particularly common — contusions, wrist and hand sprains, and fractures of the lower end of the radius as well as fractures of the upper end of the radial head. Lettermans, in a review of roller skating injuries at the Army Medical Centre in San Francisco, found that 79% of the injuries affected the upper limb, 57% the distal radius and 11% the radial head and 10% the scaphoid. The distal radius was injured in 40% of females and 33% of males.

Knee injuries were particularly common in advanced skaters and the ankle injuries all occurred in beginners. There were some "Torus" (fractures of the lower end of the tibia) in young females. Poor training and inadequate muscle control of the adductor thigh muscles were revealed as contributing factors. Poor equipment was also blamed and was used because of the expense of sophisticated modern skates.

In our review girls out numbered boys by a ratio of four to one. Ages varied from six to 55. Upper limb injuries were four times as common as lower limb injuries. Mostly contusions of the wrist and fractures of the lower end of the radius.

Contusion of the upper limb (37) outnumbered fractures of the lower end of the radius (13) and were particularly common in novices. The relatively low incidence of lower limb injuries is remarkable and there were no Torus fractures. Injuries of the ankle comprised sprains affecting the experienced skaters and fractures occurring in novices.

Bizarre accidents, falling on the nose, head injuries, abdominal injuries and hyperventilation were also unusual events.

REVIEW OF LOCAL SKATING CONDITIONS

Visits were made to the two local rinks.

1. The Centennial Arena

This is an ice rink converted for roller skating during the summer months. Conditions allow skaters considerable freedom to enjoy their individual skills with relatively little crowding. Skaters tend to be experienced and competent. The manager supervises from a control tower in the corner of the rink. Only a few injuries in this series were from this rink and the manager stated that their accidents were uncommon.

2. "The Saints" — "Wheelers"

This is a relatively new rink designed specifically for roller skating and represents a big financial investment. A special plastic floor provides good skating conditions under colored lights and disco music. Up to 200 skaters or more can comfortably perform and they are controlled by a staff who provide music and vary the mood and direction of skating. Rules are strict — no smoking, no gum, and unruly skaters are disciplined. A large stock of good skates is available for hire. Correct dress is enforced. The management was keen to help this survey and attendants assisted injured skaters promptly.

Comments of Skaters Reviewed

Most of the skaters agreed that the rink provided a good healthy facility for roller skating. They commended the standards, discipline, rules, and banning of drinks and cigarettes.

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whilst beginners lessons are provided, many people felt that more could be done to prevent accidents particularly in novices. amongst the suggestions were:
limit the number when crowded.
separate novices from experienced skaters.
padding should be provided for knees and wrists.
spotters should be ready for accidents.
railings should be provided for beginners.
allow "games" only at specified times.

one person suggested that a wood floor would be preferable to plastic.

street skaters
the 15 street skaters represent a small problem compared with the large number of street skaters and acrobatic performers in the united states.

historical aspects
roller skating has a long history. one of the first records of roller skating accidents occurred in 1760 when the ingenious belgium inventor, joseph merlin crashed into a plate glass mirror. skates at first only allowed the skater to proceed in a straight line so one would expect that this was hazardous.

tyers invention of the five wheeled skate allowed the athlete to rock gracefully and francis garcin provided a three wheeled elegance. it took meyebeers to launch an opera "the prophet" with boys and girls careening around the stage on wheels. the boys had two wheels and the girls had two pairs which would seem to favour the latter.

after plimson's invention of roller skating became a world wide epidemic. when this faded, the invention of roller bearings by richardson gave another spurt to the sport.

more recent invention of larger wheels and the modern plated skate has brought roller skating from the doldrums of the past two decades when it became doomed to a few beefy males bursting their way around a roller derby.

recent papers
more recent reviews of roller skating have been made in the united states. roller skating injuries in california were reviewed by schwarzman. it was stated that a roller skating epidemic has hit the united states. some 15 ambulances per weekend cross the golden gate bridge with enthusiasts who have succumbed to accidents. roller skating has been recently adopted as an official sport for the pan am games.

in his review of 100 roller skating injuries treated at the medical centre in marina del ray, california, he found that the average age of injured skaters was 28, (ages varied from 7 to 57 with a peak of 30 to 34 years).

as in our review, women were more commonly affected than men (53% female and 37% male) and the injuries of the wrist and elbow were the commonest lesions. six severe injuries of the ankle occurred and this probably illustrates that many of the skaters were injured on the streets of california and that some of them probably had poor footwear presenting a different situation from the organized rinks of nova scotia.

inexperience, falling on the outstretched arm were the chief causes of injuries and unlike skateboarders (who are mostly teenagers and who sustained severe head injuries or renal trauma, which were occasionally fatal).

another report, stated that there were 2,800,000 roller skaters in the united states with 95,103 roller skaters seen in the emergency room in nine months in 1979 in one hospital. the commonest injury was wrist fractures and sprains. high quality wrist guards have been strongly advocated to prevent these injuries.

conclusions
roller skating has become a popular sport with some 200,000 tickets sold each year in the halifax/dartmouth area. injuries are particularly common in novices — especially women who have probably not been adequately trained for this sport. fractures of the upper limb are the commonest injury.

whilst adequate facilities for this sport are available, it behooves each participant to prepare adequately for the event and for the organizers to strive constantly to provide the safest conditions for the large numbers of people of all ages who wish to enjoy this magnificent sport.

acknowledgement
i wish to thank wheelies — family roller centres inc., dartmouth, n.s., for their cooperation and permission to use the photographs that appear in this article.

references
1. roggensak d. the wonderful world of roller skating. everest house, new york, 1980.
4. ulis k. wrist injuries in roller skating. n engl j med 1979; 301:1350.
Child Abuse —
Evolving a Protocol for a Community Hospital

Linda J. Smith,*M.S.W. and James A. Smith,**M.D.,
Dartmouth, N.S.

In 1981 there were 45 cases of child abuse reported to the Child Abuse Register of Nova Scotia. Seventeen of these cases were residents in Dartmouth. Six were reported by Dartmouth M.D.s, 4 by non-M.D.s and 8 by the I.W.K. Hospital (one case reported by two groups).

Definition of Child Abuse “The neglected or abused child is any child whose health and development are impaired or endangered for reasons of physical assault or a failure to provide adequate care and protection”.1

IDENTIFYING CHARACTERISTICS OF THE FAMILY AND CHILD AT RISK

The abused child, the parents and the family at risk have identifiable characteristics that physicians should be aware of and sensitive toward.

A. Family In the assessment of a family, one should be aware of the family in crisis; a family that moves frequently, and is lonely and isolated in the community — especially from friends and family. The parents are often dependent, demanding and critical. They show difficulty in handling stress, and immaturity and impulsivity are often noted. They may express a fear of “spoiling the child” and a belief in corporal punishment.

B. Child The abused child is often perceived as “different” by the parents, or may in fact be different. The child may have congenital anomalies, chronic illnesses, be a colicky baby, etc. The baby separated from mother during the first three months is potentially at risk since this often interferes with bonding. Such separation is often necessitated by prematurity and congenital anomalies. The child may be taken to a physician on several occasions for no apparent reason prior to the actual abuse.

On casual observation of abusing parents and abused children there may be no distinguishing features. On more careful assessment however, pathology will be revealed in what one may first perceive as a normal functioning family unit. The parents often have been abused themselves.

C. Crisis For abuse to actually occur, usually there has been a major change in the family recently, eg, loss of job, eviction, family difficulties, etc. or there has been a series of minor changes which necessitate constant family adjustments and hence stress. In volatile, impulsive people, who have difficulty handling stress, this can act as a triggering mechanism.

A young child was brought to our Dartmouth General Hospital Emergency Department with an injured arm. X-rays were negative and so reported to the parents. Later the same evening the child was taken to another hospital where an x-ray of the same arm revealed a fracture. The next day the parents were threatening to sue our hospital. When both medical staffs compared the films it was revealed that the fracture had occurred in fact between the two sets of films. Actually it was revealed that a parent fractured the arm. Who would have thought that abusing parents of this degree would have threatened to sue the physician and hospital? Such are the complexities in identifying the true incidence of child abuse.

DETECTION, ASSESSMENT AND REPORTING

We believe that better information regarding early detection, proper actions to be taken and community resources available to physicians will result in a more realistic detection of the true numbers of abused children.

A proper understanding of the reporting mechanism, what is involved and not involved, will hopefully encourage all of us to use resources of our Hospital and Community. The 6 cases of child abuse reported from Dartmouth in 1981 were by a small number of physicians — where were the rest?

The emphasis should be on treatment (while protecting the rights of the child) rather than on punitive action towards the abusing parents. This should make physicians more willing to refer suspected cases to other disciplines. The medical screening for suspected cases is well developed and this should be incorporated within a hospital protocol. Objective and accurate recording is essential in such cases. Psychosocial evaluation of the family would follow and then an appropriate referral.

High Risk for Potential Abuse In cases of high risk for potential abuse, the physician should arrange for continued follow-up. The physician may decide to see the family on a regular basis and should also involve Community Supports to assist the family. This is usually the Child Protection Agencies, Community Health Nurses, Family S.O.S. or Mental Health Services. It is always a question of professional judgment who in the community can best support the families at risk and yet provide enough protection to ensure that the child is not in danger. In most instances this takes the combined efforts of the Protection Agencies and medical services. Once identified however, families must not be allowed to hospital or doctor “hop” and thus continuing abuse goes undetected. This is probably the most difficult group to identify and to deal with for the physician.

As our awareness increases at the various hospitals, physicians must be alert that abusing parents may well avoid such institutions and select physicians in their offices where again, without the support and backup, one may be more reluctant to initiate involvement of treatment for this disturbed family.

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**Family Physician, Dartmouth, N.S. Perceptor and Lecturer, Dalhousie University, Halifax, N.S.
A Hospital Protocol for Child Abuse, available and familiar to all, is a mandatory initial prerequisite for proper management of the abused child and the abusing parents.

Current Nova Scotia Legislation The Children Services Act, subsection 77 (1 and 2) states that every person having information, whether confidential or privileged, of the need for protection, shall report the information to the local Protection Agency. Depending on the area, this may mean the Children's Aid Society, the Department of Social Services or Family and Children's Services.

Where abuse has been diagnosed or is suspected it is mandatory to report to the Child Abuse Register, Department of Social Services, Halifax. These forms should be available in every Emergency Department.

Protocol and Procedure to be followed in dealing with the Abused Child referred to in hospital as Trauma ‘X’. The protocol should interpret the Act as it affects reporting within the hospital, outlining the responsibilities; procedures; obligations and implications for legal responsibilities in not meeting the requirements under the Act. The physician is ultimately, as in any procedure, responsible for management of the case. When other professional members of staff are involved, (e.g. social worker) they then also become legally responsible to ensure that a report is completed.

SUMMARY OF HOSPITAL PROCEDURES FOR SUSPECTED CASES
1. Admit or transfer for admission.
2. Skeletal survey.
3. Clinical photographs.
4. Ophthalmological consultation in head injuries.
5. Report to local Protection Agency.
6. Report to the Child Abuse Registry if child abuse is diagnosed or suspected. This may be delegated to the social worker. The administration of the hospital should be advised.
7. The hospital social worker should liaise between medical staff and appropriate Child Protection Agency.
8. It is not anyone’s responsibility to report to the police, however D.O.A.s or deaths due to child abuse must be reported to the Medical Examiner in addition to the Child Protection Agency.
9. Records should not be available to a third party, other than the Child Protection Agency, except by subpoena.

Utilizing Community Resources
The hospital team for child abuse should remain, ideally a physician and the hospital social worker. This team should have a working relationship with community services, e.g. Child Protection Agency, Community Health Nurses; Family Court; Special Services of the School System; Mental Health Clinic, etc.

In the Halifax-Dartmouth Metro Area, these groups have joined forces and formed a group known as SCAN. This group acts as an information gathering and co-ordinating service of child abuse and neglect. It is oriented toward education for professional and lay people; advocacy for children and families, plus support and consultative services for involved groups.

This type of group can be organized in any community, probably co-ordinated and hosted by the local hospital. This enhances working relationships between these groups. One staff physician could be available to this group and act as consultant to other hospital staff.

The lack of reporting child abuse throughout this Province would indicate either a lack of awareness or an unwillingness to get involved. A better understanding of reporting procedures and support of other personnel should result in better diagnosis and treatment of this preventable problem.

“The Physician who examines and treats the child believed to have been abused, neglected or deprived, can be a natural advocate for the child.” The physician is in an excellent position to be the advocate for the abuse child, in fact may be the only advocate available prior to severe injury or even death.

“The complex problems associated with the appropriate care of the battered child and his parents require the attention of the most experienced personnel available... who can guide interested nonprofessionals in their involvement with these children and their families.”

PREVENTION AND S.O.S. (FAMILY SERVICE OF SUPPORT ASSOCIATION)
This organization consists of one paid professional co-ordinator who supervises a group of lay therapists, trained by professionals in child abuse under the model of Dr. C. Henry Kempe’s (Denver, Col.) group. They work with families that have been identified as a high risk for child abuse. Since 1978 they have worked with 249 families of which 66 came from Dartmouth.

These families have primarily been identified at the Grace Maternity and I.W.K. Hospital. High risk parents have been those with poor parenting skills, single mothers living in isolation or those where bonding has not been successful. Referrals are accepted from various groups, including self-referral by parents. The emphasis is on support and education to the parents with small case loads which enables significant amounts of time to be spent by the worker in the home.

This group serves as a model of another community service that should be available to all practising physicians. We feel the effectiveness of preventive programmes in the area of child abuse has been demonstrated.

Although one-third of the S.O.S. caseload in 1981 has been residents of Dartmouth, our Municipality has not seen fit to support this project financially that to date has been funded by the City of Halifax, the Province of Nova Scotia and various charitable sources. Does this indicate a lack of awareness and sensitivity within our community? Must we experience additional injuries and deaths before physicians and other community members utilize the resources of our communities and all become advocates for these children and their families?

References
A Community Hospital Programme of Continuing Medical Education

David A. Gass, "M.D., C.C.F.P.,

Halifax, N.S.

SUMMARY

Dalhousie University’s Division of Continuing Medical Education co-ordinates a programme of continuing medical education in community hospitals in the Maritime Provinces. Programme planning involves local community physicians and is focused through a local community hospital programme co-ordinator in each community. Teachers travel to the community making this programme economical of participants’ time as well as increasing the awareness by teachers of the local resources and environment in which the participants practise. Evaluations are carried out and the information shared among teachers, local co-ordinators and the Division of Continuing Medical Education. Research is required into relevant needs identification procedures, effective teaching and learning methods, and evaluation of these programmes on participants’ clinical practice.

Since 1951, Dalhousie University has assisted many community hospitals throughout the Maritimes in designing and providing continuing medical education sessions. Under the leadership of physicians such as Dr. Lea Steeves, Dr. Paul Cudmore, Dr. Marvin Clark and now Dr. Wayne Putnam, the programme has developed to involve 38 hospitals throughout the Maritime Provinces. Teaching sessions range from three to four hours with one teacher to whole-day sessions involving either one or two teachers. Resource teachers are drawn from a variety of universities as well as from practitioners in private practice.

The continuing production of these educational sessions in the Community Hospital Programme is designed in accordance with well-known characteristics of adults as learners. Most importantly, planning process involves the learners in directing their own education. In fact, the success of the programmes depends on the specific input of local physicians in each community focused through a local physician co-ordinator. Educational formats are chosen which encourage audience participation and make use of the great wealth of experience of the target audience. Because adults are less willing to postpone application of their learning, members of the target audience are involved in selecting topics. They are often problem rather than subject oriented and particularly relevant to the daily activities of the participants.

Participants’ motivation to learn flows from the tasks they perform in the community. These will include acting as diagnostician, counsellor, technician or therapist as appropriate to the medical problems presenting to them and the treatment resources available.

The activities of community physicians on hospital committees involved in medical audit, infection control, utilization, etc., can also provide an opportunity to identify educational needs. These committees’ deliberations may reveal a problem amenable to an educational solution. A good and accurate understanding of individual communities’ educational needs and preferences are necessary in the design and production of effective educational programmes.

The decision to produce educational sessions in the workplace of the learners, the community hospital, is economical of participants’ time and places control of the physical setting in the hands of participants. A familiar environment facilitates the experimentation and innovation with a variety of learning formats which take advantage of participants’ wealth of experience. It has also produced a wide variety of programmes acknowledging each community’s preferences and resources. Teachers report that visiting physicians in the community and more particularly the community hospital, does give them a better appreciation of the learners’ needs, and of the available settings and resources with which to resolve them.

The focus for overall planning in each community is the annual visit by a physician from the Division of Continuing Medical Education. This serves as a focus for the process of needs assessment by a local physician co-ordinator. One to one contacts by the educator with a variety of local physicians provides first-hand feedback on the past year’s programme. Individuals also have this opportunity to state preferences for the following year.

Individual physicians in each community are encouraged to give serious thought to their educational needs and preferences prior to the visit. Local hospital or medical society committees may review educational needs evolving from their work. A clear expression of the community’s needs will result in a relevant and useful continuing medical education programme. The annual visit also provides an opportunity to review other educational sessions in the hospital and to meet with hospital librarians, hospital administrators and others who represent local resources. In this way, The Division of Continuing Medical Education maintains the close contact with the community and co-ordinates its programmes with those organized locally. This close contact is essential to the Community Hospital Programme.

The appointment of a local physician as co-ordinator for the Community Hospital Programme has proved to be crucial to its success. The co-ordinator makes the arrangements for the Division’s educator’s annual visit by organizing local appointments and stimulating discussion of education needs and programme preferences at appropriate meetings. Six weeks prior to each individual programme, the co-ordinator is encouraged to contact the teacher to outline the community’s request in more detail and to state their preferences for the format or presentation.
The teacher has an opportunity to express his or her particular interests and concerns and a detailed programme is worked out conjointly. Co-ordinators and teachers alike need encouragement to experiment with a variety of participatory formats which actively involve those attending. The legacy of experience from medical school days in these areas is frequently narrow, with the emphasis on the lecture format and an authoritarian approach. Once communities have achieved a significant level of participation they are seldom content with strict didactic formats. The co-ordinator collects evaluations from the audience and receives feedback from the teacher on the local planning and organization.

Teachers are selected on the basis of the community's and the Division's previous experience with individuals as consultants or teachers. The tradition of using a significant number of teachers not on the Dalhousie faculty began with inclusion of New Brunswick communities in 1956. At that time, participation of the local consultants as well as francophone teachers was requested. The excellent assistance of the Continuing Medical Education departments of The Universities of Laval, McGill, Montreal and Sherbrooke, among others, has been invaluable in encouraging such teachers' participation.

Dr. Paul Cudmore began an annual workshop for local hospital co-ordinators at which he used his excellent abilities as a group leader to present information on a variety of planning processes, the expression of needs as particular objectives as well as information on a variety of seemingly mundane features such as seating, lighting, audio-visual needs, etc., which influence the acceptability of educational systems to adult learners. This workshop continues as a regular feature. In recent years it has focused on methods of needs identification while modelling several formats which involve participants and utilise their experience. They have resulted in the production of a planning protocol and several worksheets for use by co-ordinators. This year it addressed the topics of needs assessment, educational resources, marketing and funding of the programme.

After the annual community visit, the role of the Division of Continuing Medical Education is to contact the teachers, convey this initial information and arrange a mutually acceptable programme date. Handling of monies for expenses and honoraria is also done by the Division. The programmes are financed by contributions from the Medical Societies, the Medical Licensing Bodies, individual participating communities, voluntary health agencies, and the pharmaceutical industry. These financial arrangements vary from province to province. The various agreements for sources of funds are co-ordinated through the Division of Continuing Medical Education. Ongoing evaluation has played a role in the evolution of this programme over the past 29 years. However, it has only dealt with presentation, content, organization, sense of usefulness to participants and individual participants' comments. Some individual teachers may try to assess the material learned by producing questions or case presentations as part of the teaching format but this is infrequent. Evaluation of actual behaviour change of physicians has not been performed. Research into methods of needs assessment, educational formats and outcome evaluations are currently being pursued within Dalhousie's Division of Continuing Medical Education.

In summary, physicians will learn best when their need to be self-directing is recognized, when their wealth of experience is utilized, when they can apply their new learning immediately and when they are motivated by their various professional and social roles. Community input from individual practitioners during the annual visit and through the ongoing involvement of local physician co-ordinators is the foundation upon which the community hospital programme has been built. Each physician can help ensure the inclusion of appropriate topics and their presentation in an effective format by giving serious consideration to his individual educational needs and expressing them at appropriate staff meetings, to the local physician co-ordinator and to the educator from Dalhousie's Continuing Medical Education during the annual visit. Their activities on hospital or medical society committees may also identify important educational needs. Participation in the evaluation of each session in the programme is a valuable contribution to the planning of future sessions. Research should be directed to defining more effective methods of needs identification, more effective designs of programme presentation and more effective tools for evaluating a variety of settings, formats and participants.
Dr. Lea C. Steeves Retires

Barbara Hinds,
Halifax, N.S.

Dr. Lea C. Steeves, a medical consultant and educator, known by doctors throughout the Maritimes for his wisdom and courtesy, has retired as Associate Dean, Postgraduate Medical Education, in the Faculty of Medicine, Dalhousie University, Halifax, N.S.

Looking back on his career, he said in interview, his most important contribution to medicine was enabling doctors to help in the design of their own continuing education and then introducing the concept to undergraduate medical education. Invoking students in the design of their curriculum was directly opposite to the “father knows best” syndrome endemic in all medical schools, as in many other spheres.

“I think I’ve spent my career in medical education trying to get educators to agree that undergraduate, postgraduate and practising doctors are all adult learners. They deserve a place in designing their own curriculum,” said Dr. Steeves.

He was the university’s first full-time director of Continuing Medical Education (CME), and his appointment in 1957 was the second in Canada. CME is now recognized as an integral part of medical education in all 16 Canadian medical schools.

Dalhousie’s division of CME is formally 25 years old, but the University’s CME activity goes back to 1922. It now runs a smooth operation by regularly offering courses in Halifax to update skill and knowledge in the health field. It also sends specialists to medical centres anywhere in P.E.I., New Brunswick and Nova Scotia in response to local need and request.

The network organization of demand and response was built on the solid and enduring reputation of integrity which Dr. Steeves built during his first 10 years in Nova Scotia as a consultant in internal medicine. If a patient were too sick to be moved to the medical centre in Halifax, and if a physician needed help, Dr. Steeves was usually called in as a consultant and he would go in person wherever he was needed. It is typical of the man that his vehicle has long been a four-wheel drive. The doctors he met during those early consultant years later became the key personnel in the CME network in Atlantic Canada after Dr. Steeves was appointed first full-time director of the CME Division.

In addition, Dr. Steeves, like most other cardiologists in the province, performs another duty of importance but tedious. For 34 years he was interpreted electrocardiograms (ECGs) sent in to Halifax from outlying hospitals which do not have a cardiologist. Those thousands of ECGs have been read after “normal” working hours for many years. His load will not be reduced, but Dr. Steeves will continue to read ECGs.

Since 1973 he has been preparing for retirement from the Dean’s office, increasing his involvement in teaching and in the care of patients.

Despite the years of long hours, Dr. Steeves has always enjoyed several hobbies — photography, canoeing, camping, bird watching, social dancing and cross country skiing. Three of his sons are doctors, one is a photographer and environmentalist, and one is a junior high school teacher.

Born in New Westminster, B.C., in 1915, he graduated as M.D., CM., from McGill in 1940. He served his country as a Surgeon Lieutenant in the RCNVR for nearly three years and arrived at Dalhousie University, as a lecturer in medicine in January 1946. By September the same year, he was an Assistant Professor of Medicine. Later he became Associate Dean of Clinical Affairs and Associate Dean of Postgraduate Medical Education, while holding posts in Halifax Infirmary, Camp Hill Hospital and Victoria General Hospital. He has been president of the Canadian Association of CME, the President of the Medical Council of Canada and of The Medical Society of Nova Scotia.

Immediately after retiring from the post of associate dean, Dr. Steeves spent five days in Nigeria as the university’s representative, assessing the problems faced by a newly established medical school on the edge of the Sahara Desert.

*Consultant in Public Relations for the Faculty of Medicine, Dalhousie University, Halifax, N.S.
An Appreciation

DR. JOSEPH BAXTER MACDONALD

Dr. J. B. MacDonald, 71, died at his home on March 22, 1982. Born in Stellarton he was a son of the late H.C. MacDonald and Sarah Jane Pushie Baxter.

After completing elementary and high school education in Stellarton and New Glasgow schools, he received a B.Sc. from Dalhousie University and after his first year in medicine there, he entered McGill University where he graduated with an M.D.C.M. in 1937. Following internship in the Montreal General Hospital he practised in Bridgewater and Stellarton for short periods before joining the Royal Canadian Army Medical Corps with which he served overseas in England, Holland and Germany for four years during World War II. After his discharge, he returned to Stellarton in December 1945 where he practised until his retirement in July 1978.

Active in medical affairs, he served as President of the Aberdeen Hospital Staff, the Pictou County Medical Society, and two terms on the executive of the Medical Society of Nova Scotia. He was founding member of the Stellarton Professional Centre which opened in 1975. He was also a life member of the Stellarton Branch #28 Royal Canadian Legion.

Surviving besides his wife, the former Helen Logere, are two daughters; Ann (Mrs. G. T. Dolan), Caledon, Ontario; Dr. Marion, (Mrs. R.J. Bedard), New Glasgow; live sons; Fred, Peterboro, Ontario; Dr. Paul, New Glasgow; Dr. Chris, Campbellton, N.B.; Jim, Ottawa, Ontario; and Dr. Bill in Halifax. There are nine grandchildren. Also surviving are two sisters; Catherine (Mrs. J. Leahey), Montreal; Nonie (Mrs. I. Smith), Brantford, Ontario and a brother Tom, Ottawa, Ontario.

Following his retirement in July of 1978 the town of Stellarton hosted an evening in honor of "Dr. Joe", as he was affectionately known to patients and friends, and the large turn out exemplified the esteem in which he was held by all. He will be greatly missed.

S. H. Cameron, M.D.,
Stellarton, N.S.

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Reminiscences

DR. ROBERT W. BEGG

The death of Dr. Robert W. Begg in Saskatoon on March 2, 1982, closes the career of one of Dalhousie's most distinguished medical alumni. He will be sadly missed by his many friends and associates in cancer research and medical education.

He was the first full-time medical research scientist appointed to the Faculty of Medicine at Dalhousie University in 1948, moving on in 1950 to become a fellow in Cancer Research at the University of Western Ontario. In 1957 he was appointed Director of the Saskatchewan Research Unit of the National Cancer Institute and maintained his contact with these laboratories as he went on to occupy progressively higher posts at the University of Saskatchewan — Dean of Medicine, 1962-67; Principal of Saskatoon campus, 1967-74; and President 1975-81. He was appointed an Officer of the Order of Canada in 1976 and awarded honorary degrees by Kings (DCL 1976), Dalhousie (LLD 1977) and Saskatchewan (LLD 1981).

My personal association with Bob Begg began in the 1930s when a mutual interest in clinical medicine and research brought us into frequent contact as students at Dalhousie. He obtained his B.Sc. degree in 1936 and continued in science to earn an M.Sc. in Biochemistry in 1938, a very unusual pre-medical preparation in those days. Our paths diverged for a few years after I graduated in Medicine in 1938. Bob entered the Dalhousie Medical School and graduated in 1942. By that time I was back in Halifax as Medical-Officer-in-Charge of the R.C.A.F. unit at the Embarkation Unit (Y Depot). We were responsible for training aircrew in the use of oxygen equipment in low pressure chambers, and testing them for susceptibility to decompression sickness.

One day I received a telephone call from Bob Begg. He said he had joined the Royal Canadian Army Medical Corps and was trying to persuade his superior officer to post him to the new school for paratroop training in Western Canada. Because he had a slight impairment of hearing in one ear, the Medical Officer thought he might have trouble equalizing pressure in his ears during flight or parachute jumps. I, of course, invited him to take a simulated flight with me in a low pressure chamber. He was at the unit within minutes. A mere demonstration that he could ventilate his ears on a slow descent was not enough for Bob. We "dove" at speeds exceeding any aircraft then known. His exuberant energy and all-consuming curiosity required demonstrations of oxygen lack at 25,000 feet and decompression sickness at 35,000 feet. Enthusiasm and scientific curiosity were exemplified in all that Bob Begg did.

He received his posting to the paratroop training school and was the first Canadian medical officer to wear the coveted parachute insignia. Knowing Bob, I would assume that he performed many more than the number of parachute jumps required to qualify for the badge.

After the war, Dr. Begg continued his education and research training, earning a Doctor of Philosophy at Oxford University in biochemistry. He returned to Dalhousie as a research-scientist in the Department of Biochemistry in 1946, the same year I joined the Department of Preventive Medicine. Assistant professors had a hard time at Dalhousie in those days, as the post-war inflation rapidly worsened. His loss to the University of Western Ontario and Dr. Martin Hoffman's later move to Montreal were part of the tinder that lit a fire under the University Administration.

One other story. Several years later the distinguished Principal of the Saskatoon campus of the University of Saskatchewan (the second campus was at Regina) was a member of the survey team to accredit the Medical Faculty of Queens University at Kingston, Ontario. After an exhausting day of interviews and visits to laboratories, clinics and hospitals, we spent a long evening reviewing our findings and comparing notes. Then we spent the second day on more inspections. As we headed wearily back toward our hotel, a massive red fire hydrant partially blocked the narrow sidewalk. Bob leaped over this like a schoolboy, much to the surprise of an on-coming group of medical students. Nothing seemed to slow him down.

After the enemy he had fought all his life, as a medical scientist, forced the removal of one lung, he continued to work in his cancer research laboratory. And he returned to his laboratory even after he developed a secondary in the brain.

An appraisal of Dr. Begg's significant contributions to cancer research, medical education and university administration might be considered by some to be a more appropriate tribute. I prefer to recall episodes that, I think, illustrate a few — and only a few — of the outstanding human characteristics of the man.

Chester B. Stewart, M.D., C.M., F.R.C.P.(C), Former Dean of Medicine, Dalhousie University.
The new Silver Wing at St. Mary's Memorial Hospital, Sherbrooke, N.S. was officially opened recently. The wing is named after Dr. Gordon Silver who Dr. Sheehy, Minister of Health, described as "not only a pillar of the community, but also the type of man we might all consider the ideal physician — a doctor who embodies all the finest traditions of medicine".

Dr. Silver was born in Halifax and graduated from the Dalhousie Medical School in 1935. He served on the St. Mary's Memorial Hospital Board of Trustees since it was established in 1949 until his retirement in 1981. Dr. Silver was made a Senior Member of The Medical Society of Nova Scotia in 1981.

Dedication ceremonies for the "Dr. Robert Clark Dickson Centre", for ambulatory care and oncology research at the Victoria General Hospital, took place recently. The centre which is now under construction in the Victoria General medical complex was dedicated to Dr. Robert Clark Dickson.

In his remarks, Health Minister Gerald Sheehy pointed out that the dedication was made in honour of Dr. Dickson's unstinting service as: "Professor of Medicine Emeritus, Dalhousie University, and Senior Physician, Victoria General Hospital, whose outstanding leadership within the University and this hospital has influenced the provision of clinical care and medical education throughout Canada."

Dr. Robert N. Anderson, Halifax heart specialist, has been appointed Acting Head of the Dalhousie University Department of Medicine in the Faculty of Medicine, and Acting Head of the Victoria General Hospital Department of Medicine.

The Walter C. MacKenzie Health Sciences Centre soon to begin functioning in Edmonton Alberta honours Cape Breton native.

Dr. Walter C. MacKenzie was born in Glace Bay, grew up in Sydney and Baddeck and graduated from Dalhousie Medical School in 1933, to embark on a remarkable and distinguished medical School in 1933, to embark on a remarkable and distinguished medical career which earned him honours both within and outside the profession, and the epithet "citizen of world surgery".

He came to Edmonton in 1937 after completing a surgical internship at the Mayo Clinic but was soon back in east coast hospitals in Halifax, Sydney and St. John's, while serving as Surgeon-in-Chief to Royal Canadian Navy hospitals during the Second World War.

He returned to his surgical practice in Edmonton and, in 1949 he was appointed chief of surgery at the University Hospital. In 1959, he became Dean of Medicine, a post he held until his retirement in 1974. He also was Honorary Surgeon to Her Majesty the Queen for 1966-67.

Dr. MacKenzie's contributions as a surgeon, educator, administrator and researcher have been acknowledged, not only in Canada, but internationally, and at his death in 1978, tributes from around the world were received.

DALHOUISIE MEDICAL STUDENTS -
RECIPIENTS OF RESEARCH AWARDS

Four students have been named the 1982 winners of the highly prized scholarships awarded annually by The Dalhousie Medical Research Foundation. The awards valued at $10,000 each, payable over two years, are made to students of merit who undertake research programmes over two summers and during their elective studies in Dalhousie University's Faculty of Medicine, "The Medical School of The Maritimes." Miss Patricia Anne Tomney, B.Sc., (Hons. Biology) St. Francis Xavier University, 1976, M.Sc., (Anatomy) Dalhousie, 1980, has won the studentship named after Dr. W. Alan Curry, former Professor of Surgery, Dalhousie University. The special award is made every second year to a student engaged in research in either surgery or anatomy. Miss Tomney will work on research into innervation of the heart in the laboratory of Dr. David A. Hopkins, Department of Anatomy. Miss Tomney, 27, a native of Halifax attended Riverview High School, New Brunswick, before entering university. Foundation studentships have been won by Ms. Mai Riives, 29, a native of Saint John, New Brunswick; Atul Sharma, 20, born in New Delhi, India, now of Truro and Halifax, N.S., and Colin G. Mann, 20, born in Reading, England, now of Halifax.

OBITUARY

Dr. Joseph B. MacDonald (71) of Stellarton, N.S. died on March 22, 1982. Born in Stellarton, he received his early education in Stellarton and New Glasgow schools, and then graduated with a B.Sc. from Dalhousie in 1934, subsequently receiving his M.D. from McGill in 1937. He served overseas with the RCAMC during the Second World War and then returned to Stellarton where he practised until retiring in 1978. To his wife and family we extend our sincere sympathy.

THE NOVA SCOTIA MEDICAL BULLETIN

APRIL 1982
Correspondence

To All Nova Scotia Doctors:

The use of Urea Formaldehyde Foam Insulation (U.F.F.I.) has been banned in Canada since December 17, 1980. Prior to this homes throughout Nova Scotia were insulated with this product, the majority of these on a federally sponsored insulation grant program.

Health implications associated with exposure to formaldehyde (produced as U.F.F.I. deteriorates) have been well documented in the article, "Formaldehyde: Its Hazards at Work and In The Home", Modern Medicine of Canada, Aug. 1981, Vol 36, No. 8). The effects of long-term exposure have yet to be determined.

The Federal Government, which held financial interest in one of the major producers of U.F.F.I. has been negligent in failing to provide sufficient information to the medical community on the hazards associated with U.F.F.I. and has offered little more than "Band-aid" treatment or limited compensation to those affected.

Monitoring methods have been found to be inadequate due to the unstable nature of the product and failure to account for varying environmental conditions (humidity, etc.).

Another factor that must be considered is the emotional stress of those who have witnessed their home (their home) depreciate in quality and in value. The financial implications are overwhelming.

The only solution is complete removal of the foam at an estimated cost of approximately $25,000 per unit. Without a comprehensive, federally sponsored program to correct this health hazard, the problem will continue to adversely affect the physical and emotional well-being of thousands of Canadians.

U.F.F.I. QUESTIONNAIRE

1. Have you been made aware of the health implications associated with prolonged exposure to U.F.F.I.?
   YES  NO

2. Have you ever considered exposure to U.F.F.I. to be a factor in certain conditions?
   YES  NO

3. Have you ever diagnosed conditions you felt to be directly related to U.F.F.I. exposure?
   YES  NO
   OFTEN  Seldom

4. Did you consider the symptoms serious enough to advise removal of the insulation?
   YES  NO

5. If so, were the symptoms alleviated?
   YES  NOT SURE  NO

COMMENTS:

The simple economics of immediate removal compared with the long term costs of medical problems for all those who are presently, and will in the future, occupy these homes is obvious. Young families and the elderly are the most susceptible and in general, the least able to rectify the problem.

It is the intent of the UREA FORMALDEHYDE FIGHT GROUP OF NOVA SCOTIA to:

1. Create an awareness within the medical profession of the potentially serious health hazards associated with prolonged exposure to urea formaldehyde foam;

2. Determine the extent that individual practitioners have suspected, or determined that U.F.F.I. has been detrimental to the health of their patients.

We have documented cases on file which suggest that U.F.F.I. has been the contributing factor in serious health conditions; however, we wish to expand our information base and are seeking your cooperation in responding to the attached questionnaire.

Sincerely,

Dr. Paul F. Brodie
Board of Directors
Nova Scotia Urea Formaldehyde Fight
6222 Jubilee Road
Halifax, N.S. B3H 2G2
Phone 422-2380; home 426-6325

Please use format as shown in inset when preparing your reply to Dr. Brodie. Thank you. Ed.

An Open Letter To All Nova Scotia Doctors:

I am writing to solicit your support for our organization, "Canadians for Health Research" (CHR). We are a non-profit, federally chartered organization run by volunteers who are laymen and medical professionals interested in the further development of medical research in Canada.

We have two main purposes:

1. To act as a lobby to ensure that medical research is adequately funded by provincial and federal governments. This involves working directly with government committees as well as informing MPs and MLAs of the needs or requirements for medical research.

2. To act with the media and the general public (including the voluntary associations and the scientific community) to raise the level of awareness of the mechanisms of research and the significant research work in medicine being done in this country.

Most of the work of the organization is handled by volunteers in chapters across Canada. The head office, in Montreal, handles as well the publication of a quarterly magazine FUTURE HEALTH. Our problem is that the volume of work has increased substantially and CHR needs to broaden its financial base so that it can continue to be effective. I am asking that you consider supporting our organization by contributing an amount of $10.00 or 15.00 which is, of course, tax deductible. Should you feel that an amount larger or smaller than this is within your capability, it would also be greatly appreciated. You will be placed on our

THE NOVA SCOTIA MEDICAL BULLETIN

APRIL 1982
membership list which entitles you to receive FUTURE HEALTH and to attend our annual meeting.

Should you be interested in taking an active part in CHR, please contact me personally. As you know, most breakthroughs in the medical field start in the research lab. The contributions of our scientists to the education of medical students, the postgraduate courses they give, the refresher courses provided to their peers in medical practice, the training of new scientists, the application to patient care of relevant research advances made anywhere in the world, and the need for research into health problems unique to this country are facts that demand that we work together to ensure the viability and growth of the Canadian medical research effort. CHR needs all the support it can get to achieve its objectives.

Head office address:
CP Box 126, Westmount, Que., H3Z 271
Phone (514) 392-4864.

Thank you for your interest in our work,
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