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THE NOVA SCOTIA MEDICAL JOURNAL

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GUEST EDITORIAL

The Family Physician and Home Health Care Programs

Murray Nixon,* MD, CCFP, FCFP.

The emergence of organized home health care programs, many government supported and multidisciplinary, is an important development in our health care system.

The home provides the ideal setting for patient care when:

1. The patient's condition does not require hospitalization or nursing home replacement.
2. The patient is able to leave the hospital or rehabilitation unit and continue recuperation or rehabilitation at home.
3. The patient chooses care at home rather than in an institution and has attentive and available family and friends to assist him.[1]

We have come from a time when care at home was the normal thing, for all who had a home, through a period of emphasis on care in institutions and are now in an era of humanization and cost control in which care at home is again of increasing interest.[2] Home care is rapidly entering the mainstream of medical practice, a change that is being fueled by dramatic economic and social mandate.[3] Patients have always liked it.

Health care at home has become much more than families caring for a relative, supervised and supported by a visiting nurse and occasional house calls by the family doctor, however, those doctors and nurses recognized something that some of us have forgotten or not learned; that "In home care, the caregiver has a tremendous advantage, you get a thousand clues immediately, as you enter the neighborhood, walk down the street, climb the front stairs. . . . .In the hospital all these clues are lost."[4]

Today, many patients who formerly would have stayed in the hospital after surgery or a period of acute illness are now being discharged to home care for supervised convalescence. Some patients are able to safely bypass hospital entirely. In response to these changes in medical practice, techniques previously used only in institutions have been adapted for use in the home.[5]

Intravenous lines, both central and peripheral, for the administration of essential nutrition,

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chemotherapy, antibiotics and narcotics have become commonplace in home care. Ventilators and apnea monitors are permitting patients who used to be confined to institutions to return to their homes. Most important, services needed to provide these high technology therapies have also been expanded. Many nurses, therapists and homemakers are working in home care programs, government and private. Home care services are increasingly used by the elderly, a group growing rapidly both in absolute numbers and in proportion to the rest of the population. These elderly patients are usually either chronically ill and for whom home care services may forestall institutionalization, or require skilled rehabilitation and/or nursing services following acute illness, in order to allow them to return as much as possible to their former level of functioning.[6]

Palliative care has become an important component of home health care with new medications and routes of delivery providing good symptom control which allows the patient to remain at home if that is where he wishes to be.

Home health care can foster continuity of care and patient advocacy, and the coordination of care with other health professionals.

Through training and experience, doctors are able to make major decisions about patient care when other health workers may hesitate or over-react. These decisions often relate to the wisdom of staying at home versus transfer to the hospital, evaluation of signs and symptoms and the use of medications.[7]

Participation by the physician in home health care can include the following seven broad ranging responsibilities:

1. Awareness of when to use coordinated home health care for a patient.
2. Referrals by the physician knowing where the services are available.
3. Supervision by the physician as he remains the leader of the home health care team. This includes house calls, when indicated.
4. Information keeping by the physician as records are maintained and data exchanged with other team members.
5. Consultation by the physician who is available to speak with others.
6. Discharge planning by the physician as he determines when home health care can be discontinued.
7. Advisory activities as the physician relates in a professional capacity to the hospital, medical society or other groups.[8]

Appropriate physician participation and leadership are indispensable to the delivery of high quality home health care. When there is insufficient physician participation, the quality of care may suffer.[9]

The strongest argument to be put forth to encourage the family physician to remain actively involved with his patient in home health care, is that to have a patient cared for in the home and not remain actively involved is a form of abandonment — not abandonment in the strictly legal sense, but rather an abdication and moral abandonment of our responsibility for the continuing care of the patient. We physicians, at times, have deferred home care responsibilities to the nursing profession, which has responded with dedication, compassion, and skill — and with too little support from us. If we are intensely involved with the patient in the office and hospital, why should there be an abrupt change in the level of participation when the patient becomes a home patient? The patient and family certainly do not view hospital discharge as a divorce but rather as a part of a continuum.[2]

Home health care is team care, which means that professionals from different disciplines work together in providing care for patients. Team work implies that solutions to problems can be worked out as a group rather than by individuals and that it is possible to arrive at a shared philosophy.[10]

It is important of course to include physicians other than family oriented or general practitioners in the home health care plan. There is a place for many specialists including the geriatrician, psychiatrist and even the surgical specialists who have been seen on house calls, that have proved beneficial, convenient and certainly much appreciated.

The importance and contribution of nursing to home health care cannot be stressed enough. The nurses are in the homes caring for our patients. If physicians develop a strong working relationship with the nurses helping in the home, there is better sharing of information and encouragement for the nurse to make decisions based on her expertise and close involvement with the patient.[2]

With home health care linking ambulatory and hospital care, the family physician has a challenge to provide leadership as the only member of the home health care team actually chosen by the patient. This doctor-patient relationship provides a firm foundation for successful health care in the home.

Let us remain involved, along with other team members, both for the professional satisfaction and the good of our patients. □

References

1. Bernstein Lawrence H, Grieco, Anthony I, Mary K. *Primary Care in the Home, Philadelphia*: J.B. Lippincott Co., 1987.
2. Sutherland Ralph W, Fulton M Jane. *Health Care in Canada. A Description and Analysis of Canadian Health Services.* MOM Printing, 1988.
3. Tapia Jayne. *Planning for Home Health; A Guide to Organization and Operation,* American Health Care Association, 1985.
4. Mount Balfour M. Challenges in Palliative Care, *Am J Hospice Care,* 1985; **2**:22-30.
5. Moxley JH, Roder PC. New Opportunities for out-of-hospital health services: *New Engl J Med* 1984; **310**:193-197.
6. Koren Mary Jane. Home Care — Who Cares? *New Engl J Med* 1986; **314**:917-920.

7. Brickney P. *Home Health Care for the Aged,* New York: Appleton-Century Crafts, 1978.
8. Ginzberg E, Balinsky W, Ostow M. *Home Health Care; Its Role in the Changing Health Services Market.* Totowa, New Jersey: Rowman and Allanheld, 1984.
9. *American Medical Association Physician Guide to Home Health Care.* Chicago, Illinois: Second Printing, 1981.
10. Barker JH, Kratz C. *Towards Team Care,* London: Churchill Livingstone Press, 1980.

OF NOTE

Among many other worthwhile comments made by Dr. Jim Smith, MLA, in the Reply to the Speech from the Throne; we find the following comments on Nova Scotia's home care program. Dr. Smith is commended for his leadership in this area.

"The skeleton of a home care program is slowly emerging, after surviving two elections and four Thone Speeches. I would like to compliment the sincerity of Mr. Bob Moody, Provincial Coordinator for the Home Care Program. While I am critical of this government for squeezing home care under the welfare umbrella, rather than an integrated, coordinated, comprehensive program under health, I would compliment Mr. Moody and his staff for making do with limited resources.

The current program is not designed to support patients discharged from hospital, to provide 24 hour nursing care, involved nursing care or follow-up of the mentally ill patients. It will be a non-acute and non-emergent program. Such a program will have limited effect in eventually reducing the escalating health care costs that are mainly hospital generated. While it may promote independence, it will rely heavily on family and volunteer resources.

While the nursing component is free, the allotted time for visits is not clear, other than it does not include 24 hour nursing services. The relationship and responsibilities of the family physician are ambiguous at this time. The back-up services, such as technical aids, are lacking, though we note the promise of a coordinator for technical aids in the Speech from the Throne."

Nothing in this world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan "press on" has solved and always will solve the problems of the human race.

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In young children the respiratory centre is especially susceptible to the depressant action of narcotic cough suppressants. Benefit to risk ratio should be carefully considered especially in children with respiratory embarrassment, e.g., croup. Estimation of dosage relative to the child's age and weight is of great importance.

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Treatment: *If respiration is severely depressed, administer the narcotic antagonist, naloxone. Adults: 400 µg by i.v., i.m. or s.c. routes and repeated at 2 to 3 minute intervals if necessary. Children: 10 µg/kg by i.v., i.m. or s.c. routes. Dosage may be repeated as for the adult administration. Failure to obtain significant improvement after 2 to 3 doses suggests that causes other than narcotic overdosage may be responsible for the patient's condition.*

If naloxone is unsuccessful, institute intubation and respiratory support or conduct gastric lavage in the unconscious patient.

Dosage: Children 2 to under 6 years: 2.5 mL 4 times a day. Children 6 to under 12 years: 5 mL or ½ tablet 4 times a day. Adults and children 12 years and older: 10 mL or 1 tablet 4 times a day.

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Pictonians, Pulp Mill and Pulmonary Diseases

Daniel S. Reid,* MD, MCFP,

Pictou, N.S.

For 20 years, residents of Pictou in north-eastern Nova Scotia have complained of both the stench from, and possible health problems related to stack (atmospheric) emissions from a nearby Kraft-type pulp mill. The Provincial Cancer Registry for Nova Scotia, in its latest report, indicates that Pictou County has a very high incidence rate of cancer. Using provincial Department of Health and Fitness separation data, the author has established that the community hospital in the Town of Pictou has a statistically significantly higher separation rate for respiratory illnesses when compared with other similar Nova Scotia Community Hospitals.

The medical literature has not previously indicated a strong association between cancer and/or respiratory disease and pulp mill atmospheric emissions, the indication being that these emissions are an annoyance only. The author concludes that either a complete and thorough epidemiological study should be done immediately by Government Departments to confirm these findings; and/or the pulp mill either voluntarily or through Government regulation be forced to change its technology immediately, so as to avoid further hazard to the health of residents of Pictou.

A Kraft-type pulp mill operated by Scott Maritime — a division of Scott of Philadelphia (USA) — has since 1968 been discharging both gaseous and particulate matter into the environs of Pictou.

Pictou is a Town of 5,000 residents on the north-eastern shore (Northumberland Strait) of Nova Scotia, located on a large harbour. The Scott mill is located at Abercrombie Point, a protrusion of land into the centre of the harbour, directly across from the Town and approximately two km distance. Pictou lies in the offshore direction of the pulp mill — this being the wind direction during overcast, rainy or dull weather. Thus, on many days of the year, the stack emissions from the pulp mill fall directly on the Town and surrounding areas. It stinks!

The kraft process uses sulphate to convert raw wood fibre into pulp. Pulp, of course, is used in a subsequent process (away from Nova Scotia) to make paper. The gaseous emissions from this process are: hydrogen sulphide, methyl mercaptan, dimethyl sulphide, dimethyl disulphide and sulphur dioxide. The particulate emissions are: sodium sulphate, sodium carbonate, calcium carbonate and calcium oxide. The stink is from the hydrogen sulphide.

Documented toxicity in both human volunteers and following pulp mill accidents as a result of these gaseous emissions (particularly sulphur dioxide), exists and is reported in the literature. The chief source of these gaseous emissions, and hence the stench in a kraft pulping process, are the recovery furnace, digester and the lime kiln.

The Scott Mill was built with 1960s technology. Through the years, Scott has spent considerable sums to improve the quality of their air emissions; and especially in the late '70s, did much to reduce particulate emissions. Further improvements since 1981, totalling over $10 million, have resulted in reduced emissions from the recovery boiler to a level below the limit established by the Nova Scotia Department of the Environment.

The Nova Scotia Department of the Environment [correspondence from the Minister, John Leefe] indicates that the standards applied to Scott are comparable to those of other Provinces and the Federal Government. Current Nova Scotia standards (1990) are the National Ambient Air Quality objectives for particulates and sulphur dioxide; and British Columbia's ambient air objectives for hydrogen sulphide. However, these standards are quite lax by most North American criteria for 1990.

Scott, in fact, candidly admits in a brochure mailed to all Pictou County householders in the Fall of 1989 that mill equipment is largely of 1967 technology, and that it is not designed to meet modern mill air emission standards. They indicate further that they will spend $2.5 million over the next two years on upgrading and replacing air emission control equipment. This will do little, however, to eliminate the stench or to comply with North American standards of the 1990s.

Besides the annoyance to local citizens caused by this odor, the question has been asked: "Do these emissions cause any disease or harm to health?"

The author and fellow medical practitioners in Pictou have heard many anecdotal accounts over the years from patients, complaining that this odor and associated air emissions cause: nausea; vomiting; dizziness; congestion; nasal discharge; eye irritation; migraine headache; and respiratory (pulmonary) problems. Many of these accounts come from very reliable citizens.

Pharmacists in Pictou report a drop in sales of various medications such as respiratory aerosols, inhalers and other related drugs when the pulp mill is out of operation, e.g. "downtime" for maintenance, prolonged labor strikes, etc.

A review of the medical literature in 1985 by Dr. Lamont Sweet concluded as follows: "While residents are often annoyed with odor from mills, there is no

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evidence that emissions cause respiratory illness in residents living near the mills".[1] This literature review revealed few epidemiological studies but did point to the fact that in one study, the implementation of new pollution control measures resulted in a significant decrease in the number of health complaints by residents of the area. In all, twelve references were reviewed by Dr. Sweet.

In 1989, Solet *et al.* described an increase in lung cancer in pulp and paper workers and indeed, an increase in all malignant neoplasms in workers with greater than thirty years employment.[2]

Two documents have recently come into my hands, in my capacity as Chief of Staff in Pictou, which has caused me to further ponder the health effects aspect of the Scott pulp mill.

The first is the *Annual Report of the Cancer Treatment and Research Foundation of Nova Scotia.*[3] Covering the period from April 1, 1987 to March 31, 1988, the registry figures reveal that Pictou County males have the highest incidence rate (6.82%) of total cancers in Nova Scotia, as reported by county. When skin and in-situ cancers are excluded, again Pictou County males show the highest incidence rate (5.26%). Similar tables for females show Pictou County women to be third highest in Nova Scotia for total cancers and second highest when excluding skin and in-situ cancers. This report compares all eighteen Nova Scotia counties. The registry further points out that the three leading cancer sites in men are lung (21.40%), prostate (18.11%) and colon/rectum (10.24%). The three leading cancer sites for women are breast (25.4%), colon/rectum (16.70%) and lung (10.24%).

The second document that caused me even greater concern resulted when our hospital was preparing for an accrediditation survey by the Canadian Council on Health Facilities Accreditation (CCHFA). It listed the ten leading diagnoses at separation (discharge) for both our adult and pediatric patients at the Sutherland-Harris Memorial Hospital in Pictou.* The striking thing to me was the seemingly large number of respiratory cases. Was the pulp mill across the harbour a factor, I mused?

METHODS

Several hospitals, similar in size to the Sutherland-Harris Memorial Hospital (SHMH) were contacted for their separation numbers and diagnoses; as was the Nova Scotia Department of Health and Fitness. The latter supplied data for all Nova Scotia hospitals broken down by type of respiratory diagnosis, and total respiratory cases. The three-year periods, 1986-87, 1987-88 and 1988-89 were compared. SHMH data were compared with all medium-sized hospitals (51-100 beds), listed in Table I. In order that the data be comparable, only acute care bed separations from SHMH were compared with other hospitals in the representative sample (Table II).

TABLE I

MEDIUM-SIZED (51-100 BEDS) COMMUNITY HOSPITALS IN NOVA SCOTIA

Hospital	Number of Beds
All Saints, Springhill	61-62
Digby General, Digby	65
Fisherman's Memorial, Lunenburg	82(includes 23 DVA)
Halifax Civic, Halifax	52
Inverness Consolidated, Inverness	75(includes 35 extended care)
New Waterford Consolidated, New Waterford	88
Queen's General, Liverpool	50-55
Roseway, Shelburne, Shelburne	56
Sutherland-Harris, Pictou	58(includes 21 extended care)
Western Kings, Berwick	63

The individual proportions of respiratory separations to total separations for each hospital in this group, were compared with the overall proportion for the total group (for each year separately), using the "chi-square test for homogeneity of binomial samples".[4] The large chi-square values show that the individual proportions do indeed vary from hospital to hospital. To identify which hospitals are significantly above average for each of the three years, standard errors were calculated and one-tail tests performed. The results are summarized in Table II.

RESULTS

The data in Table II show a statistically significant increase of respiratory diseases for three or four different hospitals in Nova Scotia, depending on the year of analysis. Closer scrutiny of the data shows that hospitals other than Pictou with increases (New Waterford, Springhill and Inverness, for two of the three years) are all located in active coal mining towns. Although coal mining was formerly carried out in Pictou County, it was in the Westville-Stellarton area (not serviced by SHMH in Pictou). As there has long been an established and medically documented association between lung disease and exposure to coal dust, one might expect a higher incidence of respiratory cases amongst a population of active and ex-coal miners. Such is the case in New Waterford, Springhill and Inverness.

For Pictou, a detailed study of the data (available from the author upon request) shows that the greatest number of respiratory cases fall into the asthma/acute infective bronchitis category. This, one might expect to see from an allergan or irritant in the atmosphere. Common sense and observation establishes that Pictou's atmosphere differs from other communities in Nova Scotia only by the fact that it is in the immediate vicinity of the air emissions from the Scott kraft pulp mill.

*This is a medium sized community hospital of 58 beds (37 acutre care and 21 extended care), serving the Town of Pictou (pop. 5,000 approx.) and the surrounding rural area of West Pictou County (pop. 10,000 approx.). As a consequence of this survey, the hospital received the highest award of the CCHFA — a three-year accreditation.

TABLE II

RESPIRATORY SEPARATIONS COMPARED WITH TOTAL SEPARATIONS IN ALL NOVA SCOTIA MEDIUM (51-100 BEDS) COMMUNITY HOSPITALS

Hospitals	1986-87 Separations Resp.	Total	Proport.	1987-88 Separations Resp.	Total	Proport.	1988-89 Separations Resp.	Total	Porport.
Pictou	216	1,395	.1548*	190	1,310	.1450*	155	1,262	.1228*
Springhill	225	1,543	.1458*	222	1,543	.1439*	242	1,359	.1781*
Shelburne	98	1,866	.0525	80	1,636	.0489	117	1,558	.0751
Berwick	173	1,941	.0891	166	1,894	.0876	187	1,880	.0995
Liverpool	220	2,229	.0987	156	2,013	.0775	177	1,979	.0894
Inverness	275	2,138	.1286*	205	2,112	.0971	250	2,077	.1204*
Digby	145	1,898	.0764	145	1,911	.0754	160	1,735	.0922
Lunenburg	197	1,906	.1034	123	1,900	.0647	177	1,979	.0894
Halifax (Civic)	24	1,444	.0166	17	1,393	.0122	18	1,261	.0142
New Waterford	421	2,496	.1687*	382	2,592	.1474*	404	2,561	.1576*
Totals:	1,994	18,856	.1057	1,686	18,304	.0921	1,878	17,725	.1059
	$\chi^2 = 379.89$; $P < 0.001$			$\chi^2 = 360.37$; $P < 0.001$			$\chi^2 = 305.62$; $P < 0.001$		
	$se(p) = 0.003769$			$se(p) = 0.0032964$			$se(p) = 0.003814$		

Note: those hospitals marked with an asterisk (*) are significantly above the overall mean ($P < 0.001$) for that particular year.

DISCUSSION

I conclude that the air emissions from the Scott pulp mill — a kraft type process releasing hydrogen sulphide and sulphur dioxide — are the reason for the highly statistically significant incidence of respiratory illness in the Pictou hospital. I do concede that these data cannot establish a direct link between the pulp mill air emissions and the respiratory patients. The evidence is indirect, circumstantial if you will, but strong none-the-less. The old adage, 'common things are common' comes to mind.

I further question why such a high incidence of cancer in Pictou County, as revealed in the Annual Report of the Cancer Treatment and Research Foundation? I do not have the resources to study this matter further, but I cannot help concluding that the quality of the air we breathe is a definite factor.

A further study based on a good epidemiological model, such as that by Spitzer *et al.* is recommended.[5] As well, a paper by Antó could serve as a model.[6] Both of these papers appeared in 1989.

Such data as linking respiratory illnesses to times when the pulp mill is in operation as compared to downtime should prove helpful. A study of drug store sales of aerosols and inhalers for these corresponding periods would prove interesting. Comparing cancer incidence by county to data available before the pulp mill located in Pictou County with present day data, would be enlightening; as would, of course, comparing our observed numbers with those expected, excluding other risk factors. The author has neither the resources or the expertise to carry out such analyses. If however, government or university authorities were to undertake such studies, they would find full support in this community.

I further conclude that living with this health hazard, plus the terrible stink for the last 20 year plus, is enough!

Scott official (Mr. Byrne, the Mill Manager) and the present Minister of the Environment for Nova Scotia (Mr. Leefe) conclude that the installation of a low odor recovery boiler and a high efficiency precipitator is part of the answer to our problem with the stink. It too could help with the health effects. Scott Maritime has indicated that its present boiler of 1960s design has another five to eight years of life. At that time, they would consider replacing it at a cost in excess of $100 million. The Nova Scotia Department of the Environment could speed this up by introducing stricter standards (1990 vintage) regarding atmospheric emissions.

I believe that the data presented here fairly reflect a cause and effect relationship. Further studies would only delay appropriate action. I therefore call on both Scott Maritime and our Government (through the Department of the Environment) to begin planning now, set aside the dollars and measure up to present day acceptable standards so as to retrofit the Scott pulp mill. Do this before more Pictonians suffer undue health problems, increased morbidity and mortality.

. . . . and let's be rid of the stink! □

ACKNOWLEDGEMENTS

I would like to thank my medical colleagues at SHMH for their support in the preparation of this article — both moral and otherwise. I am indebted to Dr. Aden Irwin for a lesson in statistical analysis I thank SHMH Board members and Administration for their helpful support and finally, for her knowledge of where to find information, critical review and for typing the manuscript, I am deeply indebted to our hospital medical record librarian, Carole Scanlan.

References on page 166.

Comprehensive Care for Patients with Congenital Hemostatic Disorders in the 1990s

Dorothy R. Barnard, MD, FRCPC, FAAP,
K. Susan Robinson, MD, FRCPC and Margaret M.L. Doane, RN.

Halifax, N.S.

The desirability of establishing an efficient, effective and comprehensive care clinic for people with congenital hemostatic disorders has increased over the past decade because of problems the magnitude of which were only dimly realised in the past. The number of these patients is few, yet the implications of their health care affect many. Acquired immunodeficiency disease, decreased supplies of replacement components, advances in genetic diagnosis and counseling, persistence of significant joint disease in spite of early aggressive treatment and difficulties with insurance and employment, have all become realities to patients with congenital hemostatic disorders. The issues are complex, yet if the resources required to solve them are used effectively, the cost can be reduced. The principles of comprehensive care for patients with congenital hemostatic disorders include both those which are unique as well as those common to other chronic illnesses.

In this overview, a perspective of current comprehensive health care for patients with congenital hemostatic disorders and some of the resources available in Nova Scotia will be presented. At a work-shop conference convened by the Canadian Hemophilia Society in 1978, the stated objective was to encourage Canadian health care professionals to establish comprehensive care programmes throughout Canada for patients with congenital bleeding disorders. The expectation was that the patients and their families would have significant responsibility for maintaining their own health care. This objective has been realized to varying degrees over the ensuing decade.

The incidence of severe congenital hemostatic disorders is approximately one for every 10,000-15,000 persons living in Canada. Thus few health care team members have a chance to gain in-depth experience in the care of these people. Because of the significance of their disease and its treatment, the expertise of many health care professionals is required to provide optimal care (for example, physicians experienced in hematology, infectious diseases, rehabilitative medicine, orthopedics, dentistry; health care professionals with expertise in psychosocial concerns, counseling, negotiating). Technical advances, including those in hemostasis, therapeutic infusion products, and orthopedic procedures, are on-going. The most effective approach to the care of patients with congenital hemostatic disorders is to pool the resources and form an "expert" health team, or comprehensive care programme, dedicated to providing consultation for maintaining and advancing the care of these patients.

The Nova Scotia Government has facilitated the development of a Comprehensive Care Programme for people with congenital hemostatic disorders by providing the salary for a nurse coordinator who works through a clinic for patients with congenital hemostatic disorders at both the Izaak Walton Killam Hospital for Children and the Victoria General Hospital. The overall objective of the Programme is to allow a person with a congenital hemostatic disorder to achieve his/her maximum potential. It is not the intention of this Programme to take over their on-going care unless it is so desired by the person's primary physician and the person/parents themselves. The purpose of the Clinic is to maintain an accurate assessment of all persons with congenital hemostatic disorders so that optimal resources can be provided (i.e. infusion products, hepatitis vaccine, anti-viral agents, prenatal diagnosis). Lobbying, for disability allowance and insurance coverage for example, requires accurate data on the total functioning of patients and their families. Participation in the Clinic depends on the individual needs of each patient.

Using the acronym CARE for clinical care, assessment, research, and education, some of the many facets of health care maintenance will be briefly mentioned.

CARE: Clinical Care

As stated above, maintaining optimal care related to all aspects of health: preventive, adaptive, and therapeutic; psychologic and physiologic so that the affected individual and his/her family can achieve his/her maximal potential and independence is the goal of the comprehensive care clinic. To attain this goal, involvement by many health care professionals with differing areas of expertise must be available to all persons with congenital hemostatic disorders, wherever they live in Nova Scotia.

Diagnosis

Access to a skilled coagulation laboratory is necessary to establish the initial diagnosis, to carry out family or prenatal testing, to determine the response to therapeu-

From the Departments of Pediatrics/Pathology; Department of Medicine and the Izaak Walton Killam Children's Hospital.

Correspondence: Dr. Dorothy Barnard, IWK Children's Hospital, 5850 University Avenue, Halifax, NS, B3J 3G9

tic trials (i.e. DDAVP), to monitor for the development of factor inhibitors, and to measure factor concentration during and following surgery.

Accurate diagnosis of von Willebrand's disease (incidence approximately 1 in 1,000) is important for therapy. (see Table for subtypes of von Willebrand's disease). DDAVP, which is beneficial in the commonest sub-type of von Willebrand's disease, may be ineffective e.g. for patients with type III, and perhaps for patients with type IIa; or harmful e.g. for patients with type IIb. Cryoprecipitate is the recommended factor replacement product for patients with von Willebrand's disease in situations where DDAVP is not indicated. Factor VIII concentrates do not contain sufficient von Willebrand activity (Ristocetin cofactor activity) for therapy.

The development of DNA probes capable of defining chromosomes which carry the "hemophilia" gene has allowed increased accuracy in prenatal and carrier diagnosis. Random inactivation of one copy of a gene occurs in each cell. In general, one copy is eliminated in 50% of cells and the other copy eliminated in the other 50% of cells. There are people in whom significantly more of the abnormal gene is inactivated (carriers undetectable by clotting assays) or significantly more of the normal gene is inactivated (women with clinically significant factor deficiency). DNA probe testing is helpful in defining the carrier status of women in whom the testing by coagulation assays is unsatisfactory.

When an X chromosome is inactivated it is not transcribed but it is replicated during cell division. The DNA from the inactivated X is present in the cell and available for testing. Using combinations of restriction enzymes (which each cut chromosomes at the site of a characteristic nucleic acid sequence) and DNA probes (which recognize certain nucleic acid combinations), chromosomes which carry the "hemophiliac" gene *may* be recognized. It is important to realize that the probing detects a sequence associated with "hemophilia" and not the diseased gene itself. Therefore, detailed family studies are critical to determine that the defective gene is definitely associated with the allele detected by the probe.

Prenatal diagnosis is possible using the same technic, preferably on first trimester chorionic villus samples. Optimally, women should be tested prior to becoming pregnant to determine whether an appropriate probe is available. DNA analysis is expected to provide maximum certainty regarding the phenotype of a male fetus in approximately 60% of women, for 3% no diagnosis will be possible and for the remaining 37% the chance of mis-diagnosis will be 5%. All patients with factor VIII or factor IX deficiency do not have the same defective allele. This DNA testing is available through the Department of Pathology/Pediatrics, Queen's University, Kingston, Ontario.

Treatment

Early intervention is the cornerstone of effective treatment for patients with congenital hemostatic disorders. Participation in a home care programme allows the patient to infuse replacement product as soon as possible, thus maximizing independence as well as providing the best therapeutic intervention.

There is limited availability of increasingly safe coagulation transfusion products. The use of wet-heat treated products (factor VIII and factor IX concentrate) is associated with a decreased incidence of infection with HIV and hepatitis B and non-A, non-B (hepatitis C). Increased accountability for these expensive and relatively scarce products will be required in the future.

The treatment of patients must be reviewed to ensure optimal benefits. Treatment plans for the next year will be discussed at Clinic visits to predict their approximate factor replacement product requirements.

TABLE I

CLASSIFICATION OF vonWILLEBRAND'S DISEASE

TYPE	INHERITANCE	BT	VIII:C	vWF:AG	VIII:RCoF	MULTIMERS
I	AD*	↑	↓	↓	↓	all forms decreased
II	all subtypes have decreased large multimers in plasma					
II a	AD	↑	↓/N	↓/N	↓	intermediate forms ↓ (+/- ↓ in platelets)
II b	AD May be associated with thrombocytopenia	↑	↓/N	↓/N	↑	
II c	AR**	↑	N	N	↓	abnormal bands
II d	AD	↑	N	N	↓	abnormal bands
II e	AD	↑	↓/N	↓/N	↓	abnormal bands
III	AR	↑↑	↓↓	↓↓	↓↓	absent

*AD = autosomal dominant **AR = autosomal recessive

Complications

Infectious complications have become an overwhelming concern for patients, their families and their health care workers.

Acquired Immunodeficiency Syndrome

As experience increases, it has become apparent that all patients with HIV I infection do not react alike. This provides some optimism with regard to the outcome of these patients. The Canadian Hemophilia Society is actively involved with research of HIV infections in patients with congenital hemostatic disorders. HIV positive hemophiliacs are eligible for a number of clinical trials. Educational programmes for hemophiliacs and their families are urgently needed to provide them with information regarding the pathogenesis and transmission of HIV infection, as well as information of the meaning of positive antibody status. Many people with congenital hemostatic disorders are receiving information from the media with all the potential inaccuracies and misinterpretation this can involve. Resources and up-to-date information are available to those involved in the comprehensive care programme and can be forwarded to those interested when appropriate. Monitoring for abnormal lymphadenopathy, signs of infection, as well as abnormal blood work including lymphocyte markers is important in following HIV positive hemophiliacs for the development of clinical HIV infection. Interpretation of changes in lymphocyte markers in patients is complicated as changes in lymphocyte markers are found in all chronically transfused patients, probably secondary to intravenous stimulation by many foreign antigens.

Hepatitis

Hepatitis B and C (non-A, non-B) have been associated with significant morbidity and mortality in patients receiving replacement blood products.

Other

The full implication of other transfusion acquired infections (CMV, EBV, or HTLV I) is unknown.

Arthropathy is the most well known complication of patients with classical hemophilia. Repetitive bleeding into a joint usually leads to a proliferative synovitis with hypervascularity. This can be followed by destructive arthropathy, osteopenia, cystic changes in subchondral bone, destruction of cartilage, and loss of joint space. Associated problems include muscular atrophy, contractures, joint instability and deformity, and chronic arthritic pain. Initial treatment may include factor replacement, rest, splinting, followed by muscle-strengthening exercises, and a prophylactic factor replacement programme. Chronic synovitis with heat, swelling, and tenderness of greater than two months duration; recurrent hemarthrosis unresponsive to coagulant factor replacement; and advanced arthropathy without signs of active inflammation are indications for more aggressive intervention.

Treatments for chronic synovitis include:

a) surgical intervention which usually results in chronic limitation of joint movement and requires prolonged convalescence.
b) chemical injections such as methylprednisolone which can result in subjective improvement and may decrease the number of bleeds as well as the amount of replacement factor used. Improvement in radiologic staging may be attained. Rarely, these injections can be complicated by septic arthritis or crystal-induced synovitis.
c) radioactive injections which are not usually associated with further loss of joint mobility.

Infrequent but significant bleeds include retroperitoneal (which can cause lumbar plexus compression), intramuscular (which can lead to nerve compression, atrophy, pseudocysts), and renal bleeds (which can lead to chronic hypertension).

Although 10-15% of patients with severe hemophilia can be expected to develop inhibitors against their factor replacement product, no patients presently residing in Nova Scotia are known to have factor inhibitors.

Prognosis

The mortality rate of patients with severe hemophilia is twice that of an age-matched general population. Patients have a calculated life expectancy of 66 years (exclusive of deaths related to AIDS), in spite of a decreased morbidity/mortality rate from myocardial infarction. Their increased morbidity/mortality rate, as could be predicted, is from hemorrhage and trauma — especially from CNS bleeds. Other causes of morbidity/mortality include an increased incidence of renal failure, suicide, hypertension, and infection (not including that associated with HIV infection). A higher morbidity/mortality rate has resulted from HIV infection and will alter the mortality statistics to a degree which is yet unknown.

CARE: Assessment

An assessment of all aspects of care should be carried out often enough to provide the tools for optimal functioning. As maximum independence is a goal of comprehensive care, an assessment of the individual's self-functioning is important to determine areas of needed improvement. Encouragement to attain one's maximum potential is even more important for patients with obstacles along their road. The emphasis on early treatment for prevention of permanent joint damage needs to be reinforced.

Stress and self-concept are very influential on the expression of disease in patients with any chronic illness. In the USA, 20-50% of hemophiliacs are unemployed, 12-30% receive a disability income, 30-50% are married, yet 30-50% complete college. Patients followed in comprehensive care centres function better than those not involved, and it is expected that children will have an even better outlook. This information

accentuates the need for consumer advocacy for these patients. Encouragement of flexibility by teachers and employers is important.

Periodic review is important to ensure that patients are familiar with the implications and influences of their disease. As neurologic complications are rare but significant complications of congenital hemostatic disorders, patients require at least an annual neurologic screening examination. A thorough musculo-skeletal assessment, done in the Clinic by a physiatrist, is useful to pinpoint areas for more intensive treatment and/or prophylaxis. Othropediac consultation, fortunately, is needed by few patients. However, most patients require significant input from physiotherapy and/or occupational therapy. Preventive and restorative dental care are important to avoid unexpected or emergent dental intervention.

CARE: Research

The Canadian Hemophilia Society is actively involved with research to improve the supply of safe, effective factor replacement products. Multicentre clinical trials are being carried out in cooperation with factor replacement product manufacturers.

Adequate supplies of safe factor replacement products are a prime concern of all involved in the care of patients with congenital hemostatic disorders. This concern must be matched by accountability. The Canadian Hemophilia Society is researching methods to improve accountability by patients and their health care professionals in the usage of factor replacement products.

All areas of economy (national, provincial, community, hospital, environmental and individual) are partaking in research endeavours to provide cost-effective care for patients with congenital hemostatic disorders.

The Canadian Hemophilia Society is actively involved in research of AIDS.

Multi-centre trials include:

- immune surveillance of patients, problems associated with heterosexual transmission of HIV, treatment of asymptomatic HIV positive hemophiliacs with Ribavirin. (pediatric protocol underway)

Proposed trials include:

- natural history of patients infected with HIV.
- further clinical trials of new antiviral agents. maintenance of a serum bank.

Single centre projects include:

- residential care needs of hemophiliacs with AIDS.
- effects of EBV virus on HIV positive hemophiliacs.

The Government of Canada's AIDS programme ($14 million, committed to 1993) is being used for drug and vaccine studies. (including azidothymidine [AZT], aerosolized Pentamidine for prevention of pneumocystis carinii pneumonia). The influence of HIV positivity of hemophiliacs on the frequency and types of surgery performed is under study. In the rapidly evolving field of AIDS, up-to-date information is obviously necessary.

Advances in rehabilitative and orthopedic medicine are being made albeit slowly. The Canadian Hemophilia Society is seeking methods to improve the communication of information to all persons with congenital bleeding disorders as well as to increase the collection of data on patients.

CARE: Education

Patients and their health care team must be encouraged in their endeavours to attain equal opportunities for all patients with congenital hemostatic disorders. Patients and their families must be aware of their diagnosis and its possible effects on their lives, as well as the best utilization of their factor replacement products. Proposed research endeavours in the area of education by the Canadian Hemophilia Society include:

- evaluation of educational programmes for HIV positive hemophiliacs.
- evaluation of education and vocation needs of Canadians with congenital hemostatic disorders.

Information required to implement an independent, improved quality of life must be available to patients, their families and their health care professionals.

The following may be contacted for further information about the Comprehensive Care Programme for persons with Congenital Hemostatic Disorders in Nova Scotia.

Medical Director of the Programme —
Dr. S. Robinson, VGH 428-2394
Assistant Medical Director —
Dr. D. Barnard, IWKH 428-8291
Nurse Coordinator —
Mrs. M. Doane, VGH, IWKH 428-8752
President of the Nova Scotia branch
of the Canadian Hemophilia Society
— Mr. L. MacLeod 422-9659 □

References

1. Aronson DL. Causes of death in hemophilia A patients in the United States from 1968 to 1979. *Amer J Hematol* 1988; **27:** 7-12.
2. Brocker-Vriends AHJT, Briet E, Kanhai HHH et al. First trimester prenatal diagnosis of haemophilia A: two year's experience. *Prenatal Diag* 1988; **8:** 411-421.
3. Kernoff PBA. Miller EJ, Savidge GF et al. Reduced risk of non-A, non-B hepatitis after first exposure to "wet heated factor VIII concentrate". *Brit J Haematol* 1987; **67:** 207-211.
4. Lineberger HP. Social characteristics of a hemophiliac clinic population: a survey and literature review. *Gen Hospit Psychiatr* 1981; **3:** 157-163.
5. Mannucci PM, Zanetti AR, Colombo M et al. Prospective study of hepatitis after factor VIII concentrate exposed to hot vapour. *Brit J Haematol* 1988; **68:** 427-430.
6. Nimorwicz P, Tannebaum J. Educational and vocational achievement among hemophiliacs: the Pennsylvania experience. *J Chron Dis* 1986; **39:** 743-750.
7. Rosendaal FR, Varekamp I, Smit C, et al. Mortality and causes of death in Dutch haemophiliacs. *Brit J Haematol* 1989; **71:** 71-76.
8. Shupak R, Teitel J, Garvey MB, Freedman J. Intraarticular methylprednisolone therapy in hemophiliac arthropathy. *Am J Hematol* 1988; **27:** 26-29.

Update on Post-Polio Syndrome

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Acute poliomyelitis due to polio virus is heralded by fever, headache and other flu-like symptoms. Within a few days, weakness develops in some patients ranging from mild paresis of one limb to quadriplegia and respiratory failure. Many patients who survive acute paralytic poliomyelitis are left after partial motor recovery with a static residual paresis. It has been recognized since 1875 that after many years of static weakness progressive muscular atrophy and weakness may develop once again in patients previously suffering from acute poliomyelitis.[1] Controversy as to the nature of this late neuromuscular progression has been evident in the literature from the very early reports.[2,3] Recently there has been some clarification of the issues surrounding the post-polio syndrome (PPS).

Post-polio syndrome can be defined as a decrease in strength of muscles previously affected by polio which cannot be explained by another diagnosis or normal aging.[4] Patients with residual acute polio weakness may be prone to developing arthritis and radiculopathies due to long stress to the spine and joints from weakness and asymmetrical limbs. Entrapment neuropathies may result from compression of nerves against splints or assistive devices. Those conditions must be excluded before true progressive muscular atrophy due to PPS can be diagnosed. Patients with PPS often complain of fatigue, weakness and pain made worse by prolonged use of muscles. The muscle weakness and atrophy is generally asymmetrical which is consistent with the distribution of the original polio.

Dalakas and colleagues reported a mean interval from acute polio to the onset of PPS of 28.8 years (range 15-54).[5] North American survivors of the 1940s and 50s epidemic have already or are now coming due to the development of PPS. In Olmsted County 22% of patients suffering from polio between 1935 and 1959 have reported new symptoms.[6] However, the true incidence of PPS will not be known until more years have passed and enough time has elapsed for all patients who will develop PPS to become symptomatic. In one group the progression of new weakness has continued for an average of 11.6 years (range 6-20).[5] During the follow-up period progression was slow and generally undetectable to patients year-to-year though they were aware of change over periods averaging three years. Only a minority of patients became severely disabled requiring wheelchairs and they were the patients who had the greatest residual disability usually requiring crutches from the original polio.

It seems likely that given the probable incidence and prevalance of PPS many Nova Scotia physicians can expect to encounter patients with the disorder. It cannot be predicted which patients with previous polio will develop PPS, but the syndrome occurs more frequently in those developing acute polio after age 10 years and in those most severely affected by the original polio.[7] Patients are more than twice as likely to develop new problems if all four limbs were paralyzed originally than if only one limb was affected.

When new weakness develops, it may be restricted to the limb or limbs which were left with the greatest residual weakness.[5,8] Post-polio syndrome can affect limbs which had subclinical or very mild involvement during the acute attack but the new weakness in those regions is experienced later and is usually mild. New respiratory failure has been rarely reported. The neurologic examination features of PPS patients are a mixture of long-standing and new lower motor neuron dysfunction. Weakness is usually asymmetrical and is accompanied by wasting and absent tendon reflexes. Contractures and limb length shortening may be present due to the long-standing motor dysfunction. As with acute polio very minor sensory disturbance can sometimes be detected in affected regions. However, marked sensory loss or evidence of upper motor neuron abnormalities should raise doubts concerning the diagnosis.

It is clear with extended follow-up that PPS is not the result of amyotrophic lateral sclerosis (ALS) developing with greater frequency in patients with previous polio as had been feared with earlier reports. The mean duration of onset of illness to death in ALS is 4 years, whereas death has not occurred due to PPS with follow up beyond a decade.[5] Post-polio syndrome, as noted above, does not have an upper motor neuron component as is seen in ALS. Patients with PPS should be reassured they do not have ALS as that is sometimes a fear they develop as weakness progresses. They do not have a disorder which like their original polio is likely to require ventilatory support and in general the prognosis for remaining ambulatory is good.[5]

Currently, there is no diagnostic test that confidently determines the presence of PPS. Routine electromyographic studies and single fibre electromyography are abnormal in patients with previous polio whether new weakness has occurred or not.[8] However, electromyography can be useful to exclude other neurologic problems such as entrapment neuropathy and radiculopathy. Muscle biopsies show features of new denervation

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in polio patients with new weakness and those without.[8] Post-polio syndrome can only be truly diagnosed at this time by history and physical examination. Re-examination over time to objectively determine whether progressive muscular weakness is developing is probably the most useful diagnostic tool for PPS.

What causes PPS is not yet fully understood. During recovery from acute polio, muscle fibres that were denervated through degeneration of motor neurons are re-innervated by terminal collateral sprouts from surviving motor neurons. This results in motor neurons that are innervating many more muscle fibres than they normally would. During aging there is a normal fallout of motor neurons, and motor neurons surviving polio may be more susceptible to dysfunction during normal aging due to their greater workload. As well, re-innveration during late motor neuron failure may be defective in PPS.[8]

Many other factors have been suggested as possible contributors to motor neuron dysfunction in PPS such as strenuous exercise,[9] toxic agents,[10] hormonal changes,[10] or autoimmune processes,[5,8] but the relevance of these factors remains to be determined. In particular, the role of over exertion of weakened limbs in contributing to disease progression is important to patients and the physicians who counsel them. Though over-use may lead to chronic mechanical strain in affected limbs causing pain and increasing weakness,[11] at least one study has detected no contribution by the degree and type of physical activity to the progression of weakness when reasonable levels of activity were reported.[5] The disease is not due to re-emergence of polio virus.[5]

There is no specific treatment for PPS but patients with the disorder can be helped in many ways. Excluding other potentially more treatable causes for worsening motor function or pain is a first important step. A careful history and examination followed by appropriate investigations such as joint x-rays and electromyography generally determine whether the problem relates to PPS or some other diagnosis. The problems of patients with PPS frequently require the expertise of specialists in Physical Medicine and Rehabilitation, Orthopedics and Neurology. Many of these patients have previously been under the care of physiatrists. An appropriate rehabilitation program and the proper utilization of assistive devices are important components in the management of PPS. Of equal importance is providing these patients with information and psychological support. To many it has come as a painful surprise that they must once again deal with increasing disability from a disease they thought they had licked. □

References

1. Cornil L. Sur un cas paralysie generale spinale anterieure subaigue, suivi d'autopsie. *Gazette Medecine* (Paris) 1875; **4:** 127-129.
2. Mulder DW, Rosenbaum RA, Layton DD. Late progression of poliomyelitis or forme fruste amyotrophic lateral sclerosis? Mayo *Clin Proc* 1972; **47:** 756-761.
3. Poskanzer DL, Cantor HM, Kaplan GS. The frequency of preceding poliomyelitis in amyotrophic lateral sclerosis. In: Norris, Jr., FH, Kurland LT, eds. *Motor Neuron Diseases: Research on Amyotrophic Lateral Sclerosis and Related Disorders.* New York: Grune and Stratton, 1969: pg 286-290.
4. Maynard FM. Post-polio syndrome — differential diagnosis and management. *Orthopedics* 1985; **8:** 857-861.
5. Dalakas MC, Elder G, Hallett M, Ravits J, Baker M, Papadopoulos N, Albrecht P, Sever J. A long-term follow-up study of patients with post-poliomyelitis neuromuscular symptoms. *N Engl J Med* 1986; **314:** 959-963.
6. Codd MB, Mulder DW, Windebank AJ, O'Fallon WM, Kurland LT. Poliomyelitis in Olmsted County, Minnesota 1935-1959: Epidemiology and long-term sequelae. *Neurology* 1988; **38:** 311.
7. Halstead LS, Rossi CD. New problems in old polio patients: results of a survey of 539 polio survivors. *Orthopedics* 1985; **8:** 845-850.
8. Cashman NR, Maselli R, Wollmann RL, Roos R, Simon R, Antel JP. Late denervation in patients with antecedent paralytic poliomyelitis. *N Engl J Med* 1987; **317:** 7-12.
9. Bennett RL, Knowlton GC. Overwork weakness in partially denervated skeletal muscle. *Clin Orthop* 1958; **12:** 22-29.
10. McComas AJ, Upton ARM, Sica REP. Motor neurone disease and aging. *Lancet* 1973; **2:** 1474-1480.
11. Perry J, Fleming C. Polio: Long-term problems. *Orthopedics* 1985; **8:** 877-881.

The true aim of Science is the discovery of all operations and all possibilities of operations from immortality (if it were possible) to the meanest mechanical practice.

Francis Bacon (1561-1626)

Arthritis Facts:

- More than three million Canadians have arthritis.
- More than 30,000 arthritis victims are under 15.
- Nearly one million arthritis victims are between 30 and 45.
- 200,000 arthritis victims in Canada suffer every day with long-term disabilities.

Arthritis is everybody's problem and it's time we took it seriously. Contact The Arthritis Society office nearest you for the true facts about this terrible disease.

THE ARTHRITIS SOCIETY

PROCEEDINGS OF

25th MEETING OF COUNCIL

and

136th ANNUAL MEETING

of

The Medical Society of Nova Scotia

HALIFAX

November 17-18, 1989

THE MEDICAL SOCIETY OF NOVA SCOTIA
PROCEEDINGS OF
25th MEETING OF COUNCIL
136th ANNUAL MEETING
November 17-18, 1989

The 25th Meeting of Council began as the Medical Society Officers, accompanied by Dr. Marcien Fournier, President of The Canadian Medical Association, the Division Presidents, and Mr. A.A. Schellinck paraded through Council Chambers to the head table. Following call to order by Dr. George Ferrier, Chairman of the Executive and General Council, the Officers and Dr. Fournier were introduced.

Mr. Schellinck read the names of Society members deceased since October 1, 1988 as follows: Dr. Allison H. Barss of Riverport; Dr. Maxwell D. Brennan of Dartmouth; Dr. Ivan E. Carter of Halifax; Dr. Edward M. Fogo of Halifax; Dr. Kenneth A. Fraser of Baddeck; Dr. John K.G. Grieves of New Glasgow; Dr. Gerd A. Kloss of Kentville; Dr. Herbert B. Lang of Halifax; Dr. G. Sterling MacLean of Tatamagouche; Dr. Ian M. MacLeod of Dartmouth; Dr. Joseph P. McGrath of Kentville; Dr. Henry A. Myers of Amherst; Dr. T. Clare Sodero of Truro; Dr. Clennel E. VanRooyen of Halifax; and Dr. Allan S. Wotherspoon of Sydney.

The Transactions of the 24th Meeting of Council and 135th Annual Meeting (1988) as printed in the December 1988 issue of The Nova Scotia Medical Journal were approved.

Council approved a motion that the narrative of all reports and supplementary reports be received for information.

These Transactions are a concise record of reports which were presented and the decisions arising therefrom. It may be necessary for the reader to refer to Reports to Council (1989) for detailed background information. The Reports are available through the Society office, all Branch Societies, and members of Council. All information is available for viewing at the office on reasonable notice.

REPORTS

Executive Director

In speaking to his report Mr. Schellinck expressed thanks to the staff, Officers and members who have performed an exemplary service to the Society and assisted him in carrying out his duties. He advised Council that since his report was written Dorothy Grant had joined the staff as Director of Communications.

Executive Committee Chairman

In speaking to his report Dr. Ferrier made reference to Dr. Audain's President's Letter of October 11, 1989 in which he had so aptly provided the membership an outline of Society Organization. He reminded Council that it is important for members to know the name of their Section's elected officers as they are the door to involvement in the economic business of the Society.

Dr. Ferrier mentioned briefly Society committees noting that there are some that require chairmen. Also, the Society requires volunteers to serve as representatives to various organizations. He noted that the appointment of committee chairmen and representatives to other organizations would be an item of business at the upcoming Executive Committee meeting in January and urged that interested individuals come forward to volunteer their services.

President's Report

In speaking to his report Dr. Audain reminded Council of the tremendous demands on the President and noting that if appropriate candidates are to be attracted to serve, serious consideration will have to be given to compensation of that individual for the time lost from the practice of medicine.

RESOLUTION #1

"THAT the 1989 Council of The Medical Society of Nova Scotia seriously consider increasing the compensation to the President of The Medical Society in the future." ***CARRIED.***

Economics Committee

In speaking to his report Dr. Gibson noted that his report is a summary of the activities of his committee during the past year. He highlighted for Council portions of his report — Institutional Contract Psychiatry; the Relative Value Fee Schedule Project; Adjustments Towards Relativity; the Intensive Care Sub-Committee; the Committee to Investigate Clause Six of the recently negotiated Agreement; and the Task Force on Inter-Specialty Income Per Hour.

At this point Dr. Gibson asked Dr. Canham to come forward and present the Report of the Task Force on Inter-Specialty Income Per Hour. In speaking to his report Dr. Canham stated that this task force was first established in January 1987 and has met regularly since then to complete its mandate. He described for Council how this study was done and reminded Council that his report is to the Economics Committee and one which the Economics Committee will be looking at over the next couple of years. He added that the sole purpose of this task force was to gather information and that they had contacted the persons that they did in an attempt to get information from knowledgeable people. Lively discussion ensued regarding certain aspects of the report. Debate was closed when one member of Council once again reminded his confreres that this report is a report to the Economics Committee and was presented to Council solely for informational purposes. Dr. Gibson's report contained three recommendations.

RESOLUTION #2

"THAT in keeping with the recent tariff agreement, The Medical Society seek to increase remuneration for those procedures relatively underpaid, while decreasing remuneration for those procedures relatively overpaid. Further, that the Economics Committee specifically investigate the appropriateness of current remuneration for Obstetrical Care, Fracture Care, Sigmoidoscopy, and Psychotherapy." ***CARRIED.***

RESOLUTION #3

"THAT the Economics Committee proceed with an investigation of and possible modifications to the system of Premium Fees, in an effort to expand the hours covered and improve the fairness of the system." ***CARRIED.***

RESOLUTION #4

"THAT the Economics Committee proceed to investigate and possibly implement, subject to approval by the Officers, a modified system of Consultation Fees based on consideration of the time expended, overhead costs, training, teaching responsibilities, etc." ***CARRIED.***

In concluding presentation of his report Dr. Gibson thanked his committee members and Economics Department staff. He advised Council that two of his members - Drs. J.R. Rae and K.R. Langille would be stepping down and that he is looking for another member to join his committee.

Negotiating Committee

In presenting his report Dr. Acker drew Council's attention to page 16 of the 1988 Proceedings as they appear in the "yellow" section of the 1989 Reports to Council booklet. As well, he highlighted briefly paragraph 86-96 or his report - i.e. the committee's terms of reference, authority and responsibility, committee membership, administration, and to whom it reports. Dr. Acker expressed the view that "we, the doctors of Nova Scotia, are the best ones to take our concerns to government."

A vote of thanks was extended to Dr. Acker and his Committee members for their efforts on behalf of their confreres. A Council member reminded his fellow physicians that Nova Scotia's settlement is the envy of every Province in Canada.

RESOLUTION #5

"THAT the Negotiating Committee continue to exist on a pro-tempore basis." ***CARRIED.***

In concluding presentation of his report, Dr. Acker sincerely thanked his committee members and the Medical Society Economics Department for their tremendous help and team spirit during the past year. He reminded Council of the extent to which his committee and even the Chairman of the Executive Committee had attempted to keep the membership informed on latest events pertaining to negotiations.

Allied Health Disciplines, including Task Force on Health Personnel Standards Act

These reports were presented by Dr. A.H. Shears and accepted as printed.

Archives Committee

Dr. Hogan thanked the previous committee chairman, Dr. Ian Cameron, for his hard work on behalf of the Medical Society. Dr. Hogan's report contained one recommendation.

RESOLUTION #6

"THAT The Medical Society of Nova Scotia continue to support the salary of the Medical Archivist with an annual grant of $7,500.00." ***CARRIED.***

Building Committee

To present his report to Council Dr. Hamm used a number of overheads to explain how events had transpired since the 1987 Council Resolution "THAT Council endorse the proposal of the Building Committee and the Medical Society proceed with construction of its headquarters building as heretofore described." As well, staff from Sperry & MacLennan gave a presentation in slide form of how the project went to tenders. Council was advised that all prices received from the invited tenders were within a few thousand dollars. The contractor who was recommended came in at $1.631 million. Mr. Sperry noted that there is no doubt that the building is worth $1.6 million. He reminded Council that there are a lot of things open for discussion and that the recommended contractor had been invited to work with the architects during the past few weeks. Following the architects' presentation the following recommendation was introduced.

Recommendation

"THAT any further building plans be deferred until we have expert opinion on the health risks of high tension power lines and electromagnetic radiation therefrom." **DEFEATED.**

Prior to the above recommendation being defeated lengthy discussion ensued. Dr. Hamm acknowledged this issue was one of which he had become aware only recently. However, he expressed the feeling that it was not a major decision as to whether or not to build on that parcel of land. Dr. Hamm further added that if the building is approved it must begin within a few weeks in order to meet construction deadlines.

A couple of members spoke against this recommendation with the feeling being expressed that "expert opinion" could be sought quite quickly from within the medical profession. The motion was subsequently DEFEATED. However, Council agreed that expert opinion would be sought from within the profession. Dr. Ferrier noted that it was the Chair's understanding that the Building Committee would bring back to the Officers any concerns it might have with regard to high tension power lines and electromagnetic radiation therefrom.

Dr. Hamm continued his presentation, with the aid of overheads, outlining for Council the purpose of a Medical Society headquarters, funds available as of October 1991, project breakdown, and the cost of a $500,000. mortgage for a ten year term at 10.5 per cent.

Two motions were introduced and passed.

RESOLUTION #7

"THAT we proceed with the Building Project at a cost of $1,650,000." ***CARRIED.***

RESOLUTION #8

"THAT we continue the $100./year/ member for an additional five years as necessary." ***CARRIED.***

By-Laws Committee

Report not presented due to time constraints - referred to the Executive Committee.

Child Health Committee

In presenting her report, Dr. Kenny noted that her committee had had preliminary planning discussions through Spring of 1989. She noted that her committee had had a formal meeting with the Community Health Committee members on September 27, 1989. Issues discussed at this meeting were:

(a) Finalization of a proposal to amalgamate the two committees with focus on child health promotion, prevention and advocacy.

(b) Agreement to use highly expert advice on focus issues and therefore expand the base of expertise available to The Society by members who might not be active on committees (e.g. secure expert advice on immunization from paediatric infectious disease specialists as well as experts in community health to produce background information).

(c) Smoking and Children.

(d) The Nutrition Council Report.
(e) School Health Education, and
(f) "A Choice of Futures: Canada's Commitment to its Children.

Discussion arose concerning the recent death of a child in Nova Scotia who had ingested Oil of Wintergreen.

RESOLUTION #9

"THAT as Oil of Wintergreen (Methysalicylate) is an unnecessary substance and has a potential lethal effect when ingested, that it be banned from general sale." ***CARRIED.***

It was recognized that since this is a product safety issue the Provincial Government would also have to deal with the Federal Government on this matter.

Council directed that the Child Health Committee draw up a list of other toxic substances containing Oil of Wintergreen and submit it to the MSNS Executive Committee for consideration and debate during the coming year.

Community Health Committee

In presenting his report Dr. Langille drew Council's attention to that portion of his report pertaining to Tobacco Warnings on Prescription Pads. He noted, that he as Committee Chairman, had met with the Medical Society's Executive Committee on March 11, 1989, and a resolution had been passed that the Medical Society optionally provide for the placement on its physician prescription forms the wording, "The Medical Society of Nova Scotia urges you to take this prescription to a pharmacy which does not sell tobacco products." He reminded Council that as stated in the September issue of InforMed and Dr. Audain's President's Letter of November 3, 1989 members may now order these prescription pads from the Medical Society office.

Editorial Board

In speaking to his report, Dr. O'Connor noted that his Board had not yet been able to achieve indexing with Index Medicus but will continue to strive to reach that goal.

He noted that as in all other areas costs have been increasing with publishing costs being a major change for the Journal. He informed Council that some of these costs will be absorbed by increased advertising revenue so that the Journal can continue to be the bargain it is for the Society.

Environmental Health Task Force

In presenting his report Dr. Shires noted that three possible approaches to education have been considered by the Task Force:

1. Distribution of an Environment Canada map of Nova Scotia illustrating Shellfish area contamination. This would be distributed through the InforMed newsletter to all N.S. physicians.

2. Environment Awareness session for physicians to be presented at a scientific meeting of The Medical Society of Nova Scotia.

3. Public forum for addressing issues of environmental health concerns of Nova Scotians through an invited mailed response.

Apart from the activities described above, the Task Force will plan to be involved with providing further information stimulating interest among Nova Scotia physicians on the issues of:

1. ground water standards to prevent contamination, and
2. the disposal of toxic/infective waste.

Dr. Shires reminded that environmental health concerns should remain an important area of concern for The Medical Society of Nova Scotia and all members should be aware of the potential health hazards in their practice area.

RESOLUTION #10

"THAT the Task Force on Environmental Health remain active for at least a further three year period." ***CARRIED.***

RESOLUTION #11

"THAT the Program chairman for the Scientific meetings of The Medical Society of Nova Scotia be asked to consider including presentations/discussions of environmental health issues." ***CARRIED.***

RESOLUTION #12

"THAT The Medical Society of Nova Scotia's Communications Committee consider the current political importance of environmental health issues before the public and express The Medical Society's concern." ***CARRIED.***

Ethics Committee

Report not presented due to time constraints - referred to the Executive Committee.

Finance Committee

Dr. Auld reviewed the Society 's 1990 fiscal year budget. He presented the budget which was circulated to the membership via Dr. Audain's letter of November 3, 1989.

Dr. Auld then introduced the Financial Statements of the Society for fiscal year 1989 which had been prepared by Doane Raymond and circulated just prior to the meeting. He then highlighted the significant points set out in the Statements.

RESOLUTION #13

"THAT The Financial Statements of The Medical Society of Nova Scotia for Fiscal Year 1989 be approved." ***CARRIED.***

RESOLUTION #14

"THAT Doane Raymond be retained as The Medical Society's Auditors for Fiscal Year 1990." ***CARRIED.***

RECOMMENDATION

"THAT the Honoraria amount paid per day (excluding the President) be reduced from $309. to $250. This reduction should keep our Honoraria Budget within the $80,000 previously estimated for the 1990 Budget. (October 1, 1989 - September 30, 1990)." ***DEFEATED.***

RESOLUTION #15

"THAT the Chairman of the Building Committee be paid an Honoraria for his contribution of time and effort on behalf of The Society." ***CARRIED.***

RESOLUTION #16

"THAT the yearly Honoraria paid the Editor of the Nova Scotia Medical Journal be increased form $1,000 to $2,000." ***CARRIED.***

RESOLUTION #17

"THAT the yearly Honoraria paid the Associate Editor of the Journal be increased from $800 to $1,600." ***CARRIED.***

RESOLUTION #18

"THAT The Medical Society of Nova Scotia review its Honorarium Policy and increase payment to committee members to reflect the national standard." ***CARRIED.***

RESOLUTION #19

"THAT membership dues for ordinary members of The Medical Society for Fiscal Year 1991 be increased by $50.00 with other categories of membership dues to be increased proportionately." ***CARRIED.***

Gynecological Cancer (Screening for)

In speaking to his report Dr. Fraser advised Council that the Committee has concluded that the women of our province would be better served by the co-ordination of colposcopy data collection and the Cytology Registry. He noted that his committee has proposed to the provincial Minister of Health and Fitness that province-wide integration of the two screening programs under the umbrella of the Gynaecological Cancer Screening Program be considered. Such a Program would involve improved Quality Control and establishment of colposcopy and cytology standards, a sharing of centralized computer resources, both hardware and software, standardization of forms and terminology, better management of improved diagnostic services, increased opportunities for education and collection of epidemiological data and, ultimately, improved patient care.

He informed Council that on June 16, 1989, with the endorsement of the Nova Scotia Department of Health and Fitness and The Medical Society of Nova Scotia, the Committee hosted a Workshop to which all practising colposcopists and their nurses, pathologists supervising cytology laboratories and their senior technologists, and other interested representatives in Nova Scotia were invited. The purpose of the Workshop was to solicit comments and suggestions regarding the proposed cytology-colposcopy integration. The consensus of the meeting was one of approval for the Program concept.

Dr. Fraser noted that his committee had just completed drafting guidelines for a Gynaecological Cancer Screening Program for Nova Scotia and that these will be presented to the Minister of Health and Fitness in the near future.

Home Care Ad Hoc Committee

Dr. Cudmore in speaking to his report informed Council that his committee had been looking at specific concerns of physicians with regard to development of a home care program - i.e., the role of the family physician, the role of specialists, the assessment process, physician-program communications and future enhancement to the program. He noted that these topics require future review and that there are many other topics to be considered such as physician responsibility and liability, and physician reimbursement for program related activities.

The question was asked if it had been determined on an overall basis how such a program is going to impact on health care - i.e., reduction in hospital care costs and increased physician workload for whatever reason. Dr. Cudmore acknowledged that this was a good point and one worthy of follow-up. The following motions were introduced and passed.

RESOLUTION #20

"THAT the Home Care Ad Hoc Committee remain operational for another year." ***CARRIED.***

RESOLUTION #21

"THAT the Home Care Ad Hoc Committee of The Medical Society of Nova Scotia continue to meet regularly with the Provincial Co-ordinated Home Care Advisory Committee." ***CARRIED.***

Hospitals & Emergency Services Committee

In speaking to his report Dr. Maxwell noted that his committee had not met during the past year as no specific business or issues requiring consideration were identified to justify such meetings, thus the reason for this recommendation "That the Hospital and Emergency Services Committee be dissolved." However, he informed Council, since the report was written he had received a letter from the Society which indicated the rationale for this committee to remain in place.

RECOMMENDATION

"THAT the Hospital and Emergency Services Committee be dissolved." ***WITHDRAWN.***

Liaison Committee - MSNS/Faculty of Medicine

Dr. Audain advised Council that an excellent working relationship continues to exist between the Medical Society and the Faculty of Medicine. He noted that two formal meetings had been held during the past year, and that he had met with Dean Murray informally on at least two other occasions.

Liaison Committee - MSNS/Minister of Health & Fitness

In speaking to this report Dr. Audain noted his committee had met in January 1989 with the recently appointed Minister of Health and Fitness, Hon. David Nantes to exchange some ideas on the health care system. Dr. Audain expressed the view that Mr. Nantes is beginning to get a clear understanding of the role of Nova Scotia physicians and considers them a valuable partner in the provision of high quality health care for the people of Nova Scotia.

Liaison Committee - MSNS/Registered Nurses' Association

Dr. Audain informed Council that this committee had met once this past year with the Registered Nurses. During the discussions the nurses cited several examples of a lack of understanding or a breakdown in communications between nurses and physicians. However, it was agreed that working together, mechanisms could be developed that would alleviate many problems. Dr. Audain added that he was pleased that both associations expressed a desire to collaborate, to work together in a positive deliberate way to solve common problems in order to promote quality health care to the citizens of Nova Scotia.

Liaison Committee - MSNS/Workers' Compensation Board

Dr. Audain informed Council that the Workers' Compensation Board and The Medical Society of Nova Scotia Liaison Committee met on two occasions this year, and had exchanged correspondence several times. We were able to address the concerns of two of our members by having them present at these meetings, so a more meaningful exchange of ideas could occur. While this method of resolving disputes is a time consuming process, the ultimate

results of these meetings assisted both sides in appreciating the causes of the problems, and thereby, instituting different approaches towards solving them.

Council was reminded that July 1, 1989, saw the institution of WCB payments being handled by MSI. Dr. Audain noted that this had been under discussion for at least two years, and the WCB must be commended for their untiring efforts in bringing this to a satisfactory conclusion.

In conclusion, he noted that the relationship between the WCB and Medical Society has shown steady improvement over the years.

Maternal & Perinatal Health, including Reproductive Care Program

Although Dr. Luther had no report at this time, Dr. Judy Kazimiski a member of the Reproductive Care Program took this opportunity to bring Council up to date on the activities of this Program in recent months. She noted that the Perinatal Forms had been changed and urged that physicians take the extra time required to complete them. She informed Council that the Perinatal Data Base is now complete. Council was advised that the mortality rate in Nova Scotia is the lowest in Canada and the Country.

Mediation Committee

Dr. Audain in speaking to his report noted that public awareness of the role of the Provincial Medical Board has resulted in fewer complaints directed toward The Medical Society of Nova Scotia. He added that in fact the vast majority of calls to the Society office sought direction to the Provincial Medical Board.

Dr. Ferrier took this opportunity to remind Council how fortunate the physicians of Nova Scotia have been to have an objective, unbiased representative like Dr. Audain to act on their behalf.

Medical Education Committee

This report was presented on Dr. Murray's behalf by Dr. P.D. Muirhead, a member of the Committee. Dr. Muirhead noted that Dr. Murray's report was brief as he had just recently taken over as Chairman. Ongoing issues of concern to the Committee include - education of physicians for optimal care of our aging population; the issue of continued competency of physicians; and third world responsibilities which might be addressed by physicians practicing in a prosperous country.

Membership Services Committee

Dr. Myatt in presenting his report invited questions concerning his report. A number of questions were forthcoming - i.e., the possibility of physicians and their families being covered under Blue Cross for drugs, etc.; guidelines for physicians to consider when purchasing computers for their offices. Dr. Myatt informed Council that a subcommittee under the chairmanship of Dr. R. Wayne Putnam is being established to develop a list of criteria for doctors to compare when considering a computer purchase.

Dr. Myatt also expressed sincere thanks to Mrs. Jeannette Osborne who has administered the Society's membership services since July 1989. He stated that he looked forward to working with Mrs. Dorothy Grant on behalf of the members. Concluding his remarks he thanked Dr. Patterson, a committee member, who will not be on the committee next year.

RESOLUTION #22

"THAT The Medical Society of Nova Scotia explore the establishment of a contract arrangement for the provision of membership services." ***CARRIED.***

Dr. Myatt reinforced for Council his purpose of the motion, that being to explore not enter into a contract.

Occupational Health (Special Committee)

This report was presented on behalf of Dr. Doucet by committee member, Dr. Fran Galvon. In speaking to this report Dr. Galvon noted that the main thrust of the Committee throughout this year had been the organization of the Annual Meeting of the Occupational Medical Association of Canada (OMAC). This meeting was held at the Halifax Sheraton Hotel, October 3-6, 1989. The meeting attracted occupational health physicians from across Canada and the United States. In addition, a pre-conference day long session entitled Backpain in Industry, Prevention and Management was held in association with Dalhousie C.M.E. This day long session was directed not only to visiting occupational health physicians but also to local physicians, occupational health nurses and other related professionals.

Physical Fitness

Not presented - referred to the MSNS Executive Committee.

Pregnancy Counselling

In speaking to his report, Dr. Myatt drew Council's attention to the 1988 Council resolution "THAT The Medical Society of Nova Scotia establish a special committee to consider the establishment of a comprehensive pregnancy counselling service in Nova Scotia."

With the aid of overheads Dr. Myatt outlined for Council the activities of his committee during the past year in this regard. He made reference to the Survey that was circulated to the membership with the September issue of InforMed and the results of that survey.

RESOLUTION #23

"THAT the Pregnancy Counselling Committee continue to work towards establishing a database of Pregnancy Counselling resources in Nova Scotia."
CARRIED.

Professionals' Support Program

Not presented due to time constraints - referred to the Executive Committee.

Senior Advisory Committee

In presenting his report, Dr. Acker reminded Council that this committee is advisory in nature and will respond to requests from the Officers or Executive Committee. He noted that it was created two years ago at the 132nd Annual Meeting.

NOVA SCOTIA REPRESENTATIVES TO C.M.A.

C.M.A. Board of Directors

Dr. Kazimirski in presenting her report made reference to the C.M.A.'s Strategic Management Project. She added that much of the data that has been collected by Redding and Associates on behalf of CMA would be of benefit to divisions who have expressed an interest in doing their own strategic management exercise.

Dr. Kazimirski also drew Council's attention to the CMA Committee on Medical Manpower (Committee on Physician Resource Planning). She noted the Committee has been developing a discussion paper on physician resource planning. It reviews the state of knowledge in the field, attempts to stimulate a broader reflection on the issues, presents the key features of the situation as it was in the past and is now, identifies some of the major opportunities and constraints we face and suggests scenarios for solutions and for the participatory development of a medical human resources plan in each province and for the country as a whole (CMA, Physician Resource Planning, 1989). The Committee is beginning to develop policies that address the rate of growth of the physician supply relative to the rate of growth of the population. The Board has instructed the Committee to begin to discuss these options with the provincial medical associations. The Committee on Physician Resources will continue to operate for the forthcoming year (1989/90 General Council year).

Dr. Kazimirski continued, noting that the Finance Committee, as directed by the Board, sought an experienced consultant to review the corporate relationship between CMA and MD, and CMA and MDIS; the responsibility of the CMA Board of Directors and the MDIS Board in light of current operations; and several CMA financial and accounting issues. This report will be reviewed by the Finance Committee and the Board in the forth coming year.

In concluding her comments, Dr. Kazimirski thanked Nova Scotia physicians for nominating her for Chairman, for "training" her through her involvement in the Provincial Association, and extended a special thanks to Dr. Audain and the Officers for campaigning on her behalf.

Dr. Audain informed Council that he had just recently become Nova Scotia's representative to the C.M.A. Board and noted that his addendum to Dr. Judy's report spoke for itself. He congratulated Dr. Kazimirski on her excellent report.

C.M.A. Council on Health Care

Not presented due to time constraints - referred to the Executive Committee.

C.M.A. Council on Medical Economics

Dr. Muirhead, in highlighting some of the activities of his Council during the past year, drew Council's attention to that portion which dealt with Health Care Costs and Physician Resource Planning - Impact Analysis. He outlined for Council how it was explained to his Council by the Executive Assistant of Riverside Hospital, a community hospital owned by the city of Ottawa, primarily staffed by GP's with a budget for $31 million. He noted that the program is voluntary at the moment and is a good example of the formalized tools which will be increasingly used by hospitals to monitor/control costs. He noted that one of the

main points made by his Council is that hand in hand with a cost impact analysis must go a quality impact analysis.

Dr. Muirhead also noted that his Council had discussed a brief overview of the Harvard Relative Value Scale study which was done by a team from the Harvard School of Public Health under contract to the Health Care Financing Administration. He added that his Council will hold a conference titled "Methodologies of Physician Fee Determination" in the 1989-90 Council year.

Speaking on the subject of Utilization, Dr. Muirhead said that the Council on Economics is convinced that the topic of utilization will continue to be one of the crucial issues facing the medical profession in Canada well into the 1990's. In response to the need for negotiators and provincial medical associations/societies to tackle the issue of utilization on a uniform basis and to respond to provincial governments in a consistent manner, the Council on Economics will be organizing a utilization workshop in the fall of 1989. This workshop will address the practical and applied difficulties the provincial divisions face as well as provide the representatives of the medical profession with some "hands-on" experience as to how to effectively deal with utilization.

C.M.A. Council on Medical Education

Dr. Myatt's report generated discussion regarding the issue of two-year licensure and how this will affect the graduates of Nova Scotia. Dr. Myatt reiterated that Nova Scotia's policy is similar to that of the C.M.A. and other divisions. Dr. Myatt expressed the feeling that by 1993-94 this would be the required route. Dr. Myatt's statement was echoed by a couple of physicians present from Dalhousie University.

MD Management Limited

Dr. Sapp's report was presented on his behalf by Dr. Audain as Dr. Sapp was unavoidably absent attending a conference in Florida. Dr. Audain reminded Council of the upcoming MD Management seminar and informed those present that further information can be obtained from John Klaas at the Halifax MD Management office.

REPORTS OF SECTIONS

Anaesthesia , including Anaesthesia Mortality Review Committee

Dr. Clark outlined for Council the activities of his Section during the past year. He noted that the Guidelines for Anaesthetic Practice in Nova Scotia have been updated and endorsed by The Medical Society of Nova Scotia and circulated to all anaesthetists in Nova Scotia. The Anaesthetic Services Program Encompassing Nova Scotia (ASPENS) continues to be active and approximately two-thirds of the hospitals providing anaesthesia care in the Province have now been surveyed. All those hospitals that have not been surveyed are encouraged to become involved in the Program.

The Relative Value Fee System has been developed with hopeful implementation in the not too distant future. The Anaesthesia Section continues to have major concerns about the relativity of fees between different sections and the effect of placing increases on the unit values rather than into specific areas. Dr. Clark reminded his confreres that sections must become more involved in Society affairs.

Anaesthesia Mortality Review Committee

The Anaesthesia Mortality Review Committee was not included with Reports to Council but was available at the registration desk. It noted that reports were received for approximately 100 cases of post operative mortality, that nearly all the cases were related either to malignancy, or complications of old age, that no deaths due to anaesthesia were reported, and that several provincial hospitals are not reporting their post operative deaths, and the Section of Anaesthesia has directed this Committee to work with The Medical Society of Nova Scotia to try to improve this situation.

Emergency Medicine

In speaking to his report Dr. Sinclair noted that his Section's major activity during the past year was the development of a comprehensive Emergency Medical Services System (EMSS) proposal. He added that this proposal has been approved by the Section and subsequently endorsed by the MSNS Executive Committee at its meeting on September 30, 1989.

General Practice

Dr. Lynk noted that at the time of the Section's Annual Meeting a joint information session on the Nova Scotia Home Care Program was held by the College of Family Practice and the Section of General Practice. She made reference to the excellent dialogue between the Section and the MSNS Ad Hoc Committee on Home Care.

Dr. Lynk took this opportunity to recognize the job done by Mike Fleming on behalf of the Section, and the extensive work done on the Relative Value Fee Schedule. She concluded by reminding members that the Fee Committee will entertain requests for new fee codes. Requests must include, at the time of submission, rationale for why the service is needed, estimated utilization, and impact on the Sections as a whole.

Internal Medicine

Dr. Sapp in speaking to his report introduced the recommendation contained therein.

RESOLUTION #24

"THAT The Medical Society of Nova Scotia provide a methodology by which the Economics Commitee will improve its consultation with the Sections prior to making decisions that will affect the economic situation of that section." ***CARRIED.***

Laboratory Medicine

Dr. Moss in speaking to his report introduced two recommendations. Regarding the second recommendation which refers to Regulations pertaining to the Transportation of Dangerous Goods Act, Dr. Moss noted that most physicians are unaware of these Regulations and how they affect them. He stressed that it is important for physicians to become knowledgeable about such things.

RESOLUTION #25

"THAT The Medical Society of Nova Scotia request that an updated list of Reportable Communicable Diseases be sent by Department of Health & Fitness to all physicians in the Province." ***CARRIED.***

RESOLUTION #26

"THAT The Medical Society of Nova Scotia seek clarification of the Regulations pertaining to the Transportation of Dangerous Goods Act, as relating to the routine transportation of samples from physicians' offices to laboratories, and communicate this information to all physicians concerned." ***CARRIED.***

Ophthalmology

This report was presented on Dr. Keating's behalf by Dr. F.J. Carpenter. Referring to the paragraph in this report which refers to reduction in fees for Ophthalmology, Dr. Gibson clarified for Council that no Section was ever asked to accept a negative increase.

Otolaryngology

Dr. Cron presented this report on behalf of Dr. Donaldson. In speaking to this report, he reminded Council that manpower shortage continues to plague the rural areas. He noted that all otolaryngologists except one are over 45 and that statistically, we can anticipate to lose two or three of these remaining practitioners to health or relocation. The residency program is unlikely to provide more than one new practitioner per year for the three Atlantic provinces. A worst case scenario would have Nova Scotia in a crisis situation within five years.

Psychiatry

Dr. Slayter reviewed for Council the difficulty of recruiting psychiatrists to the public sector. However, he noted that a new payment system is close to finalization and was hopeful that this would help in recruitment of more psychiatrists. He advised that the Section has been looking at administrative fees to be paid for administrative services.

Radiology

Dr. Barton in speaking to his report noted that for the last several months attention has been directed to compiling an accurate and comprehensive list of all diagnostic imaging procedures currently being performed in the province. This is a necessary first step before the larger question of a change in our principal paying agency (from the Department of Health & Fitness to M.S.I.) can be considered. At the same time, work on completing a relative value fee schedule for the section continues.

He reported that a complete Magnetic Resonance Fee Schedule and several new ultrasound fees have been approved at the level of Economics Committee of The Medical Society of Nova Scotia and now await final Department of Health & Fitness ratification.

Surgery

Not presented due to time constraints - referred to the Executive Committee.

Urology

Dr. Auld presented this report on behalf of Dr. Norman. The report contained one recommendation and it was agreed that this would be dealt with during the closed session on Saturday morning.

RECOMMENDATION

THAT surgical Preamble Rule 17.5 (which eliminates the fee for endoscopic or other investigative procedures required to establish a diagnosis when done on the same day as the urological surgery) be eliminated." ***DEFERRED UNTIL CLOSED SESSION - NOT DISCUSSED AT CLOSED SESSION.***

REPORTS OF REPRESENTATIVES TO OTHER ORGANIZATIONS

Abilities Foundation of Nova Scotia

Dr. Patil outlined for Council the purpose of this organization and how it helps the disabled throughout Nova Scotia. He noted that the Abilities Foundation of Nova Scotia has been serving the needs of the disabled community of this Province. It assists disabled people in many ways. It runs a camp for the disabled during the summer. It also assists the disabled to acquire assistive devices in order to improve their mobility and function. It runs the New Leaf Enterprise Sheltered Workshop for the disabled. It also has a program of mobile clinics which are attended by specialists in various parts of the Province.

RESOLUTION #27

"THAT The Medical Society of Nova Scotia continue to support the Abilities Foundation of Nova Scotia and its fund raising efforts." ***CARRIED.***

Pharmacy Advisory Committee

Dr. Elliott in speaking to his report presented an overhead of a resolution passed at the Health Services and Insurance Commission Annual Meeting on November 8, 1989, which reads as follows: "That the HSIC indicate initially to the Provincial Medical Board that it supports further discussion of a Triplicate Prescription Program or a similar prescription monitoring program and will look favourably upon the provision of financial support if such a program is implemented in Nova Scotia." He noted that this committee remains concerned regarding the level of apparent prescription drug abuse that is taking place undetected by those agencies responsible for monitoring of prescriptions. The mandate of the Bureau of Dangerous Drugs extends only to the detection and reporting of the theft or diversion of straight narcotic and controlled drugs. Oral prescription narcotics and controlled drug compounds as well as other psychoactive drugs are not under surveillance.

Dr. Elliott informed Council that the Committee would continue to monitor the initiatives of the Bureau of Dangerous Drugs in its efforts to limit prescription drug abuse. Should these efforts fail to meet expectations within a reasonable length of time, the Committee will be forced to make a strong representation to The Medical Society of Nova Scotia and the Provincial Medical Board to implement a Triplicate Prescription Program or similar prescription surveillance mechanism in an attempt to reduce or eliminate prescription drug abuse.

Following Dr. Elliott's comments lengthy discussion centered around the matter of limiting prescription drug abuse and how this can best be done. Two motions were introduced by Dr. Elliott and subsequently passed following more lengthy discussion and debate. Concern was expressed that it was not only narcotic and psychotic drugs that the Commission wants to get a handle on but all drugs that are being prescribed. It was noted that a triplicate prescription monitoring program was great for narcotics but is still not going to do what the HSIC wants the medical profession to do and that is save them $2-3 million a year on drugs. There was strong concern that the medical profession is going to have to pick up the tab and must look at it from the point of view of paying for it themselves. It was the consensus of the meeting that there are too many unknowns concerning the proposed monitoring program and that it needs a little more work, i.e. - how much monitoring envisaged by each group, what would be monitored, and by whom.

In speaking to close debate on the proposed motions Dr. Elliott reiterated that the HSIC is willing to stand behind funding of the program. He noted that the HSIC assesses prescription use from all over the province and sees things that The Medical Society of Nova Scotia and Provincial Medical Board do not. He reminded Council that the intent of the motion is not adoption of a prescription monitoring system but the selection of representative(s) to serve on a task force.

RESOLUTION #28

"THAT The Medical Society of Nova Scotia support implementation of a Prescription Monitoring System (triplicate prescription program) or otherwise in this Province." ***CARRIED.***

RESOLUTION #29

"THAT The Medical Society of Nova Scotia select representative(s) to serve on a provincial task force with the Provincial Medical Board of Nova Scotia, the Pharmacy Association of Nova Scotia, the Nova Scotia Commission on Drug Dependency and the Health Services and Insurance Commission to discuss implementation of a prescription monitoring system in Nova Scotia." ***CARRIED.***

Provincial Medical Board

Dr. M.A. Smith, President of the PMB, took this opportunity to bring Medical Society members up to date on Provincial Medical Board activities. He outlined the composition of the Board. Dr. Smith made special reference to the lay persons on the Board noting that they have been very active and a great help to the Provincial Medical Board.

He noted that the issues dealt with of late have been rather more difficult than those previously brought before the Board. More and more, the PMB is hearing from special interest groups and their concerns and attitudes. He stated that the media is always there to try and put forth particular points of view and sometimes it is difficult to carry out the work of the PMB while at the same time trying to be seen as being fair and open — the Board is always being urged to open its work to the public eye. Now that the Provincial Medical Board has obtained a higher profile a lot more complaints have been forthcoming, many of which have no substance.

Dr. Smith informed Council that the Board is becoming more concerned regarding advertising. If the system is not policed by the medical profession it will become totally out of control. Dr. Smith announced that an advertising policy had been put together jointly by the Provincial Medical Board and Medical Society, adding that it will be adhered to and enforced.

In response to a question regarding reciprocity of licensure, Dr. Smith responded by noting that each province has its own standards for licensure. He said that Nova Scotia will comply with the other provinces across Canada in order to ensure good quality of care for Nova Scotians.

OTHER REPORTS OF REPRESENTATIVES TO OTHER ORGANIZATIONS

The following reports were not dealt with due to time constraints and were subsequently referred to the Executive Committee for information and action.

Canadian Cancer Society
Communicable Disease Control Advisory Committee
Dalhousie Refresher Course Planning Committee
Diagnostic Imaging Committee
Driver Licensing (Medical Advisory Committee)
Drug Information Advisory Committee
Highway Safety (Minister's Committee)
Kellogg Health Sciences Library
Laboratory Services Committee (Joint)
Lung Association (Nova Scotia)
Metro Hospital Advisory Committee
Occupational Health & Safety Advisory Committee
Physician Manager Program (Dal. Advisory Committee)
Physician Manpower (Provincial Advisory Committee)
Physical Fitness
Rh Committee
St. John Ambulance Association
Safety Council (Nova Scotia)
Smoking and Health (Nova Scotia Council on)
V.O.N.

Presentation on Royal Commission Report - New Directions by Dr. Earle Reid, Commissioner

At the closed session on Saturday morning Council heard a thought provoking presentation by Dr. Earle Reid on the findings of the Royal Commission Hearings which were held throughout the province during the past year. In his opening remarks Dr. Reid noted that his comments would have to be kept general as the final report had not yet been released by Government.

Dr. Reid urged physicians to be prepared to sit down and talk with Government to solve the problems within the health care system before government solutions are imposed on us.

136th Annual Meeting - November 17 & 18, 1989

First Session- Friday, November 17, 1989

The first item of business at the first session of the Annual Meeting on Friday afternoon, following adjournment of Council, was ratification of the deliberations of Council.

Resolution - Ratification of Actions of Council - 1st Session

"THAT the actions of the 1st Session of Council be ratified." ***CARRIED.***

Nominating Committee Report

Resolution - Society Officers

"THAT the Report of the Nominating Committee with respect to the Officers be accepted and that the names contained therein are the new Officials of The Medical Society of Nova Scotia -
***President-Elect** - Dr. W.D. Canham of Dartmouth;*
***Chairman of the Executive Committee** - Dr. G.A. Ferrier of Liverpool;*
***Vice-Chairman of the Executive Committee** - Dr. D. Ryan-Sheridan of Truro;*
***Treasurer** - Dr. R.B. Auld of Halifax;*
Honorary Secretary** - Dr. Shelagh Leahey of Yarmouth." **CARRIED.

Resolution - Branch Representatives, Intern/Resident, and Student Members on MSNS Executive Committee

"THAT 1990 Executive Committee members be approved as read from the Nominating Committee Report.

Ant/Guys	*Dr. M.A. MacKenzie*
alt.	*Dr. M.C. Gorman*
Bed/Sack	*Dr. B.M. O'Hearn*
alt.	*Dr. J.V. Ramanaskas*
Cape Breton	*Dr. P.W. Littlejohn*
alt.	*Dr. B.J.M. O'Brien*
Col East Hants	*Dr. G.A. Corbett*
alt.	*Dr. S.M. Owen*
Cumberland	*Dr. J.P. Donachie*
alt.	*Dr. W.G. Gill*
Dartmouth	*Dr. C. Gallant*
alt.	*to be advised*
	Dr. M.F. Moriarty
alt.	*Dr. G.G.R. Stewart*
Eastern Shore	*Dr. D.R. Barnard*
alt.	*Dr. M. MacQuarrie*
Halifax	*Dr. J.P. Patil*
alt.	*Dr. E. Hanley*
	Dr. D.C.S. Brown
alt.	*Dr. Dora Stinson*
Inv/Vic	*Dr. C.W. Chow*
alt.	*Dr. J.O. Belen*
Lun/Queens	*Dr. B.N. Chutskoff*
alt.	*Dr. G.P. Ernest*
Pictou	*Dr. H.P. MacDonald*
alt.	*to be advised*
Sydney	*Dr. J.R. LeMoine*
alt.	*Dr. G. Bisson*
Valley	*Dr. C.L. Smith*
alt.	*Dr. W.M. Enright*
	Dr. P.D. MacLean
alt.	*Dr. W.M. Enright*
Western	*Dr. M.A.C. Duggan*
alt.	*to be advised*
Interns/Residents	*Dr. Daniel Vaughan*
	Dr. Andrew Orr

Students** - Sandeep Kapur, Sarah Kerr, & Camille Sehmebey." **CARRIED.

Second Session - Saturday, November 18, 1989

During the 2nd Session of the Annual Meeting Mark Riley from the Shelburne Branch nominated Drs. Gordon Hollway and John E. Keeler as Branch Representative and Alternative Representative to the MSNS Executive Committee. The Chairman referred his nomination to the next meetnig of the Executive Committee for action.

Resolution - Ratification of Actions of Council - 2nd Session

*"THAT the actions of the 2nd Session of Council be ratified." **CARRIED.***

NEW BUSINESS

An Act to Restrict the Privatization of Medical Services

The above Act may be cited as the Medical Services Act. Its purpose being to prohibit the privatization of the

provision of certain medical services in order to maintain a single high-quality health care delivery system for all Nova Scotians. The list of designated medical services include: Arthroscopy; Colonoscopy (which, for greater certainty, does not include flexible sigmoidoscoy); Upper Gastro-Intestinal Endoscopy; Abortion, including a therapeutic abortion, but not including emergency services related to a spontaneous abortion or related to complications arising from a previously performed abortion; Lithotripsy; Liposuction; Nuclear Medicine; Installation or removal of Intraocular Lenses; and Electromyography, including Nerve Conduction Studies.

Dr. J.J.P. Patil of Halifax speaking with reference to the above questioned how the Society could get certain procedures removed from the above Act. In particular he was referring to Electromyography. Dr. Audain responded to Dr. Patil's question by informing those present that the Medical Society had gone on record as opposing that Act and that the Minister of Health and Fitness had been so advised. He further added that at a subsequent meeting with the Minister it was agreed and written into the Act that the Government would consult with The Medical Society of Nova Scotia with regard to certain Regulations to the Act. Thus, if the Society wishes to register objection to any items in the Regulations there is a mechanism for the Society to have items removed from the list of procedures included in the Regulations. The Society would do this by providing evidence that certain procedures can be safely performed outside a hospital. Dr. Audain noted that a letter had gone out to all Sections advising them of this and soliciting their input.

ADJOURNMENT

There being no further items of business the 2nd Session of the 136th Annual Meeting of The Medical Society of Nova Scotia adjourned at 4:45 p.m. on Saturday, November 18, 1989.

The Medical Society of Nova Scotia would like to thank the following corporate sponsors for their contributions towards our 1989 Annual Meeting:

Air Canada
Air Nova
The Bank of Montreal
MD Management Limited
McCurdy Printing & Typesetting Limited
Montreal Trust

AUDITORS' REPORT

To the Members of
The Medical Society of Nova Scotia

We have examined the Operating Fund and Building Fund balance sheets of The Medical Society of Nova Scotia as at September 30, 1989 and the statements of Operating Fund income and surplus, changes in financial position, Building Fund revenue, expenditures and fund balance, and related statements of the Cogswell Library Fund for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Society and its related funds as at September 30, 1989 and the results of its operations for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Halifax, Nova Scotia
October 20, 1989

Doane Raymond
Chartered Accountants

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

OPERATING FUND

BALANCE SHEET

SEPTEMBER 30, 1989

ASSETS	1989	1988
Current		
Cash and short term investments	$ 758,064	$1,123,681
Receivables		
Members	1,380	
Other	10,599	19,226
Accrued interest	34,762	5,028
Prepaid expenses	31,134	15,811
	835,939	1,163,746
Investments (Note 1)	15,000	320,594
Office furniture and equipment (Note 2)	36,233	46,212
	$ 887,172	$1,530,552

LIABILITIES AND EQUITY		
Current		
Payables and accruals		
Trade	$ 14,287	$ 20,734
Honoraria		71,246
Cogswell Library Fund	3,397	3,595
Deferred revenue (Note 3)	819,488	735,566
	837,172	831,141
Contingency Fund (Note 7)		133,136
Surplus	50,000	566,275
	$ 887,172	$1,530,552

Contingent liability (Note 4)
Commitments (Note 5)

ON BEHALF OF THE EXECUTIVE

Dr. R.B. Auld, Treasurer

Mr. A.A. Schellinck, Executive Director

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

OPERATING FUND

STATEMENT OF INCOME AND SURPLUS

YEAR ENDED SEPTEMBER 30, 1989

1988 Actual		1989 Budget	1989 Actual
	Revenue		
	Membership dues		
$ 841,675	Medical Society to Nova Scotia	$ 907,000	$ 911,032
241,535	The Canadian Medical Association	272,000	279,810
5,220	Intern and Resident	5,000	5,190
756	Students	700	730
1,089,186		1,184,700	1,196,762
68,615	Investment income (Note 6)	45,000	112,238
3,660	Bulletin		(3,132)
4,611	InforMed	5,000	9,783
45,940	Gain on sale of investments		45,043
3,266	Other income	3,000	2,302
1,215,278		1,237,700	1,362,996
952,631	Expenses (Page 6)	963,780	955,692
241,550	Canadian Medical Assoc. remittance	272,000	279,525
1,194,181		1,235,780	1,235,217
21,097	Net income	$ 1,920	127,779
607,133	Surplus, beginning of year		566,275
(61,955)	Transfer to Building Fund		(644,054)
$ 566,275	Surplus, end of year		$ 50,000

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

OPERATING FUND

STATEMENT OF CHANGES IN FINANCIAL POSITION

YEAR ENDED SEPTEMBER 30, 1989

	1989	1988
Cash provided from (used for)		
Operations		
Net income	$ 127,779	$ 21,097
Depreciation	19,411	21,818
Gain on sale of investments	(45,043)	(45,940)
	102,147	(3,025)
Changes in current assets and liabilities		
Increase in		
Receivables	(22,487)	(12,373)
Prepaid expenses	(15,323)	(1,411)
Deferred revenue	168,922	(37,859)
Decrease in		
Payables and accruals	(83,891)	73,200
	149,368	18,532
Investing sources (uses)		
Contingency Fund income earned	12,573	12,137
Proceeds on the maturity and disposal of long term investments	350,637	523,068
Purchase of equipment	(9,432)	(21,577)
	353,778	513,628
Transfers to Building Fund from		
Operating Fund	(644,054)	(61,955)
Contingency Fund	(145,709)	
	(789,763)	(61,955)
Net cash provided (used)	(286,617)	470,205
Cash and short term investments		
Beginning of year	1,123,681	653,476
End of year	$ 837,064	$1,123,681

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

OPERATING FUND

NOTES TO FINANCIAL STATEMENTS

SEPTEMBER 30, 1989

1. Investments

Description	Interest Rate	Maturity Date	Cost	Approximate Market Value
District of Guysborough	9.75%	Nov.15/90	$ 15,000	$ 14,761

2. Office furniture and equipment

	1989			1988
	Cost	Accumulated Depreciation	Net Book Value	Net Book Value
Office furniture and equipment	$ 68,121	$ 61,214	$ 6,907	$ 7,814
Leasehold improvements	38,827	35,667	3,160	4,740
Computer	90,145	63,979	26,166	33,658
	$197,093	$160,860	$ 36,233	$ 46,212

All expenditures for fixed assets are capitalized. Fixed assets are depreciated on the straight line basis over a five year period.

3. Deferred revenue

Annual membership dues for the next fiscal year received by the Medical Society before September 30, 1989 are recorded as deferred revenue.

4. Contingent liability

The Medical Society of Nova Scotia has guaranteed the bank loans of Nova Scotia Medical Society students with the Bank of Montreal totalling $34,500.

5. Commitments

The future minimum lease payments on the operating lease for office space are approximately $51,750 per year. These payments do not include a provision for operating costs which are presently $4.28 per square foot annually.

6. Investment income

	1989	1988
Interest on short term investments	$100,678	$ 54,862
Interest on other investments	4,915	11,070
Dividends	6,645	2,683
	$112,238	$ 68,615

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

OPERATING FUND

NOTES TO FINANCIAL STATEMENTS

SEPTEMBER 30, 1989

7. Contingency Fund

	1989	1988
Balance, beginning of year	$133,136	$120,999
Interest earned on investments	12,573	12,137
Transfer to Building Fund	(145,709)	
Balance, end of year	$ 0	$133,136

9. Comparative figures

Certain of the comparative figures have been reclassified to conform with the financial statement presentation adopted for 1989.

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

EXPENSES

YEAR ENDED SEPTEMBER 30, 1989

1988 Actual		1989 Budget	1989 Actual
	Administration		
$ 1,500	Accounting fees	$	$
7,225	Audit fees	10,000	10,455
4,736	Investment trustee fees	4,000	4,097
799	Insurance, travel, bonding and property	900	899
6,318	Legal fees	5,000	4,209
70,780	Office rent	70,000	69,966
35,534	Office services	31,000	34,837
701	Petty cash and miscellaneous	1,000	608
8,073	Postage	11,000	11,293
1,857	Repairs and maintenance	1,500	2,216
4,999	Taxes	6,500	5,261
14,638	Telephone	15,400	15,041
20,787	Travel - secretariat	12,000	18,118
7,666	Unforseen expenses	5,000	6,900
	Salaries and benefits		
397,855	Salaries	420,000	379,424
4,613	Canada pension plan	5,500	4,877
60,282	C.M.A. pension plan and insurance	66,500	56,899
7,873	Unemployment insurance	8,500	6,719
	Parking and Christmas bonus	7,480	6,850
	Departments		
8,978	Communication department	10,000	10,545
4,503	Economics department	29,000	9,329
25,047	Professional Support Program	45,000	39,206
	Committee expenses including travel		
13,013	Executive meetings	12,000	12,172
13,740	Officers and branch meetings	12,500	7,154
20,612	President's travel	9,000	17,018
	President elect travel		12,020
	Membership services committee	1,000	170
586	Nominating committee	1,000	437
4,791	Other committees	5,000	8,886
7,000	Archives committee	7,000	7,000
	Miscellaneous		
20,775	Annual meeting	21,000	18,167
300	Bad debts		
25,166	C.M.A. general council - travel	13,500	9,083
30,000	C.M.E. grant	32,000	32,000
21,818	Depreciation	12,000	19,411
3,610	Drugs and therapeutics bulletin	4,000	3,610
87,907	Honoraria	56,000	98,760
2,244	Staff development	3,000	3,098
4,374	Student assistance loan plan	7,000	5,255
400	Unpaid student loans	500	(400)
1,531	Eastern division conference	2,000	
	Think tank meetings		4,102
$952,631		$963,780	$955,692

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

BUILDING FUND

BALANCE SHEET

SEPTEMBER 30, 1989

ASSETS	1989	1988
Current		
Short term investments	$1,005,765	$
Accrued interest	23,050	
	1,028,815	
Land and project development costs (Note 2)	232,504	205,811
	$1,261,319	$205,811

LIABILITIES AND FUND BALANCE		
Current		
Payables and accruals	$ 12,741	$
Deferred revenue (Note 3)	85,000	
Investment in capital assets	232,504	205,811
Building Fund balance	931,074	
	$1,261,319	$205,811

ON BEHALF OF THE EXECUTIVE

Dr. R.B. Auld, Treasurer

Mr. A.A. Schellinck, Executive Director

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

BUILDING FUND

STATEMENT OF REVENUE, EXPENDITURE AND FUND BALANCE

YEAR ENDED SEPTEMBER 30, 1989

	1989	1988
Revenue		
Membership dues	$137,100	$133,200
Investment income	30,904	10,656
	168,004	143,856
Expenditures		
Acquisition of land		183,308
Project development costs	26,693	22,503
	26,693	205,811
Excess of revenue over expenditures (expenditures over revenue)	141,311	(61,955)
Transfer from Contingency Fund	145,709	
Transfer from Operating Fund	644,054	61,955
Fund balance, end of year	$931,074	$

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

BUILDING FUND

NOTES TO FINANCIAL STATEMENTS

SEPTEMBER 30, 1989

1. Building Fund

The Medical Society has acquired land in Dartmouth and has approved the construction of a building to serve as offices for the Society. The cost of this project is being funded by a special assessment of $100 per member annually in each of the next several years. In addition the Society has approved the transfer of funds to the Building Fund of $644,054 from the Operating Fund and a further $145,709 from the Contingency Fund.

2. Land and project development costs

	Cost Beginning the Year	Expended During the Year	Cost End of Year
Land	$183,308	$	$183,308
Project Development Costs	22,503	26,693	49,196
	$205,811	$ 26,693	$232,504

No depreciation will be claimed on the new building until construction is completed.

3. Deferred revenue

Annual relocation dues for the next fiscal year received by the Medical Society before September 30, 1989 are recorded as deferred revenue.

Doane Raymond

THE MEDICAL SOCIETY OF NOVA SCOTIA

COGSWELL LIBRARY FUND

BALANCE SHEET

SEPTEMBER 30, 1989

ASSETS	1989	1988
Receivable from Operating Fund	$ 3,397	$ 3,595
Investments, at cost	2,000	2,000
	$ 5,397	$ 5,595
FUND BALANCE		
Cogswell Library Fund balance	$ 5,397	$ 5,595

STATEMENT OF REVENUE, EXPENDITURE AND FUND BALANCE

YEAR ENDED SEPTEMBER 30, 1989

	1989	1988
Income from investments	$ 466	$ 414
Trustee expense	250	
Contributions to Dalhousie University	414	306
Excess of revenue over expense (expense over revenue)	(198)	108
Fund Balance, beginning of year	5,595	5,487
Fund Balance, end of year	$ 5,397	$ 5,595

Doane Raymond

	EXPENSES	BUDGET FY 1988	ACTUAL FY 1988	BUDGET FY 1989	ACTUAL to Sept 30/89	ESTIMATE to Year End
	Administration:					
400	Audit Fees	$ 8,300.	$ 8,725.	$ 10,000.	$ 3,230.00	$ 10,000.
401	Insurance - Travel, Bonding & Property	1,000.	799.	900.	899.00	899.
402	Investment Trustee Fees	3,000.	4,736.	4,000.	2,373.81	4,500.
403	Legal Fees	5,000.	6,318.	5,000.	4,209.54	5,000.
404	Office Rent (net) / Oper. Costs (inc Property Tax)	75,000.	70,780.	70,000.	71,209.03	71,210.
405	Office Services	35,000.	35,534.	31,000.	33,630.14	34,069.
406	Petty Cash and Miscellaneous	1,000.	701.	1,000.	608.34	608.
407	Postage	12,000.	8,073.	11,000.	12,067.09	8,828.
408	Repairs and Maintenance (office equip)	3,000.	1,857.	1,500.	1,963.09	1,963.
409	Taxes - Business Occupancy	6,000.	4,999.	6,500.	5,435.56	5,436.
410	Telephone and FAX	14,700.	14,638.	15,400.	14,975.54	16,500.
411	Travel - Secretariat	12,000.	20,787.	12,000.	17,197.42	17,464.
412	Unforeseen Expenses	5,000.	7,666.	5,000.	6,900.19	6,900.
	Salaries and Benefits:					
430	Salaries	390,000.	397,855.	420,000.	379,423.68	380,000.
431	Canada Pension Plan	4,200.	4,613.	5,500.	4,877.39	4,900.
432	Pension Plan (CMA) and Insurances	60,500.	60,282.	66,500.	56,899.35	57,000.
433	Unemployment Insurance	7,500.	7,873.	8,500.	6,719.40	6,720.
435	Parking and Christmas Bonus	-	-	7,480.	6,850.00	6,890.
	Departments:					
440	Communications Department	20,000.	8,978.	10,000.	10,545.48	10,546.
445	Economics Department	2,500.	4,503.	* 29,000.	9,328.72	9,329.
446	Professionals Support Program (net)	23,000.	25,047.	** 45,000.	42,579.24	39,256.
	Committee Expenses - Including Travel:					
450	Executive Meetings	13,000.	13,013.	12,000.	11,815.27	15,000.
451	Officers and Branch Meetings	13,000.	13,740.	12,500.	7,153.65	7,500.
452	President's Travel	15,000.	20,612.	9,000.	17,018.25	17,019.
453	President Elect Travel	-	-	-	12,019.95	12,020.
455	Membership Services Committee	---	---	1,000.	169.77	170.
456	Nominating Committee	1,000.	586.	1,000.	437.15	437.
458	Other Committees	5,000.	4,791.	5,000.	8,885.60	8,886.
459	Archives Committee	7,000.	7,000.	7,000.	7,000.00	7,000.
461	Horizons Committee	2,000.	---			
463	Building Committee (see Bldg Committee Report)				13,951.88	
464	Awards Committee	5,000.	---			
	Miscellaneous:					
480	Annual Meeting (net)	20,000.	20,775.	21,000.	18,166.77	18,167.
481	Bad Debts	---	300.	---	---	---
482	The Canadian Medical Association Membership	240,000.	241,550.	272,000.	279,525.00	279,525.
483	C.M.A. General Council	28,750.	25,166.	13,500.	9,082.78	9,083.
484	C.M.E. (Dalhousie) Grant	30,000.	30,000.	32,000.	32,000.00	32,000.
485	Depreciation	12,000.	21,818.	12,000.	---	12,000.
486	Drugs and Therapeutics Bulletin	4,000.	3,610.	4,000.	3,610.00	3,610.
487	Honoraria	55,000.	87,907.	56,000.	101,376.75	101,377.
488	Staff Development	2,500.	2,244.	3,000.	3,098.05	3,098.
489	Student Assistance Loan Plan	7,000.	4,374.	7,000.	5,255.36	5,255.
490	Unpaid Student Loans	500.	400.	500.	(400.00)	(400.)
491	Eastern Divisions Annual Conference	2,000.	1,531.	2,000.	---	---
492	Think Tank	---	---	---	4,101.85	4,102.
	Capital Accounts:					
110	Office Equipment	5,000.	* -	5,000.	2,258.61	2,259.
114	Computer Equipment	15,600.	* -	5,000.	7,527.00	7,527.
		$ 1,181,050.	$ 1,194,181.	$ 1,245,780.	$ 1,235,975.70	$1,243,653.
	REVENUE					
	Annual Membership Dues:					
300	The Medical Society of Nova Scotia	$ 840,000.	$ 841,675.	$ 907,000.	$ 911,032.00	$ 911,032.
301	The Canadian Medical Association	240,000.	241,535.	272,000.	279,810.00	279,810.
303	Student Membership	700.	5,220.	700.	730.00	730.
304	Interne/Resident Memberships	5,000.	756.	5,000.	5,190.00	5,190.
	Other Income:					
340	InforMed (net)	---	3,660.	5,000.	14,091.10	9,757.
350	Journal - Editorial Board (net)	---	4,611.	---	(3,131.56)	(3,128.)
360	Investment Income	45,000.	68,615.	45,000.	59,136.06	59,136.
361	Gain or Loss on Sale of Investments	---	45,940.	---	(1,230.60)	(1,231.)
380	Miscellaneous	2,000.	3,266.	3,000.	2,301.97	2,409.
390	Rental Income	-	-	-	-	-
		$ 1,132,700.	$ 1,215,278.	$ 1,237,700.	$1,267,928.97	$ 1,263,705.

* see A/C 485 Depreciation

Approved by
* Council $ 20,052.
** Exec 1/28/89

	EXPENSES	BUDGET 1990	PROJECTIONS 1991	1992	1993	1994
	Administration:					
400	Audit Fees	$ 10,000.	$ 11,000.	$ 12,100.	$ 12,100.	$ 13,000.
401	Insurance - Travel, Bonding & Property	1,900.	1,900.	1,900.	1,900.	1,900.
402	Investment Trustee Fees	5,000.	3,000.	1,000.	1,000.	1,000.
403	Legal Fees	7,500.	7,500.	7,500.	8,000.	8,000.
404	Office Rent (net) / Oper. Costs (inc Property Tax)	75,000.	85,595.	89,875.	94,368.	100,000.
405	Office Services	35,000.	35,000.	37,000.	39,000.	41,000.
406	Petty Cash and Miscellaneous	1,000.	1,100.	1,100.	1,200.	1,200.
407	Postage	11,500.	13,000.	14,000.	15,000.	16,000.
408	Repairs and Maintenance (office equip)	2,200.	2,500.	3,000.	3,500.	4,000.
409	Taxes - Business Occupancy	6,000.	22,798.	23,938.	25,134.	26,400.
410	Telephone and FAX	16,500.	17,000.	17,600.	18,600.	19,600.
411	Travel - Secretariat	15,000.	13,000.	14,000.	15,000.	16,000.
412	Unforeseen Expenses	7,500.	6,000.	6,000.	6,000.	6,000.
	Salaries and Benefits:					
430	Salaries	397,000.	410,500.	431,000.	452,500.	475,000.
431	Canada Pension Plan	6,050.	6,350.	6,600.	6,950.	7,300.
432	Pension Plan (CMA) and Insurances	57,500.	60,370.	63,400.	66,570.	69,900.
433	Unemployment Insurance	8,000.	8,400.	8,800.	9,200.	9,650.
435	Parking and Christmas Bonus	7,480.	2,200.	2,200.	2,200.	2,200.
	Departments:					
440	Communications Department	7,000.	12,000.	13,000.	14,000.	15,000.
445	Economics Department	5,000.	5,000.	5,500.	6,000.	6,500.
446	Professionals Support Program (net)	45,000.	37,500.	40,500.	43,500.	45,000.
	Committee Expenses - Including Travel:					
450	Executive Meetings	15,000.	13,000.	14,000.	15,000.	16,000.
451	Officers and Branch Meetings	12,500.	13,500.	14,500.	15,000.	16,000.
452	President's Travel	20,000.	11,000.	20,000.	13,000.	20,000.
453	President Elect Travel	10,000.	8,000.	3,000.	8,000.	3,500.
455	Membership Services Committee (see A/C #458)					
456	Nominating Committee	500.	1,000.	1,000.	1,000.	1,000.
458	Other Committees	10,000.	10,000.	10,000.	10,000.	10,000.
459	Archives Committee	7,000.	7,000.	7,000.	7,000.	7,000.
461	Horizons Committee					
463	Building Committee (see Bldg Committee Report)					
464	Awards Committee					
	Miscellaneous:					
480	Annual Meeting (net)	17,000.	18,000.	19,000.	20,000.	20,000.
481	Bad Debts	---	---	---	---	---
482	The Canadian Medical Association Membership					
483	C.M.A. General Council	13,000.	18,000.	13,400.	28,000.	20,000.
484	C.M.E. (Dalhousie) Grant	34,000.	35,000.	37,000.	39,000.	40,000.
485	Depreciation	10,000.	15,000.	15,000.	15,000.	15,000.
486	Drugs and Therapeutics Bulletin	4,000.	4,200.	4,500.	4,500.	4,500.
487	Honoraria	80,000.	85,000.	90,000.	95,000.	100,000.
488	Staff Development	5,000.	5,000.	5,000.	5,000.	5,000.
489	Student Assistance Loan Plan	7,000.	7,000.	7,500.	7,500.	8,000.
490	Unpaid Student Loans	500.	500.	500.	500.	500.
491	Eastern Divisions Annual Conference	---	2,500.	2,500.	3,000.	3,000.
492	Think Tank	---	2,500.	2,500.	3,000.	3,000.
	Capital Accounts:					
110	Office Equipment	6,000.	2,000.	2,000.	2,000.	2,000.
114	Computer Equipment	10,000.	17,000.	5,000.	5,000.	5,000.
		$ 988,630.	$ 1,036,913.	$ 1,073,413.	$ 1,138,222.	$ 1,184,150.
	REVENUE					
	Annual Membership Dues:					
300	The Medical Society of Nova Scotia	$ 982,000.	$ 1,068,000.	$ 1,118,000.	$ 1,172,000.	$[ ]
301	The Canadian Medical Association					
303	Student Membership	700.	700.	700.	700.	700.
304	Interne/Resident Memberships	5,000.	5,000.	5,000.	5,000.	5,000.
	Other Income:					
340	InforMed (net)	5,000.	5,000.	5,000.	5,000.	5,000.
350	Journal - Editorial Board (net)	(9,000.)	(10,000.)	(11,000.)	(12,000.)	(13,000.)
360	Investment Income	---	---	---	---	---
361	Gain or Loss on Sale of Investments	---	---	---	---	---
380	Miscellaneous	5,000.	6,000.	6,000.	6,000.	6,000.
390	Rental Income	---	12,000.	12,600.	13,200.	14,000.
		$ 988,700.	$ 1,086,700.	$ 1,136,300.	$ 1,189,900.	$[ ]
	Surplus	($ 70.)	$ 49,787.	$ 62,887.	$ 51,678.	

Presidential Valedictory Address - 1989

V.P. Audain, M.D.

Halifax, NS

I would like to take this opportunity to reflect on some of the observations that I have made over the past year and to highlight a few of the challenges that I see facing organized medicine as we march into the 21st century.

We must be sensitive to the changing concepts of health care as perceived by the various stakeholders; e.g., government at all levels, health care professionals and the consuming public. We must be prepared to work as a team with the other players. Still we must renew our fundamental role as physicians and pursue the practice of allopathic medicine. We must be innovative and creative, demonstrating the leadership that is expected of us, and I say this not in a pejorative way.

As a Medical Society, one of our principal objectives over the past 136 years, has been health promotion and disease prevention. It is with great interest that we note that this has recently become the hue and cry of many of the stakeholders, in particular the health care economists a group which has become a new growth industry. Needless to say, there are as many paradigms for our health care system as there are architects.

We must recognize the fact that although we feel responsible for our patients' needs, we are no longer their only advocates.

We now form part of a team of players who feel that they have a responsibility to see that the health care system is adequately managed.

There is often a competitive and sometimes an adversarial approach among the various stakeholders rather than one of cooperation to achieve common objectives.

Since the public sector funds the system, and Federal legislation reinforces this, both the consumers and the providers have been largely isolated from direct awareness of costs.

In any global review of health services we must be cognizant of the cost impact that such services have on the objectives they were intended to achieve. Few would dispute that the primary reason for expenditures on health services is to improve the health of the receiving population. Yet there is mounting evidence that the current emphasis on the model of diagnosis and treatment is not producing the level of population health status that we believe is possible.

An additional objective that has gained support is to maintain the maximum independence of those disabled by ill health. The current approach however is to emphasize the provision of care in expensive institutional environments. This is one of the major challenges facing organized medicine in the immediate future. Hence the new emphasis on community-based care.

We ought to develop protocols to demonstrate clinical productivity. We must show leadership in trying to avoid service duplication rather than service rationalization. The net effect of this duplication is the limitation of resources that are available for service development.

The time has now come for us to examine the results of our current approach to see how effective it is. In examining system components, much of the focus is on system inputs, such as funding, specific services, people, buildings, beds, etc. Very little emphasis is placed on determining the outputs or results and assessing them against intended objectives. One can understand this approach because of the nature of the system itself in that inputs are more tangible and visible, while results-oriented information systems are not well developed.

The issue of physician human resources is another of the major challenges that faces organized medicine. As you know, there is a widely held belief that the medical profession has not fulfilled many of the responsibilities entrusted to it with the introduction of medicare. From time to time, we have been reminded, that as a major partner in providing health care, we have a responsibility to help in keeping the system affordable. There is a notion that there is an oversupply of physicians in this country, coupled with a mal-distribution of family physicians and specialists. Many of these statements have been demonstrated to be erroneous. Interestingly enough, there are some studies that indicate that an increase in the number of physicians may actually result in a decrease in health care costs. We should remember when these discussions occur that physicians make positive contributions to the National and Provincial economies. The health care economists are quick to point out that each

additional physician introduced to the health care system, results in additional expenditure as a result of higher medical, hospital and pharmaceutical costs. These numbers are estimated to be on the average of $250,000 per physician per year added to the system. What is disturbing about this specious information, is the fact that they are quoted without any regard to the local or regional population medical needs. The implication is that physicians are considered only in terms of their costs to the health care system.

But there is another side to this equation; physicians do provide many benefits to society. We must not allow this side of the story to go untold. We recognize that it is very difficult to assemble quantitative information to substantiate the benefits that the economy derives from physicians' practices. However, we can certainly mention some of the more obvious ones. Physicians do contribute to economic growth in a variety of ways. By far their most important role is in the reduction of morbidity rates among workers in the community, which in turn improves production in the economy. Physicians, by operating in our practices and in institutional settings, we are directly or indirectly responsible for the employment of labour and expenditure of capital as inputs into providing our services. The income paid to our employees also contributes to economic growth.

Physicians' profits, which is defined as the total gross earnings minus the overhead costs, are an important factor in both Provincial and National economic growth. Profits determine the degree to which physicians consume goods and services, save, and make financial investments, all of which stimulate economic growth either directly or indirectly. Profits are also the taxable portion of a physician's income. Therefore, given the progressive structure of our income tax system, the greater the profits of a physician's practice, the greater the contributions to society (through increased tax payments). And so the rhetoric goes on.

What we are indeed hearing is that as a profession, we are perceived to be part of the problem in so far as the costs of the health care system are concerned, and therefore, it is imperative that we become a part of the solution. It is of paramount importance that we embark upon a collaborative approach with the other stakeholders to assemble meaningful data. The CMA data base on physician human resources is perhaps the most comprehensive source to date, but I believe we have to expand this to include input from other groups if the information is to be credible and meaningful planning could be embarked upon. There is no doubt that the consuming public must be involved in these discussions. The "critical mass" must be part of the equation in determining the level of care that is needed for a specific community. This is where medical organizations can have an immeasurable impact in a consultative capacity.

We must be alert to our responsibility in maintaining our professional competence. In addition we must be willing to engage in an appropriate form of peer review. Not only are our patients demanding the highest level of care, but governments are becoming increasingly interested in our ability to police ourselves. We have no alternative but to demonstrate the appropriate leadership in this regard or face having standards imposed on us.

We must be alert to the fact that there is a sense of inquiry among our patients and a desire for more information. The public has become increasingly more interested in alternatives to traditional medical care over the last few years. Some researchers believe that there is a dissatisfaction with physicians, a belief that western medicine often fails or perhaps just a plain desire to take more responsibility for one's own health care. There appears to be a growing hostility to science and technology. The Space-Shuttle Challenger Disaster, the Chernobyl Incident and other such events, have also served to emphasize the risks of advancing technology and the occasional breakdown of technological enterprises. We are therefore faced with an emerging industry of alternate methods of care, particularly for patients with illnesses for which medicine does not yet provide an adequate basis of understanding.

My final caveat is that we must be vigilant of any attempt to regulate the practice of medicine with the introduction of legislation for whatever reason. I believe there are more effective ways of managing the system without introducing measures that will have the effect of dismantling the physician/patient relationship.

In conclusion, I would like to thank you all for affording me the honour and privilege of serving you during the past year. The experience gained was immeasurable and I hope that I will be able to continue to use it wherever possible to further the goals of this renowned organization. □

Dr. Peter D. Jackson

PRESIDENT

The Medical Society of Nova Scotia
1989 - 1990

People who know Peter Jackson describe him as a very modest man and he certainly is. However, Dr. Jackson, the new President of The Medical Society of Nova Scotia has good reason to be proud of his many achievements and not the least of them is his devotion to his patients and his adopted home in Cape Breton.

Born in Dorset in 1937, Dr. Jackson grew up in a part of England that is so beautiful it has captivated the imagination of many writers. It was medicine, however, that captivated this man's interest and in 1962, he graduated from the medical school of Guy's Hospital in London. For the next two years, the young doctor worked for six month periods as a Casualty Officer, House Surgeon and a Resident in Obstetrics at hospitals in Sussex and Brighton.

In 1965, with his wife Tricia and a young son, Dr. Jackson made a decision that he believes was one of the best he has ever made; he decided he would like to set up a family practise in Sydney. In his own words, "It gave me the opportunity to work with a community that I have grown to respect and admire for their tolerance, their generosity and kindness." The community has reciprocated by letting him know that they consider him to be a physician who is deeply committed to their health and welfare. Dr. Jackson himself has been actively involved in the community. He has been President of the Kinsman Club and a member of the Cape Breton Chorale (He sang bass). But his greatest and abiding interest is in the emerging field of Palliative Care. For a year, he was Chairman of the Palliative Care Society which now has 70 trained volunteers who support families who live daily with the imminent death of a loved one. This concern has been a major factor in his long involvement with Nova Scotia's Cancer and Treatment Foundation.

The new President of The Society has also demonstrated a commitment to the official aspects of the medical profession. For eight years, he was a member of the Board of Maritime Medical Care. He has served The Medical Society of Nova Scotia as Treasurer and a Member-at-Large. Now, as President, he begins a year that he believes comes at a time of great transition. He predicts the 1990's will be a decade when all of us are going to have to re-examine the medical care system. This will mean accepting more responsibility for our own health. A committed proponent of preventive medicine, he says the public needs to

understand that this will only have a lasting impact if they avoid major risks such as alcohol, drugs and the use of tobacco. He admits that this is going to test the skills of the medical profession but he thinks it can be achieved because of a heightened awareness of the benefits of better nutrition and exercise.

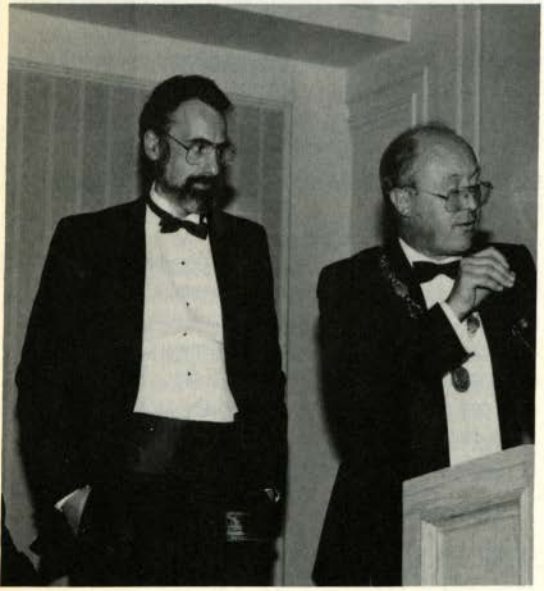
Dr. Jackson's wife, Tricia, says he does have one "vice." He is a chronic punster! Fortunately, for him, she and their four children long ago have learned to be tolerant! A close family, they have spent many happy summers at their cabin at Boisdale, on the Bras d'Or Lakes. In winter, when they can find the time, you'll find the Jacksons enjoying some downhill skiing.

Dr. Peter Jackson, the new President of The Medical Society of Nova Scotia is a modest man but members can count on him to be a highly approachable Officer who will fully comprehend their needs and concerns. He can also be counted on to let Nova Scotians know that he represents a profession that strives hard to help ensure they live longer, healthier lives. □

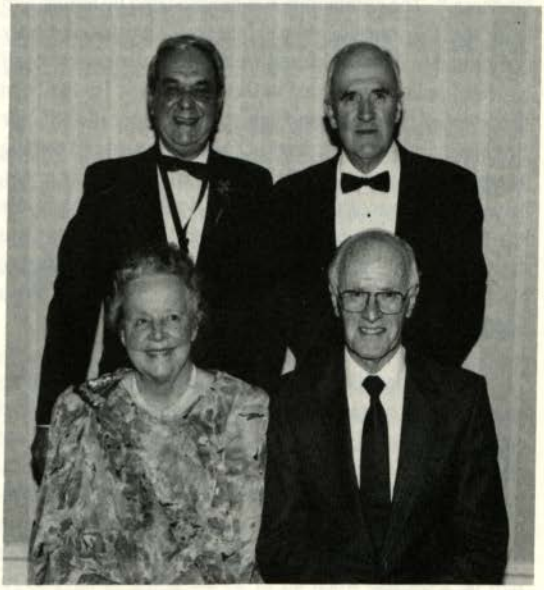
Pictorial Highlights
136th Annual Meeting

A happy moment as the new President, Dr. Peter Jackson, receives the congratulations of the President of the CMA, Dr. Marcien Fournier. Dr. Vincent Audain, Past President, views the exchange with obvious enthusiasm.

Janet Audain, receives a gift and words of appreciation from Dr. Jackson's wife, Tricia.



The 1989 Senior Members after being honoured for their contributions to The Society. Seated are Dr. Helen Holden-Quinlan and Dr. Austin Creighton. Standing behind are Dr. Ben Karrel and Dr. A. Emerson Dunphy.



Dr. William Canham, President Elect listens intently as Dr. Jackson provides banquet guests with a biographical sketch of his successor.

Dysthymia

PSYCHODYNAMIC THEORIES AND THEMES

Charles J. David, *MBBS, DPM (Lond), MRC Psy (Lond), FRCPC.

Halifax, N.S.

Depression is a fairly common problem in patients visiting family practitioners. In various studies of depression amongst family practice patients, utilizing a variety of assessment techniques, the frequency has ranged from 12.2% to 56% of patients with a median of 41%.[1] Depression is common, as an affective state, symptom or syndrome, amongst both psychiatric patients and the general population.[2] Depression is also common in both men and women after the death of their spouses.

Clayton *et al.* have shown that bereaved subjects who satisfy the criteria for primary affective disorder show some differences compared with those who are bereaved, but do not suffer from depressive disorder. The bereaved may have psychological symptoms indistinguishable from depressive illness, but they are accepted by them or their environment or family as "normal". Those who are depressed show increase in mortality or increase in visits to physicians, hospitals, have a previous history of psychiatric disorder, treatment for depression or use of psychotropic medications. They experience the process, therefore, as a "change" from their usual self which leads to their seeking help.[2]

Depression as one process in the mourning continuum has been recognized since time immemorial and it afforded Freud with his brilliant insight on mourning and melancholia which advanced the case of psychoanalysis.[3] John Birtchnell has shown that the incidence of early parent death was significantly higher in severely depressed group of patients. The incidence of recent parent death was significantly higher in the severely depressed group.[4]

The relationship of loss to depression has been noted in psychoanalytical and psychiatric literature. Actual and symbolic loss may be seen to be present in a variety of situations: actual loss through death of a significant person or parent or child or spouse, loss of limb, chronic diseases (dialysis), marital breakdown, loss of job, etc. These and similar events may trigger depressions in susceptible individuals.

Dysthymia or dysphoric disorder is, therefore, a common form of affective disorder. It was previously referred to as depressive neurosis or characterological depression.[5] The criteria for dysthymic disorder are listed below. The central feature is that depression must be present most of the time for at least two years and must also impede functioning to some extent. Usually, some psychological, familial and/or social situation or triggers may be present. Not uncommonly it may be in relation to an interaction between the patient's personality and the environment.

According to the American Psychiatric Glossary, *dysphoria* is described as an unpleasant mood. Under depressive neurosis, the same glossary states that it is an excessive reaction of depression due to an internal conflict or to an identifiable event such as a loss of a loved person or a cherished possession.[6] In DSM III-R, it is referred to as a dysthymic disorder.

In a previous paper, the criteria DSM III-R for diagnosis of unipolar depression have been outlined. The DSM III-R criteria for the diagnosis of dysphoria/dysthymia are outlined in Table I.

TABLE I

DIAGNOSTIC CRITERIA FOR DYSTHYMIA

A. A depressed mood or an irritable mood for most of the day, over many days either by subjective account or observation by others for at least two years.

B. Presence, while depressed, of at least two of the following:

1. Poor appetite or overeating
2. Insomnia or hypersomnia
3. Low energy or fatigue
4. Low self-esteem
5. Poor concentration or difficulty making decisions.
6. Feelings of hopelessness.

C. During a two-year period of the disturbance, the patient has never been without the symptoms in (A) for more than two months at a time.

D. There is no evidence of a Major Depressive Episode during the first two years of the disturbance and, furthermore, the patient has never had a Manic Episode or a Hypomanic Episode.

E. This Dysthymia is not superimposed on a chronic disorder such as a Schizophrenic Disorder or a Delusional Disorder.

F. It is also established that the Dysthymia is not being precipitated and maintained by an organic factor such as a side-effect of medication for some other illness.

(Modified after DSM-III-R)

G. Brown *et al.* note that there are three ways in which loss can contribute to the development of depression:

1. As a *provoking agent:* that is starting the disorder at a particular point in time;
2. As a *vulnerability* factor: increasing the individual's sensitivity to losses in the future;
3. As a *symptom factor,* determining the form and severity of depression but it not being aetiological.[7]

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

Given the above introductory remarks, it is now important to understand some key psychodynamic theories of depression. As previously mentioned, an accurate diagnosis often guides our therapeutic response. Charles Bowden notes that pharmacotherapy is generally indicated for major depressive disorders, bipolar disorders, and atypical depression.[8] Mild depressions and dysthymic disorders and adjustment syndromes appear to benefit from some form of psychotherapy alone or in combination with other pharmacotherapy, namely Benzodiazepines and antidepressants.

Psychodynamics of depression can best be reviewed under the headings of major contributors and major themes.

* **K. Abraham:** In 1911, he offered the view that depressed individuals have profound ambivalence towards significant others (parents, surrogate, etc.) in which the striving for love is blocked by strong feelings of hatred which in turn are repressed because of nonacceptance of this hostility. This leads to guilt which arises from the hate component of the ambivalence. Karl Abraham felt the factors were multiple; constitutional, frustration and fixation at oral level of development, repeated disappointments in early childhood, preoedipal disappointment in significant other, and repetition of the disappointment in current, significant relationships.

S. Freud: Regarded both normal mourning and melancholia as responses to the loss of someone or something loved. He emphasized that ambivalence in melancholia was both constitutionally and experientially acquired. Freud postulated that in childhood the future melancholic formed an intense, but ambivalent relationship with a significant other which was undermined because of disappointment(s) with the loved person. Other later losses reactivate this principal loss which also helps to reawaken the repressed anger which is met with disapproval.

S. Rado: In 1928, suggested that melancholic patients are felt to be dependent on others for maintenance of their self-esteem which is very vulnerable, being compromised by small disappointments.

Rado felt that the deeper roots of this are to be found in the hungry infants paroxysm of rage from which all forms of the depressive's reactions to frustration develop. In addition the depressive feels very guilty for his/her aggressive attitude; the self is blamed for the loss of the significant person (object). Depression, therefore, represents a process of repair and a period of atonement for having driven away the needed significant other (parent, surrogate).

M. Klein: Her contribution remains rather controversial. She bases her work on the interaction of life and death instincts expressed in love and hate. She postulates two basic developmental stages in the first year of life which she calls "positions". The first is that of the *schizo-paranoid* position. The infant during this stage perceives the breast as separate from the mother. There is "the good" or *feeding* breast and the "bad" or the *nongiving* breast. The child, in this manner "splits" the whole person into what they call "part objects" and internalizes these "parts" or *objects* within the psyche. The infant is indeed frightened that the "bad" will destroy the "good". This is then partly resolved by projecting "bad objects" back into the environment in order to safeguard goodness. The child in this way senses danger from without and this leads to what she defines as "persecutory anxiety". Hence, it is referred to as the "paranoid position".

The second position is known as the "depressive position" which is again said to occur at the fourth or fifth month of age, when the child can perceive the realistic whole object "or person" and realizes that he/she has to deal with conflict in respect to these external but very significant people who are sources of both pain and pleasure. The crisis at this time is a fear that the child's aggression will destroy the "good" both within and without. This leads to depressive "anxiety" and therefore it is referred to as a "depressive position".

There are, of course, many ways to deal with these positions. Depression then, according to this theory, is seen as a "basic state" which has to be defended against in either an abnormal or a healthy fashion. The followers of M. Klein have been several, but the ones that have attempted to make the theories more comprehensible by referring to environmental factors are principally Fairbairn, Winnicott and Guntrip. Family therapists have also expanded these to account for interactions between family members.

Edith Jacobson contributed several concepts to understanding the future depressive. These may be listed:

1. Severe disappointment in and disillusionment about parents in the first year of life which crushes the "infantile ego" and may start earlier development of the super ego.
2. A powerful, omnipotent superego (conscience) verses a relatively weak ego or self and indeed tension between the two.
3. The patients often cling to a fantasied, magical power of the other (parent).
4. The loss in self-esteem, the feelings of impoverishment, helplessness and weakness the patients experience result from this narcissistic breakdown.

THE INTERPERSONAL AND CULTURAL SCHOOLS

Cohen *et al.* studying families of depressives notes that the families had set themselves, or were forced by others to be apart from the general community. This may come about as a result of many factors. For example: belonging to a minority, belonging to either exclusive economic circumstances or poor circumstances or because of chronic illness, etc.

In these circumstances, the children were expected to conform to a much higher standard of good behavior

and expected to achieve to undo the family's status as it were. The mother demanded obedience and excellence and the father was often economically and socially unsuccessful. The mother frequently could not cope with the rebelliousness of the child who is then usually confronted by threats of abandonment. These experiences lead to the development of scarred adult personalities — fairly commonly found in those with manic depressive disorders.

Gibson, in comparing a group of manic depressive patients with a group of schizophrenic patients found that the manic/depressive comes from homes where there was greater pressure for achievement and prestige in a prevailing atmosphere of competitiveness and envy. The manic depressives also show a greater concern for social acceptance.

The cultural school has emphasized that depression results from efforts to meet with social demands and that the depression is a way of coping with, in some ways, abnormal goals.

Bonine extending this further, viewed the depressive's outward behavior as disguised hostility.

The Existential School has had limited use in North America. European culture, crises, wars and historical perspectives led to the development of philosophical schools which were helped to explain and understand human suffering and psychological problems. K. Jaspers refers to the "process" or what is "happening" in the patients, what they are actually going through, how they feel, etc., as a major emphasis on understanding. They refer in the most dramatic and metaphorical ways to the persons "pathetic immobility" or describe what they refer to as a "suspension of existence, a syncope of the self" as ways of emphasizing the suffering of the individual. Time distortion in the experience of depression, the excessive concern regarding past events which are used to torture oneself with guilt and the self-recriminations are all recognized. The world of the depressive is characterized, they infer, by "orderliness, conscientiousness and an overriding desire to please important others". These needs place exacting demands on the self to please others and to escape guilt. When the demands simply cannot be fulfilled, clinical depression results.

H.S. Sullivan speaks of the stereotyped, repetitive tendency towards destructive situations, preoccupation with a limited number of ideas and retardation of vital processes.

Beck's Cognitive Theory: Distortions in cognition usually in the form of pessimistic perception of the self and the environment with unrealistic self-reproaches have been part of the clinical picture of depression. Beck's view has been that these distortions are the primary cause of the disorder rather than secondary symptoms of depression.

Beck refers to cognitive triad as being rather specific to depression. This consists of the following:

1. Negative expectations of the environment.
2. A negative view of oneself.
3. Negative expectations of the future.

The patient's dreams, free associations and reactions to stimuli and to the environment give evidence of these distortions. Beck also feels that depression occurs following a recent loss, which contributes to the development of cognitive distortions. Thus, the emotional, behavioral, vegetative phenomena associated with depression originate in the automatic negative cognitions.

Beck's work has made significant contribution to the cognitive aspects of depression. More importantly, the therapeutic concepts that have flowed from the therapy have become particularly useful in practice.

Critically, it may be said, that his theory describes the result of depression rather than the cause. Recent studies have demonstrated that cognitive therapy is quite useful in the management of many nonpsychotic depressions.

SELIGMAN'S LEARNED HELPLESSNESS MODEL

Seligman and Maier in their work on experimental dogs exposed to inescapable shocks discovered what they described as "learned helplessness". After being exposed to a continuous stream of painful stimuli, the dogs failed to avoid shocks or indeed to seek escape and then seemed to helplessly endure the same. Seligman then hypothesized that depressives had been blocked from using adaptive techniques of coping and had apparently learned or acquired helpless behavior because of this learned experience. The cause of repeated efforts winning no reward leads to helplessness which becomes ingrained and indeed part of one's inner self and then generalized.

Depressives, according to Seligman, have a history of failure to cope with the environment. Passivity, misery and helplessness are the end results of this inability to obtain rewards and gratification. These states are not uncommonly seen in the seriously ill patients who may not have responded to therapy and where complications of the illness and/or complications of therapy take on a chronic, unremitting course.

Again, as with Beck's theory, criticism has been leveled that Seligman described the end result of a depressive episode rather than the cause. Nevertheless, the concept has helped many psychiatrists and physicians to be creative in their therapeutic efforts.

The psychotherapeutic management of depressive disorders will be treated in an article to follow. □

References

1. Barnes GE, Prosen H. Depression in Canadian General Practice Attenders. *Can J Psychiat* 1984; **29:** 2-10.
2. Clayton PJ, Herganic M, Murphy G, Woodruff R. Mourning and Depression: Their Similarities and Differences. *Can Psychiat Assoc J* 1974; **19:** 309-312.

3. Freud S. *Mourning and Melancholia.* In the Standard Edition. Vol. 19. Strachey, J., ed. London: Hogarth Press, 1917.
4. Birtchnell J. Depression in Relation to Early and Recent Parent Death. *Brit J Psychiat* 1970; **116:** 299-306.
5. *Major Psychiatric Disorders. Overviews and Selected Readings.* Guggenheim FG, Nadelson C. New York: Elsevier Biomedical, 1982. Part II: Affective Disorders: Overview. pg. 51-56.
6. Stone EM. *American Psychiatric Glossary.* Washington: American Psychiatric Press, Inc., 1988.
7. Brown GW, Harris T, Copeland JR. Depression and Loss. *Brit J Psychiat* 1977; **130:** 1-18.
8. Bowden CL. Current Treatment of Depression. *Hosp Commun Psychiat* 1985; **36:** 1192-1200.

*** General References of Psychodynamic Theories and Themes:**

1. Arieti S, Bemporad J. *Severe and Mild Depression: The Psychotherapeutic Approach.* Chapter 2. Critical Review of the Major Concepts of Depression. New York: Basic Book Inc., 1978: pg 11-56.
2. Robertson BM. The Psychoanalytic Theory of Depression — Part I. The Major Contributors. *Can J Psychiat* 1979; **24:** 341-352.
3. Robertson BM. The Psychoanalytic Theory of Depression — Part II. The Major Themes. *Can J Psychiat* 1979; **24:** 557-574.
4. *Psychiatry Update.* The A.P.A. Annual Review, Vol. III. Greenspoon, L., ed. American Psychiatric Press, Inc. 1984.
5. Cohen MB, Blake G, Cohen RA, Fromm-Reichman F, Weigert EV. An Intensive Study of Twelve Cases of Manic-Depressive Psychosis. *Psychiat Journal* 1954; **17:** 103-138.
6. Gibson RW. The Family Background and Early Experiences of the Manic-Depressive Patient — A Comparison with the Schizophrenic Patient. *Psychiatry* 1958; **21:** 71-90.
7. Jaspers K. *General Psychopathology.* Chicago: University of Chicago Press, 1964.
8. Sullivan HS. *The Interpersonal Theory of Psychiatry.* New York: Norton, 1953.
9. Beck A. The Core Problem in Depression: The Cognitive Triad. In: Masserman J, ed. *Science of Psychoanalysis.* 17. New York 1970.
10. Beck A. Depression: Clinical, Experimental and Theoretical Aspects. Heber PB. New York 1967.
11. Seligman M, Maier S. Failure to Escape Traumatic Shock. *J Experimental Psychol* 1967; **74:** 1-9.

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Pharmacology: Nizatidine is a competitive, reversible inhibitor of the binding of histamine to the histamine H_2 receptor of the gastric-acid secreting cells. Nizatidine is not an anticholinergic agent. It inhibits nocturnal gastric-acid secretion and gastric-acid secretion stimulated by food, caffeine, betazole and pentagastrin. Pepsin output is reduced in proportion to the reduced volume of gastric secretions. Nizatidine has little or no effect on basal serum gastrin or food induced hypergastrinemia. Nizatidine is absorbed rapidly after oral administration. Peak plasma concentrations occur from 0.5 to 3 hours after the dose. Absorption is unaffected by food or propantheline. However, antacids decrease the absorption of nizatidine by about 10%. The absolute oral bioavailability of nizatidine exceeds 90%. Approximately 35% of nizatidine is bound to plasma protein, primarily α1-glycoprotein. This binding is not influenced by other drugs such as warfarin, diazepam, acetaminophen, propranolol, or phenobarbital. Approximately 90% of an oral dose of nizatidine is excreted in the urine within 12 hours. About 60% of an oral dose and 77% of an i.v. dose of nizatidine is excreted as unchanged drug. The elimination half-life is 1 to 2 hours and the systemic plasma clearance is about 50L/hour. The volume of distribution is 0.8 to 1.5L/kg. Since nizatidine is primarily excreted in the urine, renal impairment significantly prolongs the half-life and decreases the clearance of nizatidine. In anephric individuals with creatinine clearance less than 10mL/min., the half-life is 3.5 to 11 hours, and the plasma clearance is 7 to 14L/hour. The dose should be adjusted in patients with moderate or severe impairment of renal function (see Dosage). The pharmacokinetic profile for nizatidine in the elderly was not significantly different from the profile in younger normal subjects. Gastric acid suppression correlates directly with nizatidine doses from 75 to 350 mg. Oral doses of 100 mg or 1.3 mg/kg suppressed gastric acid secretion in sham fed volunteers for 3 hours after the dose. The duration of acid suppression directly correlates with the nizatidine dose. 300 mg nizatidine suppressed acid secretion almost entirely early in the day, and the suppression persisted about 10 hours. Nocturnal acid was suppressed for 10 to 12 hours after 300 mg nizatidine. Treatment for up to 2 weeks with nizatidine 600 mg daily did not influence the serum concentrations of gonadotropins, prolactin, growth hormone, antidiuretic hormone, cortisol, triiodothyronine, thyroxin, testosterone, 5 α-dihydrotestosterone, androstenedione or estradiol.

Drug Interactions: No interactions have been observed between nizatidine and theophylline, chlordiazepoxide, lorazepam, lidocaine, and warfarin. Nizatidine does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur.

Indications: Nizatidine is indicated in the treatment of conditions where a controlled reduction of gastric acid secretion is required for ulcer healing and/or pain relief. Conditions include acute duodenal ulcer, acute benign gastric ulcer, and prophylactic use in duodenal ulcer.

Contraindications: Patients with known hypersensitivity to the drug.

Precautions: Gastric ulcer: Where gastric ulcer is suspected the possibility of malignancy should be excluded before therapy with nizatidine is instituted.

Pregnancy and Lactation: Safety of nizatidine during pregnancy has not been established. Reproduction studies performed in rats and rabbits at doses up to 300 times the human dose have revealed no evidence of impaired fertility or teratogenicity. If the administration of nizatidine is considered to be necessary, its use requires that the potential benefits be weighed against possible hazards to the patient and the fetus. Nizatidine is secreted in the milk of lactating rats, it is assumed to be secreted in human milk and caution should be exercised when nizatidine is administered to nursing mothers.

Impaired Renal Function: As nizatidine is excreted via the kidney, dosage should be adjusted in patients with moderately or severely impaired renal function (see Dosage).

Hepatic Dysfunction: Nizatidine is partially metabolized in the liver; however, in patients with uncomplicated hepatic dysfunction, disposition of nizatidine is similar to that of normal subjects.

Geriatrics: Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone is not an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function (see Dosage).

Children: Safety and effectiveness of nizatidine in children has not been established.

Adverse Effects: In double-blind, placebo-controlled clinical trials in over 2,300 patients, the overall incidence of adverse events reported by patients treated with nizatidine was no greater than in the placebo group. Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity or other adverse hormonal effects.

Headache, asthenia, chest pain, myalgia, abnormal dreams, somnolence, rhinitis, pharyngitis, cough and pruritus were reported with a slightly higher frequency by nizatidine-treated patients than by the placebo group. A relationship to nizatidine administration has not been established. Excessive sweating may be related to administration and has been reported by 1.1% of patients.

Laboratory Values: Patients treated with placebo and those receiving nizatidine therapy had mild, transient, asymptomatic elevations of transaminases; rare instances of marked elevations (>500 IU/L) occurred in nizatidine-treated patients, although causality has not been established. These abnormalities were asymptomatic and readily reversible after discontinuation of the drug. Other laboratory variables which were statistically different from placebo in the nizatidine-treated group, include serum cholesterol, serum uric acid, platelet count, serum creatinine, and white blood cell count. The clinical significance of these differences is not clear.

Laboratory Tests: False positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Overdose: Treatment: There is no clinical experience with deliberate overdosage of nizatidine in humans. Should overdosage occur, the usual measures to remove unabsorbed material from the gastrointestinal tract should be employed along with clinical monitoring and supportive therapy. The amount of nizatidine absorbed from the gastrointestinal tract can be reduced by activated charcoal.

Dosage: Duodenal or Gastric Ulcer: One 300 mg capsule or two 150 mg capsules once daily at bedtime. Treatment should be given for 4 to 8 weeks, but the duration of the treatment may be shortened if healing can be documented. Healing occurs within 4 weeks in most cases of duodenal ulcer.

Maintenance Dosage in Duodenal Ulcer: One 150 mg capsule once daily at bedtime for 6 to 12 months depending on the severity of the condition. Antacids may be given concomitantly if needed.

Dosage Adjustment in Renal Impairment:

Renal Function	Creatine Clearance (mL/min)	Dosage	
		Acute	Maintenance
Normal	>50	300 mg/ day	150 mg/day
Moderate Impairment	20-50	150 mg/day	150 mg/2nd day
Severe Impairment	<20	150 mg/2nd day	150 mg/3rd day

Supplied:
300 mg: Each pale yellow and brown Pulvule 3145 contains nizatidine 300 mg. Bottles of 30 and 100.
150 mg: Each pale yellow and dark yellow Pulvule 3144 contains: nizatidine 150 mg. Bottles of 30.
Product monograph available on request.
New Product 1987.

References:
1. Jones DB, et al. Acid suppression in duodenal ulcer: a meta-analysis to define optimal dosing with antisecretory drugs. Gut 1987;**28**:1120-27.
2. Dammann HG, et al. Topics in peptic ulcer disease. Perspective on digestive diseases, Cortina Internation, Verona, Italy 1987;**1**:19-27.
3. Howden CW, et al. Relationship between gastric secretion and infection. Gut 1987;**28**:96-107.
4. Simon B, et al. 300mg nizatidine at night versus 300mg ranitidine at night in patients with duodenal ulcer. Scand Jrnl Gastroenterol 1987;**22** (Suppl 136):61-70.
5. Data on file, Eli Lilly Canada Inc.
6. AXID® Product Monograph.

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Lilly Eli Lilly Canada Inc. Scarborough, Ontario.

Infant Feeding Practices in Central Nova Scotia

Michael O'Neill, MB.

Truro, N.S.

A retrospective study was performed to determine infant feeding practices and to discern the need for support programs. In general, mothers were influenced by books and magazines when deciding whether to breast or bottle feed. Prenatal education was satisfactory, but concerns were raised with regards to bottle feeding and how this issue was addressed. In-hospital experiences were marred by the lack of consistent advice. Postnatal support is being offered to mothers, experiencing infant feeding difficulties, through the development of an infant feeding "hotline".

Over the past two decades the incidence of breast feeding has increased in North America. National trends are difficult to extra-polate to individual communities. This study was undertaken to determine: first, the current infant feeding practices in our community and second, to discern the need for programs to service perceived community needs in this area of health care.

METHODS

All mothers who delivered at Colchester Regional Hospital (CRH) between February 1, 1986 and July 31, 1987 were surveyed once, by mail between November 1, 1987 and March 31, 1988. Of the 850 deliveries, current addresses were available on 709 women. All mothers were surveyed when their infants were at least 6 months of age.

The questionnaire devised had five areas of interest. The *first* related to the mother's prenatal decision with regard to infant feeding and the factors influencing her. The *second*, if breast feeding, the desired versus the actual length of breast feeding or, if bottle feeding, the problems, if any, encountered. The *third* related to the mother's in-hospital experience and the *fourth* addressed her perceptions and attitudes towards gift pack distribution. The *fifth* section explored her recourse if she was experiencing difficulties feeding her infant.

RESULTS

Of the 709 women surveyed, 454 (64%) responded. Prior to child-birth 45% of women had decided to breast feed only, 29% to bottle feed, 19% to use a combination and 7.5% had not made a decision. Numerous factors influenced individual mothers in their choice of infant feeding practices (Table I). Seventy-nine percent of mothers felt that they got adequate information from their family physicians, in 58% of cases breast feeding was discussed and encouraged, in 29% of cases bottle feeding was discussed.

TABLE I

FACTORS INFLUENCING THE MOTHER'S DECISION WITH REGARDS TO INFANT FEEDING

Books on Child Care	64%
Magazine Articles	39%
Previously Breast Fed	40%
Previously Bottle Fed	30%
Doctor's Advice	34%
Friend's Advice	34%
Mother's Advice	22%
La Leche League	25%

Sixty-six percent of mothers attended prenatal classes. Ninety percent of these were satisfied with the teaching and felt breast feeding was encouraged. Ten percent, however, indicated that too little time was devoted to the problems of bottle feeding and that the importance of breast feeding was overstated.

Three hundred and twenty (71%) mothers commenced breast feeding. The actual and desired length of breast feeding are outlined in Table II. For 20% the decision to wean was prompted by a need to return to work, for 27% the presence of breast related problems, for 26% a hungry baby, for 8% the presence of colic, for 5% a lack of privacy and for 5% the presence of vomiting.

TABLE II

ACTUAL VERSUS DESIRED LENGTH OF TIME BREAST FEEDING

	Actual	Desired
<1 month	14%	2%
1-3 months	24%	10%
3-6 months	28%	37%
>6 months	34%	51%

Two hundred and ninety-four mothers (66%) supplemented with formula or used it exclusively the first six months of life. Ninety percent used the formula supplied by the hospital in the gift pack as their first choice. One hundred and six mothers (35%) changed their infants' formula in the first six months of life. In

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the vast majority of cases multiple reasons were given and these are outlined in Table III. In 42% of cases the doctor advised or concurred with the decision to change the formula.

TABLE III

FACTORS INFLUENCING THE DECISION TO CHANGE FORMULA IN THE FIRST 6 MONTHS

Vomiting	32%
Expense	25.5%
Fussy Baby	25%
Allergy to Milk	23.5%
Colic	20%
Constipation	20%
Failure to gain weight	4%

During the mother's hospital stay, 52% indicated the nursing staff encouraged breast feeding, 9% felt bottle feeding was encouraged and 79% of mothers indicated their decision was supported by the nursing staff. Seventy-six percent commented favourably on the practical advice offered by the nursing staff when they were experiencing difficulty. However, only 47% indicated that the advice was consistent.

Ninety-seven percent of mothers wished the practice of gift packs to be continued and 28% indicated that this practice represented a hospital endorsement of the products therein contained. Sixty percent of mothers continued to use specific articles contained within the gift packs once they left hospital and only changed if a problem arose.

When experiencing difficulty with feeding their babies, mothers would attempt to contact resource personnel, 78% of moms indicated their family doctor, 60% the public health nurse, 50% a friend, 20% the newborn nursery, 14% the La Leche League and 9% the hospital emergency. Forty percent of mothers indicated that if breast feeding they would feed their infant a bottle of formula, if experiencing difficulty, prior to contacting any person for help or advice. Ninety-one percent of mothers indicated that they would avail of a program which dealt with infant feeding problems if it were made available. Five percent planned to have no further children and 4% indicated that the resources available were adequate.

DISCUSSION

Colchester Regional Hospital services a town of 20,000 people with a hinterland of 60,000. The community is predominantly white Caucasian with a small percentage of black and native Canadians. The community has, for uncertain reasons, a transient population which accounts for the unavailability of 16% of the current addresses. This study was performed retrospectively and the historical accuracy of the data was a concern, especially as some of the infants were as old as 21 months at the time of data collection. When the results were compared over the 19 month period little differences were noted in the replies.

The method of infant feeding is usually decided early in pregnancy.[1,2] The factors that influenced the mothers' decision to breast feed are similar to those found by other authors.[3] Books and magazines are the most frequently used sources of information and have a strong influence on those who read them. The impact of the family physician is difficult to assess. It was noted that while 79% of mothers indicated they received adequate information and 56% of physicians encouraged breast feeding, only one third of mothers felt that the doctor's advice was an influencing factor when deciding on how to feed their baby. When experiencing difficulty with infant feeding, the family physician is the primary resource person. A plausible explanation may relate to the timing of the first prenatal visit which may occur after the mother has made her decision.

Most women who attend prenatal classes in our community do so in the last trimester of pregnancy. These classes are supervised by the Public Health Nurse. Mothers, who intend to breast feed, are satisfied with how infant feeding is discussed. Mothers, who intended to bottle feed, felt uncomfortable with the enthusiasm displayed for breast feeding and felt the former was not dealt with adequately. We are uncertain if any mother changed her decision as a consequence of her experience in the prenatal classes.

Mothers commented favourably on the nursing staff, however, the consistency of the advice offered raises concerns. Conflicting advice undoubtedly leads to patient confusion. Recognizing that mothers are strongly influenced by in-hospital infant feeding practices, a manual on infant feeding is now being introduced to improve the consistency of advice and standardise practice.[4] The manual addresses issues related to bottle and breast feeding.

The discrepancy between desired and actual length of breast feeding has previously been noted.[5] When deciding to wean, mothers were influenced by many factors. The adequacy of breast milk, while often quoted as a reason for weaning, usually reflects a technical problem due to inadequate suckling frequency. Infant related problems, for example fussy baby and colic, are predictive factors of early termination of breast feeding.[6]

When experiencing feeding difficulties, mothers contact their family physician or public health nurse most often. These resource personnel may not be available on the off hours or weekends, thus limiting their effectiveness. To address this problem, an infant feeding "hotline" has been established. It is a 24 hour service, staffed by four registered nurses who usually have had in-hospital contact with the mother. Its impact is at present being studied.

One hundred and six infants had a change of formula in the first six months of life. In 26 cases the mother ascribed the reason to milk allergy. Questioning by physicians with regard to formula usage during routine

follow-up visits might prevent infants erroneously being labelled as having milk allergy.

The impact of gift packs on newly delivered mothers is uncertain.[7,8] In our community there is an overwhelming preference for the practice to be continued, as it serves to inform mothers with regard to baby care products. While 28% of mothers see the practice of gift pack distribution as the hospital endorsing these products, no steps have been taken to date to disclaim this notion.

SUMMARY

This study elucidated the infant feeding practices in our community. It has facilitated change in the areas that were perceived by mothers as being deficient. We suspect that our experience is not unique and may be transferable to other communities. □

References

1. Sarett HP, Bain KR, O'Leary JC. Decisions on Breast Feeding or Formula Feeding and Trends in Infant Feeding Practices. *Am J Dis Child* 1983; **137:** 719-25.
2. Hally MR, Bond J, Crawley J, Gregson B, Philips P, Russel I. Factors Influencing the Feeding of First Born Infants. *Acta Paediatr Scand* 1984; **73:** 33-39.
3. Bloom K, Goldbloom RB, Stevens FE. Factors Affecting the Mothers Choice of Infant Feeding Method. *Acta Paediatr Scand* (Suppl 300) 1982: 3-8.
4. Reiff MI, Essock-Vitale SM. Hospital Influences on Early Infant Feeding. *Pediatrics* 1985; **76:** 872-879.
5. Feinstein JM, Berkelhamer JE, Gniszka ME, Wong CA, Carey AE. Factors Related to Early Termination of Breast Feeding in an Urban Population. *Pediatrics* 1986; **78:** 210-15.
6. Louglin HH, Clapp Channing NE, Gehlback SH, Pollard JC, McCutchen TM. Early Termination of Breast Feeding: Identifying Those at Risk. *Pediatrics* 1985; **75:** 508-13.
7. Bergevin Y, Dougherty C, Kramer MS. Do Infant Formula Samples Shorten the Duration of Breast Feeding. *Lancet* 1983; **1:** 1148-51.
8. Hayden GF, Nowacek GA, Koch W, Kattwinkel J. Providing Free Samples of Baby Items to Newly Delivered Parents; An Unintentional Endorsement. *Clin Pediatr* 1987; **26:** 111-15.

Zantac®
(RANITIDINE HCl)

PRESCRIBING INFORMATION

ZANTAC TABLETS (ranitidine hydrochloride)
Pharmacological Classification
Histamine H_2 – receptor antagonist
Indications and Clinical use
Zantac Tablets are indicated for the treatment of all conditions where a controlled reduction of gastric secretion is required for the rapid relief of pain and/or ulcer healing. These include duodenal ulcer, benign gastric ulcer and reflux oesophagitis.
Contraindications – Zantac is contraindicated for patients known to have hypersensitivity to the drug.
Warnings – Gastric ulcer – Treatment with a histamine H_2 – antagonist may mask symptoms associated with carcinoma of the stomach and therefore may delay diagnosis of the condition. Accordingly, where gastric ulcer is suspected the possibility of malignancy should be excluded before therapy with Zantac is instituted.
Precautions – Use in pregnancy and nursing mothers – The safety of Zantac in the treatment of conditions where a controlled reduction of gastric secretion is required during pregnancy has not been established. Reproduction studies performed in rats and rabbits have revealed no evidence of impaired fertility or harm to the foetus due to Zantac. If the administration of Zantac is considered to be necessary, its use requires that the potential benefits be weighed against possible hazards to the patient and to the foetus. Ranitidine is secreted in breast milk in lactating mothers but the clinical significance of this has not been fully evaluated.
Use in impaired renal function – Ranitidine is excreted via the kidney and in the presence of severe renal impairment plasma levels of ranitidine are increased and prolonged. Accordingly, in the presence of severe renal impairment clinicians may wish to reduce the dose by one half.
Children – Experience with Zantac Tablets in children is limited and such use has not been fully evaluated in clinical studies. It has however been used successfully in children aged 8-18 years in doses up to 150 mg twice daily without adverse effect.
Interactions with other drugs – Although ranitidine has been reported to bind weakly to cytochrome P450 in vitro, recommended doses to the drug do not inhibit the action of the cytochrome P450-linked oxygenase in the liver. There are conflicting reports in the literature about possible interactions between ranitidine and several drugs, the clinical significance of these reports has not been substantiated. Amongst the drugs studied were warfarin, diazepam, metoprolol and nifedipine.
If high doses (2g) of sucralfate are co-administered with ranitidine the absorption of the latter may be reduced. This effect is not seen if sucralfate is taken after an interval of 2 hours.
Adverse Reactions – Headache, sometimes severe, rash, dizziness, constipation, diarrhoea and nausea have been reported in a very small proportion of drug-treated patients but these also occurred in patients receiving placebo. A few patients on re-challenge with Zantac have had a recurrence of skin rash, headache or dizziness. Rare reports of bradycardia have occurred. Rare cases of reversible mental confusion and hallucinations have been reported, predominantly in severely ill and elderly patients. There have been a few reports of reversible blurred vision suggestive of a change in accommodation.
Some increases in serum transaminases and gamma-glutamyl transpeptidase have been reported which have returned to normal either on continued treatment or on stopping Zantac. In placebo controlled studies involving nearly 2,500 patients, there was no difference between the incidence of elevations of SGOT and/or SGPT values in the Zantac treated or placebo treated groups. There have been occasional reports of reversible hepatitis (hepatocellular, hepatocanicular or mixed) with or without jaundice.
Hypersensitivity reactions (urticaria, angioneurotic oedema, bronchospasm, hypotension) have been seen rarely following the parenteral and oral administration of Zantac® These reactions have occasionally occurred after a single dose.
Reversible blood count changes (leucopaenia, thrombocytopaenia) have occurred in a few patients. Rare cases of agranulocytosis or of pancytopaenia sometimes with marrow hypoplasia have been reported. Other haematological and renal laboratory tests have not revealed any drug related abnormalities.
No clinically significant interference with endocrine or gonadal function has been reported. There have been a few reports of breast symptoms (swelling and/or discomfort) in men taking ranitidine; some cases have resolved on continued treatment.
Symptoms and Treatment of Overdosage – No particular problems are expected following overdosage with Zantac. Symptomatic and supportive therapy should be given as appropriate. If need be, the drug may be removed from the plasma by haemodialysis.
Dosage and Administration – Adults: Duodenal ulceration, benign gastric ulceration, or reflux oesophagitis: 300 mg once daily at bedtime.
It is not necessary to time the dose in relation to meals. In most cases of duodenal ulcer and benign gastric ulcer, healing will occur in four weeks. In the small number of patients whose ulcers may not have fully healed, these are likely to respond to a further course of treatment.
Patients who have responded to this short term therapy, particularly those with a history of recurrent ulcer, may usefully have extended maintenance treatment at a reduced dosage of one 150 mg tablet at bedtime.
To help in the management of reflux oesophagitis, the recommended course of treatment is one 300 mg tablet once daily at bedtime or one 150 mg tablet twice daily for up to 8 weeks.
Children: Experience with Zantac in children is limited and it has not been fully evaluated in clinical studies – see **Precautions**.
Availability – Zantac Tablets are available as white film-coated tablets engraved ZANTAC 150 on one face and GLAXO on the other, containing 150 mg ranitidine (as the hydrochloride), in packs of 30 and 60 tablets.
Zantac Tablets are also available as white, capsule shaped, film-coated tablets engraved ZANTAC 300 on one face and GLAXO on the other, containing 300 mg ranitidine (as the hydrochloride), in packs of 30 tablets.
Zantac Injection is available as 2 mL ampoules each containing 50 mg ranitidine (as the hydrochloride) in 2 mL solution for intravenous or intramuscular administration. Packages of 10 ampoules.
Product Monograph available on request.

References

1. Ireland *et al:* The Lancet, August 4, 1984; 274-275. **2.** Barbara *et al:* International J. of Clinical Pharmacology, Therapy and Toxicology 1986; *24* (2): 104-107. **3.** Product Monograph. **4.** Silvis *et al:* J. of Clinical Gastroenterology 1985; 7 (6): 482-487. **5.** Gough *et al:* The Lancet, September 22, 1984; 659-662. **6.** Simon *et al:* J. of Clinical Gastroenterology 1986; *8* (3): 482-487. **7.** Jensen *et al:* New England Journal of Medicine 1983; 308: 883-887. **8.** Data on File. **9.** Smith *et al:* Br. J. of Clin Pharmacology 1987; (23): 311-315. **10.** Powell *et al:* Arch Internal Med 1984; (144): 484-486.
11. Sutherland *et al:* Eur J Clin Pharmacology 1987; 32: 159-164. **12.** Siepler *et al:* Clin Pharmacy 1986; 5: 129-142. **13.** Wormsley: Postgrad Med J 1988; 64 (Suppl 1): 47-53.

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Appreciation of a Prominent Medical Supporter
BILL SOBEY

Bill Sobey, one of the major Nova Scotia and Canadian businessman, industrialist and philanthropist, died in Salt Lake City, Utah on May 29, 1989. His many contributions were widely discussed at the time of his death. It is appropriate, however, that the physicians of Nova Scotia acknowledge his specific contributions to medicine, health care and research in Nova Scotia.

Bill was one of the founders of the Dalhousie Medical Research Foundation, along with Dr. Donald Hatcher and Mrs. Nora Balders. Bill became chairman of the DMRF and has made it the successful and supportive organization that it has become. His enthusiasm, hard work and innovative ideas for the DMRF were truly amazing to watch. During the time that he displayed such energy and support for the DMRF, he held director's or officer positions in 32 Canadian companies, including President of Sobey's Stores Limited and Vice President of Empire Companies.

Bill always had a community approach, even when he was one of Canada's major businessmen. For instance, during a five year period when he was Mayor of Stellarton, he brought that town a new 21 room elementary school and a 22 room junior high school, a stadium addition, a new library and a museum. He was national director of the Canadian Council of Christians and Jews and received a National Human Relations award.

Through his leadership, the DMRF has changed the atmosphere of research in the Medical School, has sponsored senior investigators, junior medical scholars, summer research students, research equipment, research projects and research awards. For his dedicated work with the DMRF, he received an honorary Doctorate of Civil Laws degree from Dalhousie University in 1982. In the Medical School he was always known as Dr. Sobey.

He was also chairman of the Pictou County Heart Foundation for 21 years and helped raise more than a million dollars for that charity.

He was director of the Nova Scotia Heart Foundation. He was also a director and chairman of many other community organizations. As noted in his obituary, "most of Mr. Sobey's philanthropic pursuits, particularly near the end of his life, were in the field of fundraising for medical research."

When the DMRF was formed and Bill assumed the first chairmanship, the goal of ten million dollars in ten years seemed overly ambitious. However, the Foundation surpassed that goal in its ninth year.

In the last few years, as his health failed, he began to relinquish many of his business responsibilities and positions. However, he never reduced his activity, enthusiasm or work with the Foundation. Even when he was in hospital during the last year, I received frequent phone calls with new ideas and plans. Two days before he died in heart failure in a Utah Hospital, he phoned me, sounding bright and chipper, to followup on a number of Foundation issues, and with some new ideas.

His work in supporting medical research was founded on a deep understanding of the importance of advancing medicine and health care. The work sponsored by the DMRF has translated very directly into better care for the people of Nova Scotia through its support and development of programs that provide better services and better care.

T.J. Murray, MD,
Dean of Medicine, Dalhousie University. □

An Appreciation
DR. HERBERT LANG

Dr. Herbert Lang 68, died in Halifax following a prolonged illness. Born in Innsbruck, Austria, he did his undergraduate studies at the Universities of Vienna, Prague and Innsbruck, graduating in medicine in 1945. Although he was named an Assistant Professor of Anatomy, he pursued his postgraduate training in pathology under the director of his father, the late Professor F.J. Lang at the University of Innsbruck.

In 1949 he was awarded a WHO travelling fellowship and he undertook further training in New York at the College of Medicine, New York University and at the Bellevue Hospital. He received further training in clinical pathology at the Huntington Memorial Hospital in Pasadena, California, and at the University of Southern California Medical School.

In 1953 he moved to Misericordia General Hospital in Winnipeg, Manitoba where, in 1956, he was made Director of Laboratories.

In 1960 he joined the staff of the Halifax Infirmary and, in 1969, he was appointed Head of the Department of Pathology and Director of Laboratories, positions he retained until his recent retirement. He was also a member of the faculty with the rank of Assistant Professor.

Dr. Lang, during his career, was very active in teaching and research and became a recognized expert in the field of gynaecological pathology. He published papers both in Europe and North America. He represented Canada at several international meetings and conferences. He was a fellow of the American Society of Pathology, the American College of Pathology and the Royal College of Physicians and Surgeons of Canada. He was president of the pathology section of the Medical Society of Nova Scotia in 1971.

His major interests besides his professional work included music, art and travel.

He is survived by his wife Cynthia, his daughters Bianca and Maria, both physicians, and a son Benno who is completing his medical studies at Dalhousie University.

George P. Konok MD, FRCSC. □

A Pathologist's Viewpoint

THE FROZEN SECTION

Annette Foyle, *MD, CM, FRCPC.

Halifax, N.S.

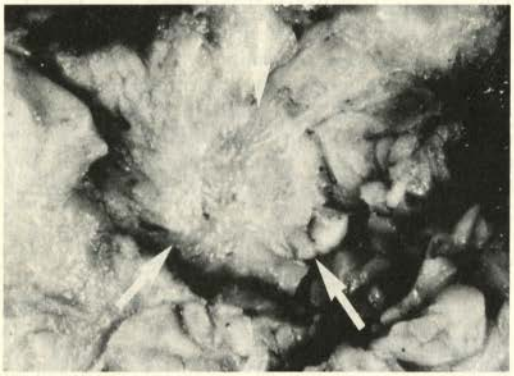

Fig. 1 The patient is a 41 year old woman. The arrows surround the lesion.

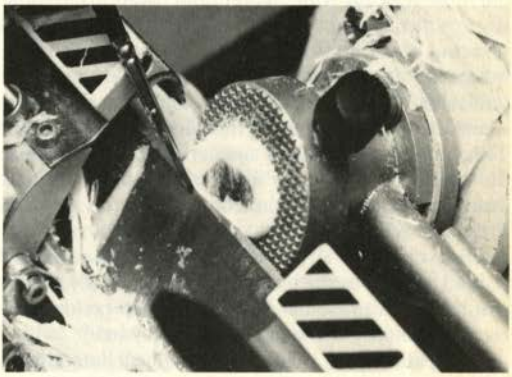

Fig. 3 Frozen tissue in the centre surrounded by frozen OCT trimmed and ready for cutting to prepare a FROZEN SECTION.

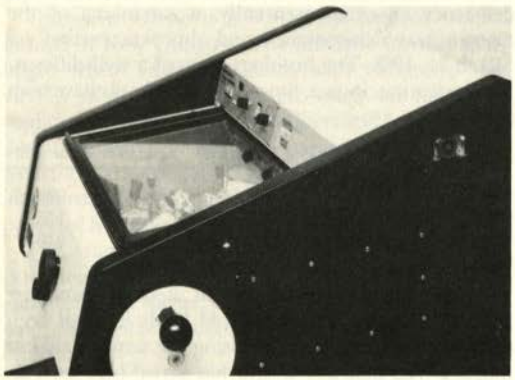

Fig. 2 Cryostat.

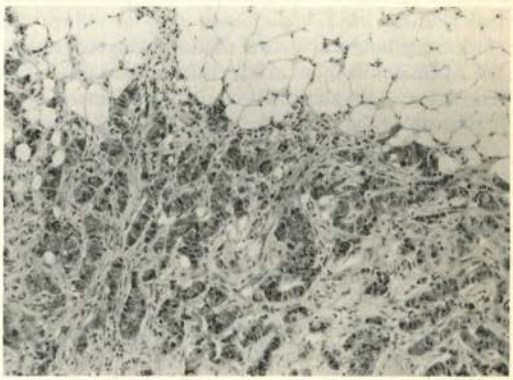

Fig. 4 This is the microscopic appearance of the tissue illustrated in Fig. 1. What is the diagnosis?

From the Department of Pathology, Victoria General Hospital and Dalhousie University, Halifax, N.S.
* Anatomic Pathologist, Victoria General Hospital, Assistant Professor, Dalhousie University.

Continued on following page.

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LET'S SEE YOU DO IT!

PARTICIPACTION ©

In the December 1988 issue of the *Journal*, we saw the pathologist at the autopsy table. In the August 1989 issue, the role of the surgical pathologist was explored. In this issue the frozen section will be addressed.

The usual processing of fresh tissue for diagnosis in surgical pathology involves fixation with formaldehyde. After fixation, small representative sections of tissue are taken and processed through alcohol and xylol to make the tissue miscible with warm liquid paraffin wax. The tissue is then embedded in the wax at room temperature, creating a hard block which can be cut with a microtome to make thin tissue slices, 3-8 microns in thickness. These slices are placed on glass slides and stained with dyes, hematoxylin (blue) and eosin (red). This conventional method takes at least 24 hours. With the advent of microwave fixation, the process can be shortened but the entire procedure is never as quick as the frozen section.

The patient is a 41 year old woman who has recently noticed a lump in the breast which is clinically highly suspicious of carcinoma. After the surgeon performs an excisional biopsy, a frozen section is requested.

The pathologist examines a hard stellate cancer infiltrating normal fat (Fig. 1). A representative slice of tumor is taken for the frozen section. The tissue is surrounded by a colorless semisolid material called OCT, for optimum cutting temperature. The OCT and tissue harden inside the cryostat (Fig. 2), where the temperature hovers at around minus 20 degrees Celsius. The tissue can then be cut into thin sections (Fig. 3) to make microscopic slides. The entire process takes about 10 minutes. Examination of the slide under the microscope establishes the diagnosis of infiltrating duct carcinoma (Fig. 4). A block of fresh tumor tissue must then be dissected and snap frozen in liquid nitrogen for the estrogen receptor assay. □

Reference

Azzopardi JG. Problems in Breast Pathology. Vol. 11 in the series *Major Problems in Pathology*. Toronto: W. B. Saunders Co. Ltd., 1979.

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Cholesterol

A CASE REPORT

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Recent articles have underscored the complex relationship between blood lipids and disease, most observing a positive correlation with ischaemic heart disease[1,2] while others have called attention to the increased mortality rates noted in people with low cholesterol levels;[3] another major study noted an inverse relationship between serum cholesterol levels and cancer.[4] In view of the latter study, the following case may be of interest.

A caucasian male born in 1923 underwent investigation in 1987 for vertigo. Lipid levels were as follows:

	Feb. 1987	Feb. 1988	March 1988
Total Cholesterol:	4.53	4.23	4.40
HDL—C:	1.34	1.32	1.18
Triglycerides:	1.48	2.43	2.56
LDL:	2.89	2.42	2.71

Late in 1987, he developed an unexplained iron deficiency anaemia; eventually, a carcinoma of the caecum was demonstrated and this was excised on March 31, 1988. The histology showed a well differentiated adenocarcinoma. Since then lipid levels have been as follows:

	July 1988	Oct. 1988	April 1989	June 1989
Total Cholesterol:	8.13	7.94	6.55	9.59
HDL-C:	1.34	1.16	1.10	1.05
Triglycerides:	3.62	3.25	2.61	9.00
LDL:	6.06	6.18	4.93	—

There have been no changes in dietary or smoking habits during this time and lipid levels have all been done in the same laboratory using the same analytical method. The patient's weight has varied between 145-160 pounds and no other abnormalities, apart from the preoperative iron deficiency anaemia (hemoglobin 10.1, MCV 71, serum iron 5.5, TIBC 65), have been manifest.

In this man, therefore, removal of a malignant tumour was accompanied by a marked and sustained rise in cholesterol level. In fact, the LDL levels doubled without any other obvious factor being present. I am not aware that such a striking finding has been described before, though I suspect non-dietary variation in cholesterol levels is much more common than generally believed and, in view of the present climate of manipulating cholesterol levels in the entire population, worthy of further study. □

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Current Topics in Community Health

Selected by: Dr. Lynn McIntyre
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BATTERED WOMEN: NEGLECTED BY PHYSICIANS?

The Halifax black women's singing group, "Four the Moment", sings a song of Betty Blue. This describes a woman with five children who is murdered by her abusive husband. In September 1989, Nova Scotians were shocked to learn of a Bridgewater woman who was shot by her former common-law husband despite the posting of a peace bond.[1]

Wife assault is clearly an important social problem and one in which physicians have an opportunity to play key roles in identification and protection. The Tearmann Society for Battered Women's report entitled *Medical Service or Disservice?: An exploratory study of wife assault victims' experiences in medical and health delivery settings* provides valuable insight into how physicians deal with their battered female patients.[2]

Tearmann House is a shelter for battered women located in New Glasgow. The initiative for this study began when Tearmann House staff recognized that victims of wife battering were often on prescribed medication, particularly tranquilizers and pain relievers. These women were therefore visiting physicians but were the real causes of their problems being adequately identified, and were they being supported, referred, and protected from abuse?

The study was conducted using a standardized interviewer-administered questionnaire of women admitted to the shelter. Generalizability of findings to all wife abuse victims and to all physicians is therefore limited.

The Findings

Forty-eight battered women were interviewed for this study. Sixty percent were thirty years of age or older and all of them were at least twenty years of age. Forty-one (85.5%) respondents had a high school level of education or less; 20% had less than a grade eight education. Over 77% of the women were unemployed. Of those employed, most worked in low paying, part-time and/or seasonal jobs. 85.5% had at least one dependent child and most had two or more.

All the women had been cohabiting with their abusing partners for at least one year and 62% had been living with their abusing spouses for six years or more. Almost 88% of the women interviewed reported that they had been abused prior to the assault which led them to seek help at Tearmann House. Many of them had been abused repeatedly throughout the relationship with their abusing partners.

The majority of women (54%) did not see a doctor after their last assault. Therefore, they could not receive immediate symptomatic relief for physical and emotional complaints or secure expert testimony in the event of criminal or family court proceedings. When asked why they did not see a doctor after the last assault (multiple responses allowed), 54% said that they did not want anyone to know about their abuse, 46% cited embarrassment as a key factor and 62% felt their injuries were not serious enough. These women judged family disputes as an intensely personal and private matter. Further, they felt that disclosure would be interpreted as a failure on their part to keep a "good home" and a "contented family".

Twenty-two (46%) battered women did seek medical care after their last assault and the data on medical care for the study come from this sub-sample. 35% reported that the attending physician did *not* ask how they had come to be injured; 22% were reported to have been specifically asked if they had been abused. Some of the women interviewed gave accounts of the doctors' reaction when they told them of their abuse. One victim related her impression that the doctor was uncomfortable with her description of the abusive home situation, while another felt that her doctor was not interested in hearing about her domestic problems. Upon examining a blackened eye, one doctor was quoted as saying "I hope the other guy is worse off" and "Go home and give him one for me". On another occasion when speaking to the victim and her abuser, the doctor was reported to have said "You should take up something else, like sex". While anecdotal information only, these statements indicate a lack of awareness of battered wife management, and point to an insensitivity one would not expect to find within the profession.

A slight majority (53%) of women who sought medical assistance did receive some advice pertinent to improving the battered woman's circumstances such as leaving the domestic situation, referral to Tearmann House or suggesting further mental health counselling. Less helpful information was "Go home and take a hot bath" or "You should get out more and you need a break from the kids".

Fewer than 9% of women who sought medical assistance and 11% of women who stated that they had been abused were given a physical examination which might have been helpful in the event of future legal proceedings. None received a gynecological examination.

Prescription Drugs

Almost 60% of the women received prescriptions for tranquilizers from their attending doctors. Even when a woman specifically mentioned that she had been abused, over 50% of doctors prescribed psychoactive drugs (Ativan®, Lectopam®, Serax®, Valium® and Atarax®).

Forty percent of these women indicated that they asked the doctor for a prescription mostly to settle their "nerves", to help them sleep, and to assist them in coping with anxiety and depression. Some of the women said they had asked for a tranquilizer so that the doctor would question them further about their problems. The general prescription length was at least one month, often more than a year. The study revealed that these women were uninformed about the side effects of consuming these drugs over a lengthy period of time.

Perception of Battered Women of Their Doctors

In general, battered women were not critical of their physicians when they visited them for treatment (Table I). They did, however, have suggestions for doctors who treat victims of wife abuse (Table II).

TABLE I

BATTERED WOMEN'S PERCEPTIONS OF DOCTORS' ATTITUDES TOWARD THEM DURING TREATMENT (N=48)

Characteristics	Response Yes (%)	Distribution No (%)
Caring	68.8	16.7
Blaming	10.4	66.7
Interested	62.5	25.0
Condescending	16.7	70.8
Friendly	75.0	14.6
Aloof	29.2	60.4
Understanding	70.8	18.8
Uncaring	12.5	72.6
Respectful	70.8	10.4
Uninterested	14.6	66.7
Impatient	14.6	72.9
Distracted	18.8	66.7

TABLE II

BATTERED WOMEN'S SUGGESTIONS CONCERNING DOCTOR'S TREATMENT (N=48)

Suggestions	Response Yes (%)	Distributions No (%)
Ask about abuse	87.5	6.3
Refer to agencies	91.7	0.0
Fully explain purpose and effects of drugs	89.6	2.1
Offer/advise a physical examination	83.3	8.3
Offer/provide availability of a nurse during physical examination	77.1	4.2
Explain law	83.3	8.3
Explain rights	72.9	25.0
Take initiative to contact police and/or other authorities	70.8	16.7

Comment

The findings in this report are disturbing. Despite increased public awareness that wife assault is a serious problem, physicians in this study (and perhaps elsewhere) appear not to be knowledgeable about how to manage these patients. The Ontario Medical Association has distributed a handbook for health professionals on wife assault.[3] The handbook discusses the reluctance of assaulted women to seek help and tell the truth, methods for dealing with an assaulted woman in the Emergency Department, how the office physician can identify and manage an assaulted woman, and how to prepare a medico-legal report. The Community Health Committee of the Medical Society of Nova Scotia will be recommending that a modified version of this handbook, with appropriate resources for referral, be distributed by the Medical Society to all Nova Scotia physicians so that they can inform themselves about wife abuse and more confidently manage their patients. □

ACKNOWLEDGEMENT

Dr. Don Langille, Chairman, Community Healthy Committee of the Medical Society of Nova Scotia reviewed this summary.

References

1. Dorey B. Tougher release rules sought. Murder-suicide prompts call for judicial action. *Halifax Chronicle Herald*, Sept. 20, 1989; pA1, A20.
2. Macdonald R, Davis A, MacNevin A. *Medical service or disservice?: An exploratory study of wife assault victims' experiences in medical and health delivery settings.* Tearmann Society for Battered Women, New Glasgow, 1988.
3. Wilcoxen M. *A Handbook for Health Professionals,* Education Wife Assault, Toronto, 1985.

PICTONIANS, PULP MILL AND PULMONARY DISEASES

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References

1. Sweet, LE *Health effects to the residents of communities exposed to atmospheric emissions from kraft pulp mills.* Paper prepared for the Bureau of Epidemiology, Nova Scotia Department of Health, 1985.
2. Solet D *et al.* Patterns of mortality in pulp and paper workers. *J Occup Med* 1989; **31**:627-630.
3. *Annual Report of the Cancer Treatment and Research Foundation of Nova Scotia,* April 1, 1987 to March 31, 1988.
4. Snedecor GW and Cochran WG. *Statistical Methods* (7th Edition). Ames (Iowa): Iowa State University Press, 1980. Pgs. 201-202.
5. Spitzer WO *et al.* Chronic exposure to sour gas emissions: meeting a community concern with epidemiologic evidence. *Can Med Assox J* 1989; **141**: 685-691.
6. Antó JM *et al.* Community outbreaks of asthma associated with inhalation of soybean dust. *New Engl J. Med* 1989; **320**: 1097-1102.

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References

1. Anderson, Castelli and Levy. *JAMA* 1987; **257:** 2176-80.
2. Editorial. *Lancet* 1989; **1:** 473-4.
3. Forette, Tortrat and Wolmark. *Lancet* 1989; **1:** 868-870.
4. Isles, Hole, Gilles, Hawthorne and Lever. *Brit Med J* 1989; **298:** 920-4.

Personal Interest Notes

SENIOR MEMBERSHIP CITATIONS THE MEDICAL SOCIETY OF NOVA SCOTIA

Dr. Austin M. Creighton

Austin Creighton was born in Scotsburn in 1922. He was educated at Dalhousie University and obtained his MD in 1945. He served in the RCAMA from 1945-1946 and went into general practice in Tatamagouche afterward.

He married Phyllis Crawford in 1947 and attended post graduate studies in Cleveland in the year following. On his return to Tatamagouche in 1948, he settled for a long career on the medical staff of Lillian Fraser Memorial Hospital where he was Chief of the Medical Staff for thirty years, a charter member of the Board of Directors and Chairman of the Finance and Expension Committee. In addition, he was a character member of the Board of Directors of the Willow Lodge Home and also Medical Director to that establishment.

Dr. Creighton has been unstinting of his time not only in the service of his patients but in the organization of local medical services and in the social organization of the Tatamagouche area. He has been a important figure in the service of the Boy Scouts Association, North Shore Recreation Centre, Tatamagouche Figure Skating Club, United Church, North Colchester Regional Elementary School, Tatamagouche Village Commission, Tatamagouche Marina Committee and on and on.

In short, he has led a very creditable life and we can be proud that he is a member of our profession.

Dr. G.A. Corbett,
President, Colchester East Hants Branch Society

Dr. A. Emerson Dunphy

Dr. A. Emerson Dunphy was born in Ingonish Beach, Nova Scotia on October 20, 1922. He began his education at St. Joseph's School in North Sydney, followed by his attendance at Sydney Academy. He continued his education att St. F. X. University where he received a Bachelor of Arts in 1943 and a Bachelor of Science in 1947. He graduated from McGill University Medical School in 1951 and then began a residency in surgery at St. Vincent's Hospital in Bridgeport, Conneticut, as well as attending New York University for his fourth year of surgical service.

His commitment and dedication to duty were exemplified early on as he served as a pilot in the Royal Canadian Air Force from 1943-1945.

Dr. Dunphy began his general surgical practice with special interest in urology at St. Martha's Hospital in Antigonish, Nova Scotia, in 1956. He worked long hardhours in those early years, along with his partner Dr. Tom Gorman. Dr. Dunphy has been Chief of Surgery at St. Martha's Hospital since 1977.

His other commitments have included serving as chairman and a member of the Medical Review Committee of M.S.I.; serving on the Education Committee of The Medical Society of Nova Scotia; serving on the Medical Assessment Committee of M.S.I.; as well as being the current chairman of the Section of Surgery of The Medical Society of Nova Scotia.

He is married to the former Margaret Campbell of Richmond, Quebec, and they have five children and seven grandchildren.

Dr. Dunphy also served on the town council of Antigonish, both as deputy mayor and school board member from 1964-1966. He has certainly shown his commitment and kindness to the patients in Antigonish, and its neighbouring counties over the past thirty years.

Dr. W.A. Booth,
President, Antigonish/Guysborough Branch Society

Dr. Helen Holden-Quinlan

The Valley Branch of The Medical Society of Nova Scotia is honored to present Dr. Helen Holden-Quinlan for Senior Membership in The Society. Dr. Holden has a long history of service to Nova Scotia through providing not only a high degree of medical expertise but also a most conscientious and thorough caring attitude toward her patients. She had adhered to the traditional values of medicine and practiced her profession with quiet humility and wisdom.

Dr. Holden was born in Toronto and completed her early education at Havergal College. She then completed her pre-medical and medical training at the University of Toronto. Following graduation she served in the Royal Canadian Navy as Surgeon Lieutenant from 1943 until 1945, and was one of only nine female medical officers in the RCN.

It was during this time, while on detached duty to the Nova Scotia Sanatorium in Kentville that she met her future husband, Dr. John Quinlan, whom she married in 1947. They raised two children, Kathleen and Patricia, as well as several springer spaniels, and enjoyed their mutual hobbies of curling and fishing. Together they devoted their medical careers to the development of the Sanatorium and the treatment of tuberculosis in Nova Scotia. While doing so, they witnessed the dramatic decrease in the death rate from this dreaded disease as drug treatment became available. In this area, Dr. Holden has made an outstanding contribution, particularly in her study of one of the more recent major drugs, Rifampin. In addition, she has devoted much time to the development of programs for the management of nontuberculous chest diseases such as chronic obstructive pulmonary disease and has published several papers on this subject.

She has been active both within the community as well as in medical associations, and has served on numerous hospital committees. In 1969 she became acting Medical Superintendent of the Nova Scotia Sanatorium and a year later its first medical director. For six years she was medical director of Tuberculosis Control, Department of Health and, at the same time, Medical Director of the Respiratory Disease Service of the Kentville Hospital Association. She is a Fellow of the Royal College of Physicians. From 1976 until 1981 she was Assistant Professor in the Department of Medicine of Dalhousie University and a consultant staff physician at the Victoria General Hospital. She is a member of the Board of Directors of Acadia University and has received the honorary degree of Doctor of Science from the institution in recognition of her contribution to medical science and devotion to others.

She is a member of The Nova Scotia Medical Society and the Canadian Medical Association. She is also active in the Nova Scotia Lung Association, the Canadian Lung Association and the International Union Against Tuberculosis. She is a member of the Canadian Public Health Association and is a past president of its Nova Scotia Branch. She is a member and past president of the University Women's Club, a charter member and past president of the Business and Professional Women's Club of Kentville and a member of the Federation of Medical Women of Canada. At the present time she is in private practice in Internal Medicine and is a member of the medical staff of the Valley Health Services Association, including the Blanchard Fraser Memorial and Miller Hospitals.

Dr. R.G. Bustin,
President, Valley Branch Society

Dr. Ben David Karrel

Ben Karrel was born in New Waterford, Cape Breton, where he received his school education and went on from there to Mount Allison. His education was interrupted by the second World War in which he served in both the RCAF and the Canadian Army. Post War, he attended Dalhousie and obtained his MD in 1952.

He was briefly in practice in New Waterford and in 1953 settled in practice in Truro where he has remained ever since, aside of a period of sabbatical leave in the mid sixties to Duke University where he obtained further training in anaesthesiology and became a fellow of the American College of Anaesthetists.

Ben and his wife Dorothy have three children. They have led active community lives. Ben has been a member of Kinsmen, the Grand Chapter of Royal York Masons, Scottish Rite of Masons and is a past member of the Truro Kawanis Club. He is an active member of the Colchester Branch of the Royal Canadian Legion. He is an accomplished musician, playing both the saxophone and clarinet as well as singing as a member of the barbershoppers.

Ben's medical life has been very busy as a general practitioner, surgeon and anaesthetist in the Truro hospital. He has been unstinting of his time in the establishment of the Department of Anaesthesia and of the Intensive Care Unit of the Colchester Hospital and is well known both as a dedicated doctor by his patients and a forceful fighter for what he believes to be right when serving in the many official capacities that he has held.

Dr. G.A. Corbett,
President, Colchester East Hants Branch Society □

OBITUARY

Dr. Gerd A. Kloss, (72) of Kentville, N.S. died on July 10, 1989. Born in Berlin he received his medical from the University of Berlin in 1940. In 1952, he immigrated to Canada to work at the Halifax Tuberculosis Hospital and then in 1957, he moved to the Nova Scotia Sanatorium in Kentville where he remained until retirement. He was a member of The Medical Society of Nova Scotia, the Canadian Lung Association and the Valley Medical Society. He is survived by his wife, to whom the *Journal* extends sincere sympathy.