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# THE NOVA SCOTIA MEDICAL BULLETIN

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## GUIDELINES FOR AUTHORS

In 1978, a number of American, British and Canadian editors of medical journals met in Vancouver, to establish a common format for the submission of papers, and their deliberations resulted in the "Declaration of Vancouver". The Editor and the Editorial Board of the *Bulletin* have decided to adopt this new format, beginning in 1981, and the changes are chiefly in the style used for citing references.

The entire manuscript should be typed double-spaced on one side only, with generous margins on all four sides. Tables should not be included in the text but typed on separate pages, as should the references and the legends for any figures and illustrations.

Non-metric units should not be used in scientific contributions. Parts of the SI system are controversial or unfamiliar, especially concentrations of substances, gas tensions, blood pressure and radiological units, so that authors should provide conversion factors. Abbreviations should be defined when first mentioned and, if numerous, the author should provide a glossary which will be printed separately in a prominent place in the article.

In general, papers reporting on studies should adhere to the following sequence:

- a) **Title page** — title of article (concise but informative); first name, middle initial and surname of each author, with academic degrees; names of department or institution to which the work should be attributed; name and address of author responsible for correspondence or reprints; source of support (if any).
- b) **Summary or Abstract** — not over 150 words, summarizing the purpose, basic procedures, main findings and principal conclusions.
- c) **Materials and Methods** — describe the selection of subjects, the techniques and equipment employed, the types of data collected, and the statistical tests used to analyse the data.
- d) **Results** — describe in logical sequence, using tables and illustrations.

e) **Discussion** — emphasize new and important aspects, and the conclusions that follow from them. Recommendations, when appropriate, may be included.

f) **Acknowledgements** — only those persons who have made substantial contributions to the study.

g) **References** — usually limited to 10 for short papers and to a maximum of 20 for review articles. Number in sequence, in the order they are first mentioned in the text, with journal titles abbreviated as in *Index Medicus*.

Examples of the new format are:

1. Journal articles — list all authors when six or less (surnames followed by initials without periods); when seven or more, list only the first three and add *et al*.

Epstein SW, Manning CPR, Ashley MJ, Corey PN. Survey of the clinical use of pressurized aerosol inhalers. *Can Med Assoc J* 1979; **120**:813-816.

2. Book —

Fletcher C, Peto R, Tinker C, Speizer FE. *The Natural History of Chronic Bronchitis and Emphysema*. Oxford: Oxford University Press, 1976.

3. Chapter in book —

Deusche KW. Tuberculosis. In: Clark DW, MacMahon B, eds. *Preventive Medicine*. Boston: Little, Brown, 1967: pg 509-523.

h) **Tables** — type each on a separate sheet, number consecutively with *roman* numerals. Supply a brief title for each, give each column a short or abbreviated heading, and reserve explanatory material for footnotes.

i) **Figures and Illustrations** — professionally drawn and photographed, as glossy black and white prints, numbered consecutively with *arabic* numerals. List all legends on one page and state magnification of photomicrographs.

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**Geriatrics and Values**

*"A time of waiting hopefully for a not too horrible and painful exit from a state of being which has become a meaningless exercise in biological function in a milieu increasingly foreign and a substratum so changed as to scarcely afford a medium in which to move with a sense of familiarity."*

*Dr. J.W. Reid, (1904-1975)*

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Geriatrics is "motherhood" — and very likely involves even our own mother or father, thus making it become a genuine and real concern in a way that other areas in medicine might not be. All of us have older friends or relatives whose limitations and diminishing capacities demand increasing attention. It is, therefore, easy to support comprehensive quality programs that would guarantee the older segment of society what it needs to maintain his or her individual dignity. This having been said then, the question begs, "Where is the comprehensive program that would meet the need, and our own desire?", and "Why is it not in place?"

The answers of course are many. The dissolution or at least changing family structure has left us without a stable structure on which to build. We know that present family arrangements do not allow the support that was once accepted and possible: changes in housing, divorce rates, fewer women at home and more in the work force, greater geographic distribution of family members, all play a part. Inflation and increasing taxes are something no one contemplated forty or fifty years ago. The rates of change of all these factors have left us with an ever increasing elderly population that has seen its stable traditions disappear in their lifetime. Small wonder they or we are not prepared. Wherever our rapidly changing society is going, it has not led us to a more caring, loving support system for the elderly. This evolving value system of our society is what is really being examined by our question, "What about the elderly?"

If admittedly our family system is inadequate and that more professional and government support is needed, we are making a loud statement about our present society. Love, caring and sacrifice cannot be replaced easily by the social worker, nurse, doctor, technician, no matter what system of geriatric care we devise. It should be with no little regret and with some trepidation that we once again look to a government controlled system to bail us out of another set of problems. Surely the issue to be looked at is not just a question of the elderly, but at least partly a problem of a young society, not willing to meet its responsibilities as individuals.

However, no matter what the reason, we in Nova Scotia still must deal with the reality of our present situation. Once again, we must decide (someone must decide) what priority we give to this new (old) situation. The articles in this issue point out the changing demographic situation, and some of the needs we have in this province. The greater question, however, remains one of allocation; that is, the priority of value we give to the unmet needs of the aged.

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\*The Nova Scotia Medical Bulletin, August 1973.

We, as physicians, are frequent in our requests for new services to meet new needs which we perceive as genuinely essential. The unfortunate fact is that new programs need new money, or money that must be subtracted from other programs. Should we take it from our salaries? from research? from the medical schools? from the acute-care hospital budgets? Health care costs in Nova Scotia are already rising faster than our political planners would wish. The increase in the geriatric population will not change the governments intent to limit the medical budget. Without increased awareness of the cost problem, and willingness to consider all alternatives, then we risk not having a say in the priorities and values that govern our society. We cannot consider costs easily with regards to the individual patient, of course, since the essence of our profession is to seek that best and most appropriate for our own practice. Someone, however, is deciding on the bed availability, whether a home program is instituted, or whether there is an increased lineup for the newest technology.

It has been said that the main problem with today's high technology society is that we allow politicians to run it, instead of people equipped with the wherewithal to understand it. We should remember that the Constitution never guaranteed smart government, but merely representative government. Hospital administrators, civil servants, politicians, somewhere, are deciding, in many cases, issues for which the doctors are being held responsible. If this is indeed so, then we had better take more of a lead in the settling of priorities and planning than has been evident up until this time. Our medical organizations have not been set up to support groups or individuals who might meet government on equal terms with regard to health planning. Perhaps we will never be able to meet them on their own ground, lacking the staff of civil servants, computers and data that would be necessary. There are, however, things we could do to allow

ourselves and society a more open choice of the possibilities available to them.

Recent programs which make ourselves and the public more cost conscious should be supported. It could be stated more openly that the costs of medical care are now more than government is willing to pay, and that choices are now upon us. The Canadian Medical Association should be supported to its attempts to bring this question before the public. Perhaps the numerous volunteer health organizations could be better coordinated to understand where their particular need and priority lies. The dangers of a single purpose lobby, without a general overview, are obvious in that both government and the medical system can become unbalanced with such a system. While promotion of our interests is a healthy way for democracy to work, it is good to remember that large numbers of people, the elderly being only one example, sometimes do not play this game well.

In a recent study, it was shown that physicians, physician leaders, hospital administrators and the public all perceived health care spending increases as having a different cause. Patients and the elderly seem to be demanding more service, or at least different service. At a recent conference of the helping professions a predictable trend could be noted. Geriatricians wanted more geriatricians, occupational health workers wanted more occupational health for the elderly, social workers needed more programs and hospital administrators wanted more long-term beds. The solution will not, however, be more of anything any longer. It should lie in the examination of our priorities and values, and in the setting out of a medical program that all groups in society deem appropriate. Only with increasing discussions of these values will we meet the changing needs of our elderly. □

J.F.O'C.

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### PUT MEASLES ON THE SPOT

The Nova Scotia Department of Health has declared November "Immunization Action Month". The theme will be "Put Measles On The Spot" as the Medical Society of Nova Scotia and the Department of Health are committed to the eradication of Measles within the province. Special emphasis will also be placed upon Rubella screening and immunization for females of child-bearing age in order to eliminate congenital Rubella Syndrome completely. These themes will be reinforced via radio and television spots, newspaper releases, Metro Transit bus signs and displays, clinics, and public service announcements sponsored by Health Units throughout Nova Scotia.

Effective October 1, 1984, the Dept. of Health introduced *adsorbed* vaccines including: DPT-P for primary immunization at 2, 4, 6 and 18 months and a booster at 5-6 years of age; Td-P primarily used as a booster at 15 years of age; TD primarily used as a booster for adults every 10 years.

The introduction of the improved vaccine will result in changes regarding dosage, technique of administration, and immunization scheduling throughout the life cycle. Contact your local Health Unit Director for further information about the *adsorbed* vaccine and the availability of immunization education materials for distribution to the public.

# Health Care of the Elderly: Theory and Practice\*

James Williamson,\*\* M.B., Ch.B., F.R.C.P. (Edin),

Edinburgh, Scotland

The increasing numbers of old people and concomitant changes in family and social conditions have posed severe problems for the health and welfare services of developed countries. In the United Kingdom we have a considerably more aged population than exists in North America. The latter will reach the current state of ageing of the United Kingdom about the end of this century.

Systems of care for the poor, the disabled and the aged have existed in Europe for centuries. In the 19th century such care tended to be based upon Poor Law provisions and the infamous workhouse. In those days, those who survived to be old were few in numbers and they tended to be enmeshed in the network of the extended family and hence caused few demands upon medical services. In the present century, however, numbers of elderly (and especially of the very old) have greatly increased and European countries have sought to cope with this new phenomenon in a variety of ways. I shall attempt in this paper to describe how some of us in the UK have viewed this new challenge and to lay down some principles which seem to me to be relevant for the care of the elderly whether they find themselves in North America, Scotland or elsewhere.

Two commonly held North American misconceptions should first be mentioned:

1. that our geriatric services are exclusively the creature of the National Health Service; and
2. that there is a standard UK geriatric model to which all departments conform more or less rigidly.

The first notion is easily debunked since the principles of Geriatric Medicine had been laid down by Dr Marjory Warren long before the inception of the NHS.<sup>1,2</sup> She conducted investigations into the condition and needs of elderly patients with chronic illness in the "chronic wards" of the West Middlesex Hospital, London, from 1936 onwards and found that large numbers of patients therein were misplaced. I have offered a brief historical outline of the growth and development of the speciality of Geriatric Medicine in the UK and this may help North American readers to understand how we have reached our present position.<sup>3,4</sup>

The second misconception is also easily dismissed as will be attested by visitors to Departments of Geriatric Medicine in the UK who are well aware of the large variation in their patterns of functioning from high turnover units which deal with all or most of the acute medical problems in the 75+ group to much slower paced activity which concentrates more upon rehabilitation and continuing care.

## Medicine and Population Ageing

In many ways the increased numbers of elderly and aged persons could scarcely have come at a less appropriate time

in the development of medical services. This is because in the last few decades medicine has been engaged in an unprecedented turmoil of change. This has been the outcome of the scientific and technological revolution in medicine whose general effect has been to lead to more and ever narrower specialization with doctors devoting their efforts to single organs or systems as in cardiology, nephrology etc. or sometimes to single diseases as in oncology. Sometimes doctors have become specialists in one particular technique as in Nuclear Medicine or the various forms of endoscopy. While these spectacular achievements may have resulted in considerable benefits for individual younger and middle age subjects, this model of health care is totally inappropriate for coping with the age changes and multiple disabilities and deprivations of the old, afflicted as they usually are by multiple social, medical and mental problems. The need here is not for an "organ" approach, not even for the "whole patient" approach but care should be based upon the meeting of the needs of old people and their family (and other) carers. This is lesson number one: the inappropriateness of the exclusively scientific and high technology model of health care of the elderly. Failure to apply a much broader approach can only lead to misuse of scarce resources. This is not to say that technology should not be used for the elderly but its deployment should not become an end in itself.

## The Nature of Disability and Loss of Function in Old Age

Loss of function which occurs with aging is a complex matter since it is dependent upon age changes, behavioural factors and disease. The pattern is almost infinitely variable but I have attempted to produce a simple analysis.

Age changes tend to result in a linear decline of function as shown by the studies of Shock.<sup>5</sup> Function thus declines from the plateau reached in youth or early adulthood.

From Figure 1 it will be seen that Function A declines earlier and more steeply than Function B. Thus the function of visual accommodation starts to tail off earlier than respiratory or cardiac function.

Although age-related reduction in function is universal, its pace may be modified by various factors.

The institution of a training regimen may improve function considerably as depicted in Figure 2. This improvement may be achieved even in old age as shown by Swedish experiments on 70 year old males in Gothenburg. A random sample were given thrice weekly physical training for 45 minutes and their ensuing fitness compared with matched controls. The test group showed significant improvement in aerobic capacity of about 26% as evidenced by reduced cardiac rates at submaximal work loads. Static and dynamic muscle strength was also improved and thigh muscle biopsies before and after the course of training showed a significant increase in type II muscle fibres along with significant increases in plasma myokinase and lactate dehydrogenase activity.<sup>6,7</sup>

\*Based upon a lecture given at a conference of the Metropolitan Mental Health Planning Board, Halifax, Nova Scotia, May 1984.

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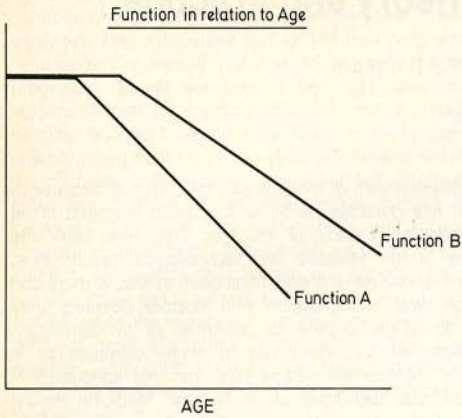


Figure 1

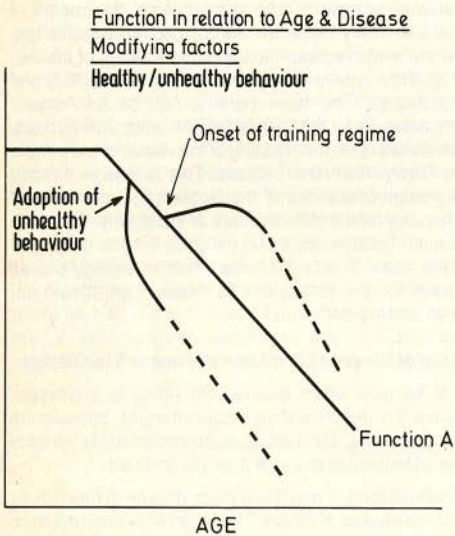


Figure 2

Conversely the adoption of unhealthy habits (eg smoking) or behaviour (eg sedentary life style) will have the opposite effect and lead to a marked reduction in fitness among subjects.

Unfortunately smoking and other unhealthy habits are generally commoner than are examples of healthy behaviour.

Figure 3 shows the effect of acute disease or injury upon function.

It will be seen that the occurrence of an acute disease or trauma will result in abrupt loss of function. The eventual outcome will depend upon the severity of the illness, how speedily and effectively it is treated and whether there is any resulting damage.

Figure 4 shows the effect of chronic disease upon function.

This shows the rapid decline in function which follows the onset of a chronic illness.

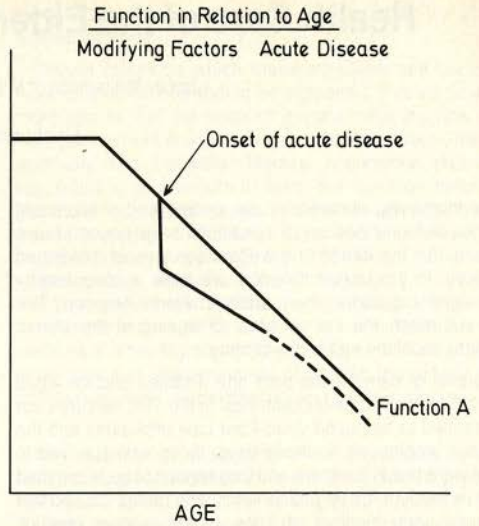


Figure 3

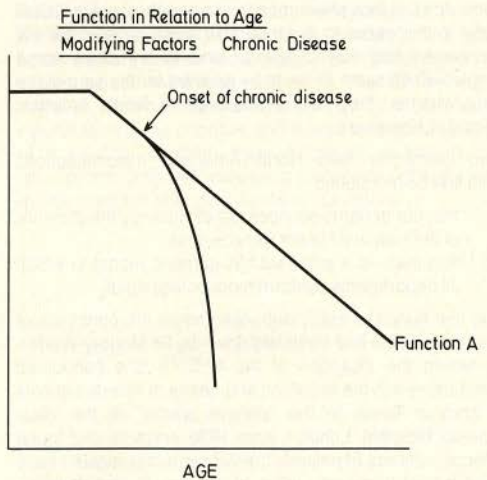


Figure 4

Figure 5 shows the probable effect of instituting treatment and rehabilitation once a chronic illness has supervened. It may be accepted that the earlier such intervention is applied, the greater is the chance of maximal functional improvement.

These simple diagrams may help to indicate the great complexity of functional changes which may occur as people grow old. While the picture is infinitely variable Fig. 6 offers a general scheme.

Figure 6 purports to show that in early adulthood we possess "maximal reserves" of function. Nature endows us so richly that we readily may withstand the severest stresses eg the loss of a kidney or lung or the effects of severe illness or injury. In middle age we retain "ample reserves" and even in early old age our functional reserves are "generally adequate". Up to this stage, the traditional model of medical care is usually appropriate — the patient with acute disease of the kidneys may be adequately treated by the General

Internist or (in more severe or complex cases) by the Nephrologist. The current North American model of Internist, plus the subspecialist with access to a wide range of medical technology for diagnosis and therapy, may prove highly effective for this type of patient.

However, once patients progress beyond the stage of "generally adequate" reserves the situation changes radically, the needs of patients begin to alter and it becomes necessary to ask whether the current model of health care remains appropriate?

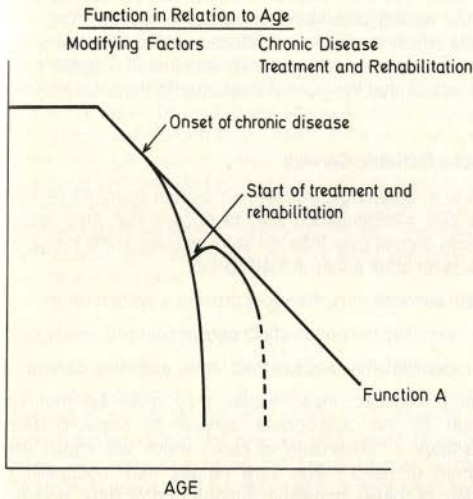


Figure 5

From Figure 6 it will be seen that once "advanced old age" is reached, the subject now enters a phase where she possesses "significantly reduced reserves" of function and from then onwards will experience further erosion of reserves until in "extreme old age" the reserves come close to zero. Beyond this stage subjects are increasingly liable to death from random causes simply because they are no longer able to maintain essential homeostasis.

The ages at which individuals reach the stages of "generally adequate", "significantly reduced" and "zero reserves" are variable. I have put them in inverted commas to emphasize that although "75" is the age at which most reach "significantly reduced reserves" and "85" the usual age for "zero reserves", there is a wide variation between individuals depending upon genetic factors, previous life style and medical history, and effects of chronic disease and trauma.

I am here tending to agree with Fries who has stated that the patient who lives long enough to achieve the "zero reserve" state is the likely candidate for "natural, disease-free death", and it seems obvious that the numbers of such deaths have increased and will continue to do so in line with his notion of increased "rectangularity of mortality".<sup>8</sup> Dr. Fries has tried to persuade us that we are witnessing a similar "rectangularity of morbidity" but I think he is only partially correct here. While I accept that we are now seeing increasing numbers of people (especially females) who reach extreme old age (and hence enter my zone of "zero reserves") without overt disease or related disability and who may therefore experience a "natural death", there is an equally large (or even much larger group) who reach old age

with multiple diseases and considerable morbidity and dependency. Among these are patients who suffer from arthropathy, vascular degenerative conditions and, most important of all, from dementing conditions. While there are hopeful signs that the ravages of arterial disease may be on the wane (due presumably to reduction in cigarette smoking, more interest in healthy life styles and more effective control of hypertension?), it cannot be claimed that we are nearer to the prevention of these other important and common chronic disabling conditions.

That this is not merely an academic matter may be appreciated from the fact that I have indicated in Fig. 6 that patients who have reached "significantly reduced" reserves and who are moving towards "zero reserves" have, in my opinion entered the "zone of Geriatric Medicine". By this I mean that for such individuals the traditional pattern of service provision becomes increasingly inappropriate. Not only is it ineffective but it is inordinately expensive and potentially very harmful to patients. How may I justify such a dogmatic assertion?

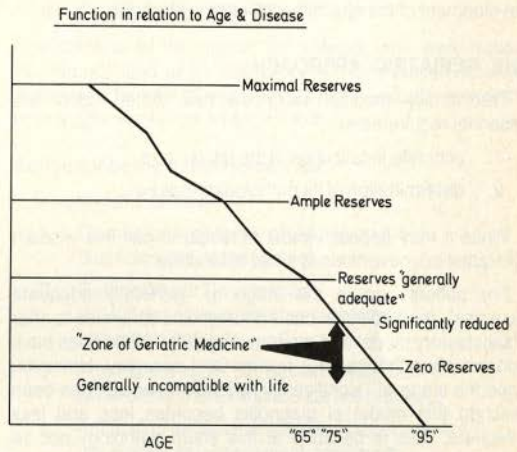


Figure 6

### Some Consequences of Entering the "Zone of Geriatric Medicine"

As has been argued above, patients may reach "significantly reduced reserves" status either through achieving extreme old age or through combinations of age changes, disease changes and the effects of unhealthy behaviour. Once this stage has been reached, however, certain consequences arise. First, any stress may prove overwhelming and result in organ or system failure. The next organ is then liable to fail also with a high chance of multisystem failure due to a domino effect. Thus the aged person who develops a respiratory tract infection may rapidly suffer respiratory failure which in turn leads to strain upon the heart which fails. This leads to hypoxia and reduced cardiac output with the likelihood of cerebral hypoxia and reduced perfusion resulting in mental confusion ("brain failure"). In the event of reduced fluid intake (associated with reduced sense of thirst due to inefficient osmoreceptors), renal failure is also probable. Thus a condition which originated with an inherently simple stress may become life threatening within hours or days. Even if death does not supervene, the patient may survive in a much more dependent state which is

disaster for the patient, her family and for her compatriots who foot the bill for her expensive medical, nursing and social care.

The clear need therefore for patients in the "geriatric zone" is for an immediate and appropriate response in order that the effects of stress are reversed or contained. Need in old age is invariably an urgent matter and this indicates the inappropriateness of the traditional division of services into *Acute* and *Chronic*. This may be emphasized by the tendency to present this model of care in the polarized version of *Acute versus Chronic* in which measures to improve one are seen as an attack upon the other. I believe that slavish adherence to this outdated concept explains quite a lot of the difficulties that medicine (especially North American medicine) has encountered in trying to come to terms with the new needs of aging populations. Even if the patient's condition is "chronic", her needs must be treated as "acute" and the tradition of separate systems of care becomes an anachronism for patients who have reached the "geriatric zone". They require a fundamentally different approach and this is one of the main reasons for the development of the specialty of Geriatric Medicine.

## THE GERIATRIC APPROACH

Traditionally medical diagnosis has rested upon two essential requirements:

1. accurate localization of the lesion; and
2. determination of its pathological nature.

While it may appear almost heretical to call this wisdom into question, nevertheless it has to be done.

For patients up to the stage of "generally adequate reserves", the traditional basis of diagnosis continues to offer a satisfactory model and modern diagnostic techniques have enormously enhanced our powers and accuracy. However, once the stage of "significantly reduced reserves" has been reached this model of diagnosis becomes less and less adequate. This is because at this stage pathology *per se* becomes less relevant and it is necessary then to include in the "diagnosis" estimates of function. It becomes necessary to decide what function has been lost and what has been retained. Thereafter restoration of function is attempted and irrecoverable losses compensated for by support services. This is the concept of rehabilitation which underlies all our activities in geriatric care.

This may be illustrated by the example of two 85 year old ladies who have identical lesions of osteoarthritis of their knee joints — similar swelling and deformity, similar loss of joint space, crepitus and limitation of movement. However, one sufferer is still independent, going to the shops, to her daughter's house and to Church etc. while the other is house-bound, needs help with shopping and housework, and is markedly dependent on several other persons to see her through each day. Clearly some other factors than the knee pathology are of overriding importance — personality and motivation, mood and environmental factors (especially the attitudes and support from family members) and, of course, the co-existence of other disabling conditions.

This again is no mere academic matter since it forms the basis of geriatric diagnosis which I shall henceforth refer to as assessment. Perhaps it may be put succinctly in the exhortation to "think beyond the pathology".

## Provision of Geriatric Services

What has been written so far concerns certain theoretical aspects of medical care of the elderly but that is not how our system of care evolved. Rather it has been based upon a pragmatic approach of trying this and trying that, rejecting what did not seem to work and developing what seemed successful. In many ways therefore our approach has been the exact opposite of that in North America where it often seems to some of us that the main effort has remained locked in the laboratory in the hope that something which fitted neatly into the "traditional model" would turn up and allow the ageing population to be contained by using the methods which have proved effective in younger persons (whose reserves are still "generally adequate" or better than that). I believe that this pursuit is doomed to continuing costly failure.

## Aims of a Geriatric Service

This is to enable old people to maintain optimum health, fitness and independence and to ensure that they retain maximum control over their life style with the same range of choice as for other adults in their society.

Health services must therefore provide a system which:

- (a) identifies the needs of old persons; and
- (b) identifies the needs of their family and other carers.

Having identified these needs they must be met by provision of the appropriate service or support. This necessitates a "continuum of care" which will match the "spectrum of need". The care ranges from counselling, provision of basic domestic support, domiciliary nursing through to day care of varying types and care in an appropriate institutional setting (including all levels of hospital care).

As already explained, these provisions must be readily and most important, immediately available. Delays and waiting lists mean that the patient's condition will deteriorate so that she will move further along the continuum of care towards the more expensive end. Likewise delays may mean that the family's resolve may be eroded and they are carried beyond their limits of tolerance.

## The Process of Assessment

Assessment, as already emphasized, is used to mean "geriatric diagnosis" which extends beyond traditional pathological boundaries.

Assessment must be full and comprehensive. It must involve several disciplines with each professional contributing an essential part. These professionals must be prepared to work within a multidisciplinary team and eschew working in professional isolation. The team members must meet regularly in order to place their individual assessments together so that the full picture may be revealed.

Multidisciplinary assessment of this type cannot possibly be achieved by the filling in of forms nor can it be achieved by "committee" or "panel" meeting to consider forms completed by other individuals.

## Outline of the Assessment Process

Assessment of the patient involves medical, social and psychological aspects. This means detailed consideration of personality, motivation and ability to form satisfactory



relationships. Full clinical history and physical examination is carried out plus appropriate laboratory and radiological investigations. (What constitutes "appropriate" here is not clear and is a subject which richly deserves detailed research.) Assessment of mental state is carried out involving cognitive function and detection of anxiety and/or disturbance of mood.

### Family Assessment

The nature and disposition of family members must be determined. The main need is often to identify the daughter or daughter-in-law who is the principal supporter. She must be interviewed and her hopes, fears and expectations ascertained. It is essential that her tolerance limits are defined and thereafter it becomes a major goal to ensure that she is not taken beyond these limits. All experience shows that should this happen then "rejection" is likely and, once it occurs, it is generally irreversible. Hence it is in the interests of service providers to see that this does not happen. Above all, it is not part of our duty to lecture middle aged family members as to where their responsibility lies. This they know very clearly and harangues on this topic will only create resentment and guilt.

### The Home Visit (or House Call)

In the early days of UK Geriatric Medicine the initial home visit was developed as a ready means of determining degrees of priority for patients' admission to hospital. It was soon discovered that the practice possessed other advantages, the main one being the large amount of relevant information which may be obtained in a very short space of time by an experienced observer.

Some departments have reduced their emphasis upon home visits and claim that with reduction in waiting lists and the offer of immediate admission the visit becomes less necessary. My own department, however, with no waiting list and admission of 93% of patients within 24 hours of referral, continues to perform almost universal home visiting as the first contact with the patient. We repeatedly have asked ourselves the question as to why we retained this practice. Was it because we had got into a rut and become too set in our ways? We decided to look at the situation critically and so we did a detailed analysis of the quantity and quality of information obtained in a series of consecutive referrals to our service.<sup>9</sup>

The first point to emphasize is that it is the aged person's ability to function in her own home which really matters and this can be assessed accurately in that environment only. It is wholly unrealistic to expect a frail old lady with impaired memory, vision and hearing to function to her optimal level when taken from her own home and deposited in a hospital ward or out-patient department. It is even more intolerable that her assessment should be attempted in the hospital emergency room which often must provide maximum stress, fear and disorientation in old people.

The other advantage of home visiting is that it enables an active geriatric service to move extremely fast. In my own department two-thirds of patients are seen within three hours of referral and 90% on the same day. No other system can offer this speed other than immediate admission (which inevitably results in significant proportions of unnecessary admissions as will be seen below). We are often asked how we manage to achieve this speed of response and my

answer is that if sufficient priority is given to the practice then it will be achieved. I usually also add that it takes no longer to do the visit "same day" than if it is left for a week!

### Information obtained at Home Visit

A house call by an experienced Geriatrician enables an adequate initial clinical assessment to be made without difficulty in almost all cases. In addition, however, a great treasure trove of vital paraclinical information will be uncovered. The following is a summary of findings reported in the above mentioned article<sup>9</sup>:

1. Drugs being taken by patient, not specified by referring family physician	23%
2. Accident hazards in the home	23%
3. Inappropriate furnishings, equipment etc. (bed too high, lavatory seat too low, etc.)	58%
4. Evidence of actual or approaching family exhaustion	49%
5. Evidence of self neglect	14%
6. Evidence of alcohol abuse	3%

In addition to the above, for patients who were subsequently admitted as inpatients, in 94% information obtained at the initial home visit was deemed highly valuable in making appropriate discharge arrangements.

### Action following Initial Home Visit

Several options exist:

1. Discussion with family physician on the diagnosis and management	11%
2. Referral to our Day Hospital (for full geriatric assessment, treatment and rehabilitation)	31%
3. Attendance at our out-patient department (where only more clinical data are required)	8%
4. Admission to Geriatric Inpatient Department (for diagnosis, assessment, treatment, rehabilitation or respite for carers)	35%
NB Patients are <i>never</i> admitted to any form of long term care (eg Nursing Home) till they have received full geriatric assessment (this leaves about 5% who require such care)	
5. Referral to other services:	
Psychiatrist	2.3%
Social Services	5%
Other Clinical Services	1.3%

### Outcome

Applying these principles in the way outlined ensures optimum use of scarce resources. Only in this way may the detailed needs of the patient and family be accurately identified and appropriately met. Most important it brings us closest to the desired goal of geriatric care, viz. to have each aged patient in the correct place at the correct time and in receipt of appropriate services.

Serving a defined population of over 20,000 elderly persons to whom we offer a free and comprehensive service, we have managed to cope with the demands upon our service. There is no waiting list for patients in the community

and more than 9 out of 10 who need to be admitted are in our wards within 24 hours of first referral.

Since we are able thus to offer patients immediate admission (and their families immediate relief) we are able to send 74% home once their need for inpatient care is over — with a firm undertaking of immediate readmission should circumstances require this.

#### SUMMARY OF REQUIREMENTS FOR A COMPREHENSIVE GERIATRIC SERVICE

1. A multidisciplinary team of professionals including physicians, who are dedicated to the ideas and practice of geriatric care.
2. A health care system which offers immediate response by identification of patient and family needs.
3. An immediately available, balanced range of services designed to meet these identified needs.
4. Close collaboration and integration of the geriatric service with other medical and social services especially Family Medicine, Internal Medicine, Psychiatry and Orthopaedics. □

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# The Role of Geriatric Medicine in Canada

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The last 100 years have shown a revolution in the demographics of the Western World. Table I shows the changes in the mean age of Canada and also the proportion of the population that is 65 years of age or greater. Between 1851 and 1981, the mean age of Canada has risen from 21.7 years to 32 years. The proportion of population that is 65 or more increased from 2.7% to 9.7%. These changes reflect a decrease in mortality rates and also a drop in the fertility rates of our population. If the current trends continue, it has been stated that the fastest growing segment of the population will be those 85 years of age or greater. At present, the life expectancy at birth in the United States is 70.7 years for males and 78.3 years for females.<sup>1</sup> According to recent actuarial data from the Social Security Administration in the United States, life expectancy at birth may be longer than 90 years for white females by the year 2080. Thus, revolutionary change in the age makeup of the population will cause profound changes in our society. One of the areas most affected will be in health care delivery.

TABLE I

	Mean Age (Canada)	% of Population 65 or more
1851	21.7	2.7
1901	26.8	5.0
1951	30.3	7.8
1981	32.0	9.7
2001	36.9 (est.)	12.3 (est.)
2051	42.0 (est.)	20.7 (est.)

(Adapted from *Canada's Population Outlook* by David K. Foot)

Data from Statistics Canada show that in 1951, 32.7% of all hospital patient days could be attributed to those 65 years of age or greater.<sup>2</sup> In 1976 this had risen to 38.1%. It has been projected by the year 2030, 60.2% of all hospital patient days will be restricted to those 65 years of age or greater. The proportion of the population that is impaired or disabled to at least a minimal degree, is highly age dependent. Information from the United Kingdom shows that while in the order of 1% of the population aged 16 to 29, will have some form of impairment or disability, over a third of those 75 years of age or greater will have some form of disability.<sup>3</sup> At birth the typical Canadian male can anticipate 0.8 years of long term institutional care, while the typical female can expect 1.5 years. Expected years of activity restriction not involving long term institutional care had been estimated to be 10.8 years for men and 14 years for females.<sup>4</sup> In Canada from 1951 to 1978, 70% of the increased life expectancy for men and 80% for that of women consisted of an increase "disability expectancy".

Unfortunately, while the numbers of the disabled elderly

increased, other social trends are taking place which have an effect at diminishing community support for these individuals. The increase in mobility of children and in rates of marital breakdown in the face of the dramatic increase in the life expectancy of females, has led to an increase in the proportion of elderly females living alone from 15.2% in 1961 to 28.9% in 1976.<sup>2</sup> The inescapable conclusions from the above is that in the foreseeable future our society will be faced with the task of looking after these older disabled individuals just as the non-Government, non-medical forms for support are declining. One aspect of the response to this challenge has been the development of geriatric medicine.

The birth of geriatric medicine in the United Kingdom can be dated to 1935. This was when Dr. Marjorie Warren took up her post in a "work-house" infirmary where she found appalling conditions. In Canada the first development of note was the establishment of a gerontology laboratory by Dr. D.E. Cameron who was then a Professor of Psychiatry at McGill University. In 1953 during the reorganization of the Ontario Homes for the Aged Program, that province appointed a consultant in Geriatrics to the government. On October 15, 1971, the Canadian Association of Gerontology was founded. The Royal College of Physicians and Surgeons of Canada in January of 1978 stated that Geriatric Medicine was a subject in which certificates of special competence might be offered. A year later a resolution was passed by the Canadian Association of Professors of Medicine which supported the development of Geriatric Medicine within Departments of Medicine. In 1981 the Canadian Society of Geriatric Medicine was formed. At present most if not all medical schools in Canada have formed divisions of Geriatric Medicine to serve as foci of future development.<sup>5</sup>

At least in the United Kingdom, Geriatric Medicine has been associated with custodial care of the elderly, especially the chronically ill elderly.<sup>6</sup> This occurred in isolated, outdated hospitals which were difficult to staff. The geriatrician was called in to acute care hospitals only in order to free up a "blocked bed". There has been a slow evolution of this concept. Geriatricians are beginning to be viewed as physicians able to bring special skills which, hopefully, can minimize chronic dependency and hasten recovery in the elderly. The scientific subject matter of geriatrics is the aging process and the phenomenon of illness in the elderly. Frequently the presentation of illness is non-specific. According to R.D.T. Cape there are five key clinical problems which form the essence of geriatrics — mental confusion, falls and loss of mobility, impaired homeostasis, and iatrogenic disorders.<sup>7</sup>

A key area in defining geriatrics is the relationship with other fields of medicine, in particular family practice and general internal medicine. Most of the care of the elderly is and will continue to be given by family physicians. One would hope that new trainees will have exposure to geriatrics as a student, intern, and/or resident. In some centres the development of geriatrics has fallen under the sway of

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academic Family Medicine while in others it remains under Internal Medicine. It would be unfortunate if this is viewed as "either/or". While the consultative aspects of a geriatric division fall within the province of Internal Medicine, other aspects such as long-term care fit better within the family practice mandate. The bulk of geriatric consultative work will be done by general internists. As with family physicians it is hoped that geriatrics will be incorporated in the training of internists. In a centre where there are both geriatricians trained in Internal Medicine and general internists, the definition of a "geriatric" case will usually be made by the referring physician. Geriatric units in the United Kingdom tend to look after older, more dependent individuals than are found on general medical wards. Geriatric emergencies are more likely to be confusional states while typical "medical" emergencies tend to be cardiovascular disorders.<sup>8</sup>

As Drs. Williams and Hadler pointed out, for the last few hundred years the first principal of medical practice has been the effort to define the disease causing the patient's distress followed by cure-orientated treatment.<sup>9</sup> If the focus of a doctor-patient relationship is this, strategies able to produce palliation may be ignored. The search for reversible disease is important but the typical geriatric patient suffers from several chronic conditions which are irreversible. There is a danger in geriatrics of becoming a "diagnostic nihilist" and falling victim to the dangers of over-medication. The art of geriatrics is knowing how far to pursue investigations and defining the most appropriate treatment plan for that particular individual.

An ideal geriatric program would include assessment beds with free access to investigative facilities, an out-patient clinic, convalescent beds, a day hospital, access to long-term care facilities, and research laboratories where indicated. University divisions of geriatrics should be used as centres for education and research. By default most of the clinical challenges facing us in the future will be geriatric problems.

While changes in medical care are an important component in society's response to the aging challenge, in itself it would be inadequate. Important questions such as income support and housing require attention. These and other problems will soon have personal meaning for most of us. □

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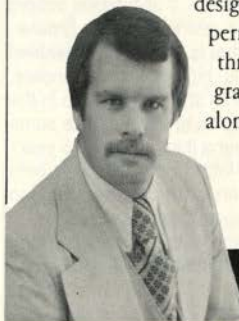
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# The Vulnerable Elderly In Nova Scotia: Their Abuse and Neglect

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Currently in Nova Scotia our public and professional awareness of elder abuse is uncomfortably low. This parallels our earlier lack of understanding of child abuse in the 60s and spouse abuse in the 70s. We were then inclined to believe these problems were unlikely to happen with any frequency here. Even now, with wider recognition publicly and professionally, cases of child or spouse abuse have often seemed to be overlooked or avoided. Elder abuse and neglect are now at that same earlier stage of disbelief that they could happen in Nova Scotia. They do indeed happen here.

In December 1982 three elderly victims of physical abuse presented at the Halifax Infirmary within a single week. One was admitted to our Family Medicine Service and was later presented at our Grand Rounds. Since then we have recognized several more cases, one of which was also a subject in Grand Rounds. These presentations and the subsequent discussions caused a deep reaction in all of the physicians and allied health professionals present.

## CASE 1

This 75 year old lady had been admitted with an apparent brain stem stroke. She was in a filthy, neglected state with bruises over much of her body. Her thought processes were impaired and it was necessary to declare her incompetent. She was placed in a nursing home, while her financial affairs were taken over by the Public Trustee. There was insufficient evidence to prosecute the suspected abuser.

It was a shock to learn that suspicion of abuse had been recorded as far back as 1968. Over the intervening years approximately 25 reports from various community health professionals accumulated. Each expressed concern, made observations or described unsuccessful attempts to intervene. In addition, approximately 14 hospital admissions and emergency department visits occurred along with many utilizations of outpatient clinics.

This person's deterioration happened despite periodic intervention by neighbors, police, public health nurses, V.O.N. nurses, social workers and a variety of physicians.

## CASE 2

A victim recently presenting was a 72 year old malnourished woman who had severe infected stasis ulcers on both legs. She was filthy and unkempt, despite the fact that she lived with her sister and two grandchildren by an adopted daughter. The granddaughters appeared of limited intellectual capabilities.

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Again many interventions had been attempted. Their apartments frequently changed as they were evicted from apartment after apartment because of destruction of property and non-payment of rent. She had been found many times on home visits in a chair in which it was assumed she spent her life — eating, sleeping and often incontinent. Apparently her poor nutrition had something to do with the cashing of her pension cheques by her care providers, who then allegedly used the money for their own purposes.

This lady denied abuse, refused placement outside the home, stating that she had an obligation to her grandchildren. She was intact mentally, so her wishes were honored. She was discharged back to the place she had left.

These two sad stories demonstrate many of the difficulties presently interfering with clear recognition or effective intervention in cases of elder abuse in Nova Scotia.

## THE TIP OF THE ICEBERG

In the U.S. in 1981, it was estimated that there were 500,000 to 2.5 million cases of elder abuse annually.<sup>1</sup> From Manitoba, a 1982 report was based upon interviews with 105 health care workers — primarily nurses (62%) and social workers (28%). It revealed 405 cases of abuse of the elderly.<sup>2</sup>

In Nova Scotia, Haley undertook a mail survey of 281 sources (family courts, hospitals, municipal homes for special care, municipal social service departments, police departments, public health units, and residential care facilities).<sup>3</sup> Cases were requested for the period of one year ending August 1983. With a 48.75% return of questionnaires, 137 cases of abuse or neglect were identified. Eleven of these appeared to be possible duplicates. Cases had been found in all sectors of the province.

While abuse may be broadly identified to include street crimes, financial exploitation schemes (through con-games, financial advisor fraud, friends taking advantage), institutional abuse, or self-inflicted abuse, here we shall restrict ourselves to the elderly living at home. In this setting, the suspected perpetrator is overwhelmingly found to be a family member.

It is the purpose of this paper to describe:

1. The expectation of a rising incidence of this problem in Nova Scotia.
2. The pressures that exist in normal families attempting to meet the needs of their elderly relatives.
3. High risk situations or presentations to aid physicians in identifying cases.
4. Some current problems that require attention concerning treatment and/or prevention of abuse or neglect for Nova Scotians.

## THE GREYING OF NOVA SCOTIA

Information drawn from the 1981 census and the Canada Health Survey of 1978-79 applied to aging, shows a variety of important observations.<sup>4</sup>

1. In Nova Scotia 93,000 (10.9%) of our inhabitants were then over age 65. The proportion of this population is projected to continue to increase steadily for the next several decades.
2. When the aged were 9% of the population (1978/79), their health problems already required 20% of hospitalizations and 41% of the days of stay.
3. The proportion of persons over age 65 whose major activity was partially or totally limited was nearly four times that in the 15-64 age group.
4. Only 9% of these people live in "collective dwellings".

These facts must force us to recognize their potential health care and social service requirements to meet their needs. Thus, over the next few decades, more and different resources will have to be directed toward solving these problems.

Using more Nova Scotia information reinforces this view. In 1982, the Victoria General Hospital showed a 20% increase in patients age 65 and over admitted compared to the number of that group admitted in 1976. Their length of stay was approximately five days longer than those below that age. Accordingly, this 10.9% of Nova Scotia's population occupied 36% of the beds overall and 43% of medicine beds.<sup>5</sup> This group has a corresponding need for out of hospital care with home care services. The medication costs for senior citizens under the Nova Scotia Pharmacare program amounted to \$340 per person in fiscal year 1983.<sup>6</sup>

As well, the ability of the elderly to remain at home requires family acceptance of a principal role in care provision. Most have at least one, and often two or more, chronic problems which may require some degree of support and assistance. Such care providers are usually the daughter or daughter-in-law, with the son's share of the load typically falling upon his spouse.

We cannot expect that these families are automatically motivated or equipped to provide for this need. The general belief that the frail elderly who are homeless or destitute are the only ones who need support and protection is wrong. Those who have good fortune and the security of living in the care of their friends and relatives, need support and protection often as much and sometimes more. Such a home is not always the sanctuary it is thought to be, as we shall see.

## AGED PARENTS AND THEIR CHILDREN

Much of the literature on aging in the early 70s focused upon sociological and social work studies of the links between elderly parents and their middle aged children. In a summary of this research the following points were made:<sup>7</sup>

1. 80% of all older people in the U.S. had living children.
2. 75% of these children lived either in the same household or no more than thirty minutes away.
3. One-third of all widowed, single, divorced, or separated elderly males, and one-sixth of comparable women, shared a home with their children.
4. The aged were subject to a narrowing of their circle of social contacts, while emotional bonds with their children became increasingly important.

5. The quality of this relationship between aged parent and middle-aged children appeared to depend upon the parent's health, living environment, finances, and attitude toward aging.

Of particular importance to physicians are the findings that, when health was more seriously impaired and when the family relationship was already perceived as strained, parental illness added to this strain. Illness increased the parent's dependence upon the adult child, whose resentment then increased, caught as they were between caring for children and parent.

A developmental task of middle age is adjusting to the aging of parents, attempting to meet their needs while keeping life as satisfactory as possible for both generations. Robinson and Thurnher found that care giving functions are seen as stressful and have a major impact on the care givers' lives, both in the present and in their plans for the future.<sup>8</sup> Increasing dependancy was related to progressive deterioration in relationships. Participants in their study said:

"The middle aged are sandwiched between their aged parents and their children; just as you have raised your family, you have to take care of your parents."

and, "for many years we have been building up to the future and now we feel constrained. I guess it is terribly selfish of me...but you are never free."

or, "...its the tied-down part that gets me."

Stress was found to be universal, worsening when mental deterioration of the parent existed and/or when the relationship was experienced as confining. Mindel and Wright found that: a) the older the relative, b) the higher their level of impairment, and, c) the fewer the roles they performed, then the greater the resultant level of inconvenience perceived by the care giver and the lower the primary care giver's family life satisfaction.<sup>9</sup>

Of course, it is not only children who provide such care. A significant proportion of care givers are the spouses of the elderly, who themselves may be physically, intellectually and emotionally less able. Providing for the needs of their physically or mentally impaired spouse may impose a critical level of stress upon their dwindling health.

## ELDER ABUSE RESEARCH

We have been examining how normal families feel about caring for aging parents. Given those negative perceptions it is easy to understand that added family stress, from whatever internal or external cause, could easily precipitate care provider abuse or neglect. This may be found to be of even higher risk in a family with a prior history of family conflict or violence.

In the mid to late 70s the first articles appeared describing incidents of elder abuse, entitled "Granny battering", "Granny bashing", and "Battered parents".<sup>10-12</sup> Subsequently, a number of studies based upon questionnaires distributed to health professionals in several U.S. states,<sup>13-15</sup> and in Manitoba,<sup>2</sup> as well as case reports and clinic record reviews,<sup>16-17</sup> have permitted improved clarity of descriptions of high risk situations, of identification of victims and care givers, and of management difficulties. While this research is not definitive, it gives a wealth of information that physicians may use. It is summarized here to assist the physician or other health professional to whom such a patient presents, in the home, emergency department or hospital.

## Definitions of Abuse and Neglect

Researchers have been varied in their descriptions and subdivisions of abuse and neglect, reflecting a lack of precision and completeness of current research. For the purposes of placing the problem in a practical framework the following definitions are offered as a composite view:

*Elder Abuse* — Commission of physical or psychological acts which threaten the victim's physical health, medical care, emotional well being, personal property or income, or right to self-determination.

*Elder Neglect* — Active or passive omission of acts to maintain an elderly individual who cannot easily perform these acts for himself/herself.

It is difficult to compare and combine individual study findings because of the inconsistencies of changing definitions and divisions within the subject of mistreatment of the elderly. This is partly related to the coexistence in most cases of various forms of abuse and neglect. However, insofar as combining these study results can be done, reports of physical abuse vary from 20% to 78% of cases of all types, psychosocial abuse from 37% to 58%, and material or financial abuse from 36% to 46% of cases. Emotional or physical abuse can be equally damaging.<sup>13,18</sup> Part of the research problem lies in the fact that the professionals responding to the interview or mail questionnaires were not really knowledgeable prior to participation in the surveys, therefore likely reporting only the most flagrant cases. This was made apparent in one multiple center report where one of the centers undertook a fairly extensive orientation prior to their survey.<sup>16</sup> In this center, active and passive neglect constituted 45% of cases, almost equal to their levels of 46% physical abuse, 62% psychological abuse, and 30% material abuse. It becomes apparent that there is a high rate of coexistence of all forms of abuse and neglect.

## Examples

*Physical Abuse* — Assault or rough handling resulting in injuries or discomfort; deliberate over-medication, under-medication; sexual assault; homicide; physical restraint (bound, gagged).

*Financial/Material Abuse* — Cashing cheques and withholding means for daily living needs; trickery, fraud, misuse or misappropriation of property; theft of funds and possessions; overcharging for residence, services or items.

*Psychological Abuse* — Intimidation, humiliation, infantilization; inadequate attention in terms of needs, unattended; isolation; confinement; threats of harm or violence; threats of withholding assistance, abandonment, or institutionalization.

*Active Neglect* — Withholding necessary food, or personal and hygiene care; withholding medication and/or medical attention.

*Passive Neglect* — Ignoring consideration of need for nutrition, personal care, and medical, psychological or physical needs.

## HIGH RISK DESCRIPTIONS

The elder at highest risk is female, is over age 75, lives with caregivers, has physical or mental deterioration requiring assistance for activities of daily living, is housebound or bedridden, has poor family relationships, and represents a financial cost or advantage to the caregiver. Their presence

in the home may make it overcrowded, limiting privacy for all. With mental deterioration they may represent an extremely difficult and frustrating management problem.

None of these descriptors should restrict perception of the abused as fitting only the above pictures. Abuse can occur in any setting, and the victim may contribute to a disturbed relationship by making unreasonable demands on the care giver, being irritable, persisting in a parental advising or demanding role, etc.

The victim will likely deny that abuse has occurred due to shame, fear of loss of their only perceived support, from a feeling of helplessness, wishing to avoid institutionalization, fear of retribution, lack of alternate shelter, unavailability of support services, and a fear of the unknown with changes.

The caregiver at high risk of being an abuser is a relative, usually a son, daughter or spouse. He/she may have a problem with alcohol or drug abuse, financial stress, or a poor coping ability and emotional resources. The care giver may have his/her own long-term medical complaints, and may have been an object of abuse previously themselves, even by the current victim.

They may also be unreceptive to intervention, unaware of resources and unwilling to risk the loss of any financial benefits from the presence of the elder. They are likely to be overworked, underpaid and stressed by personal, family or social situations. Indeed, they are likely to be ill equipped or reluctant to care for these dependent adults.<sup>13</sup>

## PROFESSIONAL DENIAL: OBSTRUCTION TO DETECTION

In 1981, Filbee undertook an informal telephone survey on elder abuse in Halifax as part of her exploration of the subject. In approximately 46 calls to people having contact with the elderly she found that 17 respondents had not heard of elder abuse; 17 had heard of it, while only 12 had encountered it in some form. She commented: "Some contacted appeared offended at the suggestion that there might be such abuse and hastened to point to the number of happy families that exist."<sup>19</sup>

Physicians rarely report such abuse.<sup>13,15</sup> A research team, noting that denial by professionals is a major barrier to detection, stated: "We have observed practitioners deny or ignore abuse in situations where three generations of women were being abused; only the female children and wives were assisted because the abused state of the grandmothers was not identified in spite of ample evidence of their victimization."<sup>20</sup>

## DETECTION IN HOME VISITS, EMERGENCY DEPARTMENTS AND HOSPITALS

A number of authors, other than those already cited, have made recommendations concerning methods of detection of abuse and neglect.<sup>21,24</sup> These have been distilled and modified here.

A number of important considerations in the detection of abuse and neglect are summarized in Table I. Home visits may be the ideal place for a physician sensitive to those considerations to identify an abuse risk situation. This means that family physicians, often having knowledge of family relationships, are able to look for evidence of strained relationships, especially with the elderly person seen to be fearful, shrinking or withdrawing from the very person from

whom we expect they derive their support. One may see clearly evidence of lack of careperson attention in a malnourished, unkempt and dirty elder in an unchanged bed in a crowded home with lack of privacy in a hostile environment. We often have the opportunity to intervene and to assist not only the supposed victim but also the caregiver, who is also a victim in their own right. Our offers of help may be accepted as a trusted health professional when strangers such as Public Health Nurses, Social Workers and others may be looked upon as untrustworthy interfering people. However, this means we would have to open our eyes to the possibility of such events.

In the Emergency Department physicians can detect this problem only if it is in their minds when they see elderly people. Two researchers reported that 3.8% of women presenting to an emergency trauma service had been battered by men with whom they were intimate.<sup>25</sup> When new data were analyzed from this same service, this information was revised with the observation that "where physicians saw 1 out of 35. . . a more accurate approximation is 1 in 4; where they acknowledged that 1 injury out of 20 resulted from domestic abuse, the actual figure approached 1 in 4."<sup>26</sup> It is easy to assume that elder abuse, because of lower awareness, would fare even worse.

TABLE I

SUSPECTING ELDER ABUSE/NEGLECT

EXAMPLES

1. PHYSICAL ABUSE: assault or rough handling, resulting in injury or discomfort — striking, shoving, beating, restraining; deliberate over- or under-medication; sexual assault; physical restraint.
2. FINANCIAL/MATERIAL ABUSE: cashing cheques and withholding means for daily living needs — trickery, fraud, misuse or misappropriation of property — theft of funds and possessions; overcharging for residence, services or items.
3. PSYCHOLOGICAL ABUSE: intimidation; humiliation, treating like a child; inadequate attention, social isolation, unattended; threats of harm, of violence, of withholding assistance, of abandonment or institutionalization.
4. NEGLECT: active or passive omission — ignoring needs by withholding necessary food, personal or hygiene needs, medication or medical attention.

HIGH RISK INDICATORS

- ELDER
- Poor health, overdependent: needs for activities of daily living or disabilities exceed family's ability to meet them, especially with increasing frailty or dementia; multiple medications.
  - Unusual patterns of trauma: imprints — belt buckle, hand, rope, burns, suspicious fractures.
  - Evidence of overall poor care: unkempt, dehydrated, malnourished, incontinent, soiling, bed sores (especially infected).
  - Passivity or withdrawal marked; fearful in presence of care provider — cringing, whimpering, tremulous (may mistake for paranoia); or opposite — being aggressive, abusive, unreasonable, directing care giver.
  - Medical attention at various sites with various doctors.
  - Acknowledges mistreatment, or denies, giving history of injury or illness at variance with care giver.

- CARE GIVER
- Demonstrates frustration, loss of control or fear of loss of control; admits conflict with elder.
  - No relief from care provision.
  - Different history from elder: unable to reasonably explain injuries or condition; evasive, contradictory.
  - Undue delay in seeking care, shows detachment.
  - Over-reacting, demanding unusual treatment (like admission for a minor problem).
  - Under-reacting to a major problem: refusing consent for diagnostic studies.
  - Alcohol or drug abuse, poor self image, acknowledges personal or family stress; unemployment, finances.
  - Own disability interferes with care provision; works full time; absence of support for care.

APPROACHES . . . (HOME, EMERGENCY, HOSPITAL)

- \* Avoid being judgmental or allowing personal feelings to interfere with provision of optimal care.
- \* Give support to both elder and care giver; acknowledge frustration of both; each is a victim in their own way and should be regarded as such.
- \* Observe interactive behavior of elder/care giver; should be trusting, comfortable.
- \* Examine patient alone without care giver.
- \* Explain to care giver he/she will be interviewed separately afterward as part of routine examination.
- \* Avoid premature labelling of abuse/neglect.
- \* Ask gently only after rapport is established.
- \* Pay special attention to trauma, burns, nutrition, medication and recent changes in condition.
- \* Involve Social Services as soon as medical condition permits.
- \* Utilize guide for history and physical documentation — remember, some day it may be needed in court.
- \* Fully describe and diagram injuries and/or photograph when possible.
- \* Use quotations for responses or comments offered when recording.
- \* With bruising consider CBC, Diff., Platelets, PT, PTT, Total Clotting Time, Bleeding Time.

CAUTION NOTES

- \* Avoid the "RESCUE SYNDROME" — needs identified cannot be met by any one person (at Home, Emergency or Hospital).
- \* Social work referral can help decide and coordinate if immediate action is necessary to protect, permit full assessment, or prevent further problems.
- \* Consider admission to remove from danger for unclear or high risk situations. . . also permitting full assessment.
- \* If seen for the first time, ensure communication with the patient's usual family physician.

The elder will usually be brought in to the Emergency Department by the care giver. The care giver and elder must be interviewed separately observing them separately and together as in Table I. Admission rather than confrontation is warranted to avoid further provocation that may have consequences for the abused, because of the possibility of removal of the elder to possible retribution. Clear documentation of evidence is again the key, calling upon others to intervene. This problem cannot be solved in the Emergency Department.

Admission to hospital allows clear documentation of objective information in the chart. Explicit descriptions of feelings and quotations should be used to record exact statements. Sketches and photographs help. Descriptions of injury may be recorded as obtained from both the elder and care giver. If the care giver reports repeated falls, while physiotherapist and occupational therapist report indepen-



dent ambulation with a normal stable gait and no falls, this can be recorded. Care giver statements regarding easy bruising may be checked upon by observation of whether new bruises occur with regular handling, turning, lifting, or transferring.

#### AFTER IDENTIFICATION: WHAT THEN?

Intervention protocols are at the same ill defined state as that of child abuse in the early 70s. Effective intervention is not always immediately possible, as exemplified by the two case summaries.

In Nova Scotia there are no adult protection laws. Thus, direct intervention may occur only at the permission of the elder. The only exception is the elder who is demented, where two physicians may declare this individual incompetent. Then the Public Trustee is empowered to intervene (he prefers that one of the physicians be a psychiatrist). However, since the Public Trustee has insufficient government funding and staff to provide guardianship for the person, only financial affairs are accepted as a responsibility.

Intervention is usually best approached by supporting both the elder and care giver, within the existing family structure. It is important to remember that both elder and care giver are victims, each in their own way, especially in the presence of mental deterioration. As Lezak has said; "one who has not cared for an ill, helpless, confused old person may not comprehend the helplessness, rage and frustration involved."<sup>27</sup> The problem can be overemphasized and viewed from only one side, so the problems of the care giver deserve attention.<sup>28</sup>

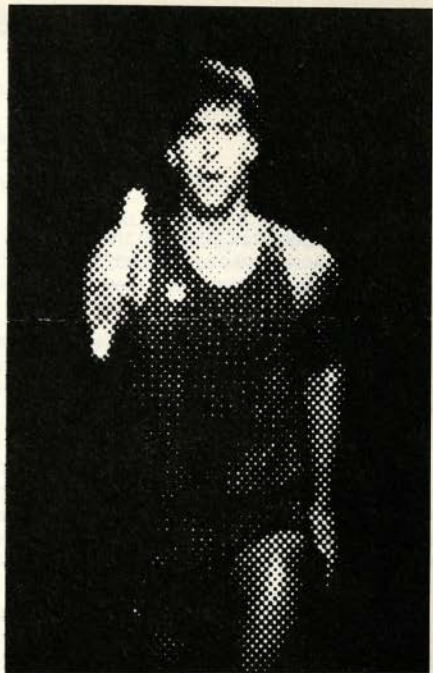
Nova Scotia still does not have a much needed coordinated home care program. Until that develops we must assess the needs of the elder, the capabilities and resources of the family care givers and attempt to meet those needs, utilizing currently available resources in the community. For example, a situation may be greatly helped by some simple measures: getting the elder out to provide free time for the principal care giver (day programs for seniors, church group attendance, part-time homemakers to share the load, respite care relief when fatigue, isolation and frustration become too much); teaching skills for care provision (transferring, use of aids for the disabled, incontinent pant use); ensuring financial support where needed; physiotherapy to help the elder become more independent. Each step may be tailored to the needs of that family.

It may be that the crisis has reached too great a level for supports to help. Remember that for many situations institutionalization may be the best and only answer.

The family physician is often in the best position to offer and coordinate help to such families. Even so, offers to help may be spurned. The trusting relationship that comes with time and continuity of care may, in the long run, enable intervention that is effective.

Finally, Nova Scotia needs coordination of home care resources and services directed to the support of families caring for their elders, thus preventing potential abuse and neglect by frustrated, ill equipped and ill supported relatives. □

**Extensive bibliography available from the author.**



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# Sir Ferguson Anderson, The World's First Professor of Geriatric Medicine

Barbara Hinds,\*

Halifax, N.S.

Sir Ferguson Anderson, OBE., MD., knighted by the Queen for his medical service to mankind, said in Halifax: "Get to 70 years. The one thing that matters is — the older you are, the longer you are likely to live."

Sir Ferguson is the world's first professor of geriatric medicine. Appointed in 1965 at Glasgow University, he is now emeritus consultant physician in Glasgow General Hospital. He is 70 years old and a sparkling example of the age group he is still studying and serving.

"A specimen does not often speak on the subject it represents," he quipped to an audience of physicians at Dalhousie Medical School, where he lectured on the health care of the elderly. He was in Eastern Canada to speak on geriatrics, through the aegis of Mitchell Franklin of Franklin Enterprises Limited.

Since the earliest days of his medical career (he graduated from Glasgow University in 1936), he said he has been attracted by the unique challenge of caring for older patients.

Today, medical students are not being adequately equipped to care for the growing number of older patients they will see when they enter private practice, and the reason for world "panic" is not because of the number of people over the age of 60, but those over the age of 80.

"The increase in the number of very old people is a massive change in demography," said Sir Ferguson.

Life expectancy at birth in Britain is now 71 years for a male and 78 years for a female. At age 85, the average life expectancy of a woman is 5½ years. The bill for the Queen's congratulatory telegrams to centenarians must have increased enormously because so many more people reach their 100th birthday, he said.

The age at which women start to outnumber men in a population differs from country to country. The female preponderance occurs after age 43 in Germany; after age 65 in England and Wales; after age 75 in Sweden and only after age 83 in Ireland, where men generally marry later in life than in other countries.

Sir Ferguson defined middle age as the period between 54 and 59 years; the elderly as 60 to 74 years; aged or old as 75 and over; and very old as 90 years or more.

Many of these people are still really very fit, he said. The process of adaptation is going on all the time, but with age comes loss of elasticity and loss of power. Skin, bones, lungs and the mind gradually change.

Old people become rigid like trees in a forest. If you move them, uproot them, they tend to die. Old people do not take well to changes in their circumstances. Their energy reserves diminish. However, some old people still feel as well at 90 as they did at 30.

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In a review of more than 2,600 people over 65 years of age, 85 per cent were found to have good vision. "If you look after your eyes, there is no reason why you should not have good eyesight when you are older."

In the elderly, 12 per cent were found to need help if they lived in their own house. "Old people are happier and healthier in their own homes," he said and even patients with Alzheimer's disease can remain in their own homes longer if their surroundings are simplified. In one instance, an Alzheimer patient was helped when her modern kitchen was simplified; her confusing computerized washing machine was replaced with wash tub and mangle.

Many general practitioners have a low awareness of the extent of physiological decline in sick, elderly people, said Sir Ferguson. Many of their disabilities are submerged like an iceberg. The physiological changes of age cause alterations in pain sensation, posture, temperature sensitivity, thirst, and reaction to drugs.

Because of diet deficiency, some old people develop scurvy or experience acute pain on touch, but their condition is easily treated with appropriate vitamin supplement. Conversely, some old people can fracture a thigh bone without experiencing pain and will simply complain they cannot move one of their legs.

In every case of fractured femur, the patient should be thoroughly investigated to determine the cause. In the U.K., after the surgical correction of these fractures, the patient is transferred to a unit where geriatric medicine is practised and the cause of the fracture is carefully explored, said Sir Ferguson.

One diagnosis is not enough. Older patients usually have multiple pathology. A serious geriatric service has many components, and people in the team should include specialists in foot care, dermatologists, dietitians, social workers as well as orthopedic surgeons and other specialists.

"The team approach pays a dividend, not just to the patients but to team members, whose strengths and skills reflect and shine on each other in the geriatric care team." □

## 131st ANNUAL MEETING 20th MEETING OF COUNCIL

*The Medical Society of Nova Scotia*

November 21 - 23, 1984

Nova Scotia Hotel  
Halifax, N.S.

# Psychogeriatric Services at The Nova Scotia Hospital

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The current in-patient and consultation/outpatient services provided by the psychogeriatric unit at Nova Scotia Hospital are described. It is apparent that the area of psychogeriatrics is underserved but that changes and improvements are not only likely in the near future, but should perhaps be considered a priority.

## INTRODUCTION

The numbers of people over the age of 65 in Canada and other western nations are increasing, both as a total number and as a percentage of the whole population. In 1971, the over-65s numbered 1.7 million in Canada; it is estimated that by 2001, they will increase to at least 3 million and by 2031 to 5 million. The 1981 census indicates that in Nova Scotia, approximately 93,000 are in this age group (11% of the total population of the province).

While this age group utilizes a disproportionate share of general medical services, there is evidence that in the field of psychiatric services, the over-65s are underserved. For example, it is estimated in the United States that the over-65s constitute only 4-8% of patients seen at mental health clinics, and only 2% of patients consulting private psychiatrists. In contrast, the rates of mental and psychological disorder among the over-65s are equal to or higher than the rates in younger age groups. 25% of all suicides occur in the over-65s; roughly 10% of this age group have clinically significant depressive symptoms (the rate is as high as 33% amongst residents of homes for the aged); and roughly 5-10% of this age group suffer from a dementia (rising to 20% or more of the over-80s).

## IN-PATIENT SERVICES

The psychogeriatric inpatient service at the Nova Scotia Hospital consists of a 28-bedded unit staffed by a psychiatrist (the author), social worker, and nursing staff; and with services from a family physician, occupational therapist, recreational therapist, and dietitian; and from other hospital departments. Admission bookings are made through the psychiatrist and there is frequently a waiting period before admission can be arranged.

For all admitted patients, a thorough biopsychosocial evaluation is undertaken, and primary care givers are involved in assessment, treatment, and discharge planning in the vast majority of cases. Over 90% of patients have a major medical illness requiring evaluation and treatment, and 70% have illnesses involving 3 or more bodily systems. Consultation with visiting specialists is a frequent occurrence. Average length of stay is about 90 days, with a range of 3 to 700 days.

Tables I to IV summarize some of the demographic and other data for the 121 patients discharged from the unit in the period April 1, 1983 to March 31, 1984.

\*Director of Psychogeriatric Services, Nova Scotia Hospital. Lecturer, Department of Psychiatry, Dalhousie University, Halifax, N.S.

TABLE I  
INITIAL REFERRALS OF INPATIENTS  
NOVA SCOTIA HOSPITAL PSYCHOGERIATRIC UNIT,  
APRIL 1, 1983 TO MARCH 31, 1984

Reason	% of total
Aggression	34.7
Confused Wandering	20.6
Deluded Depression	10.7
Agitation/Restlessness	10.0
Paranoid Thinking	8.3
Apathy	4.1
Poor Judgment	3.3
Excited Behavior	2.5
Suicidal	1.7
Others	4.1

TABLE II  
AGE AND SEX DISTRIBUTION OF PSYCHOGERIATRIC  
INPATIENTS, NOVA SCOTIA HOSPITAL, APRIL 1, 1983  
TO MARCH 31, 1984

	No.	% of total	Age Range (years)	Mean Age (years)
Male	63	52	50-92	74.8
Female	58	48	51-90	74.1
Total	121	100		74.5

TABLE III  
SOURCE OF ADMISSION AND DISCHARGE PLACEMENT,  
NOVA SCOTIA HOSPITAL PSYCHOGERIATRIC UNIT  
PATIENTS, APRIL 1, 1983 TO MARCH 31, 1984

	Admitted from		Discharged to	
	No.	% of total	No.	% of total
Home (own or relatives)	50	41.3	31	25.6
Home for Special Care	37	30.6	48	39.7
Domiciliary Care Unit (DVA)	4	3.3	3	2.5
Adult Residential Centre	2	1.6	2	1.6
General Hospital	24	19.8	12	9.9
R.R.C.	4	3.3	18	14.8
Community Hospital			1	0.8
Psychiatric Hospital (other province)			1	0.8

\*During the year, 5 patients died while still inpatients.

## OUTPATIENT/CONSULTATION SERVICES

The psychiatrist also provides consultation services to two local Nursing Homes, and to a few locally-resident outpatients. The focus of this service is very different from that of the inpatient service: diagnostic services are not as readily accessible; expectations of staff and residents may be very different; patients can be seen a maximum of once per week; and consultation may be directed at general issues rather

than at treatment of specific problems. Furthermore, staff are frequently inexperienced in dealing with elderly people with personality difficulties and behavioral problems and the process of re-education may be slow and painful at times. Some characteristics of patients seen in these settings over the past year are summarized in Tables V to VII.

## DISCUSSION

There is growing recognition that the psychological problems of the elderly are not the inevitable consequences of aging, and that many problems can be treated or managed very satisfactorily, thus improving the quality of life of both the identified patient and of the primary care givers. The growth in the size of the elderly population, and their high rates of

**TABLE IV**  
**PRINCIPLE PSYCHIATRIC DIAGNOSES**  
**NOVA SCOTIA HOSPITAL PSYCHOGERIATRIC UNIT**  
**INPATIENTS APRIL 1, 1983 TO MARCH 31, 1984\***

Diagnosis	No.
<b>Organic Mental Disorders</b>	85
Comprising the following: —	
Primary degenerative dementia	29
Multi-infarct dementia	16
Mixed Primary/multi-infarct dementia	4
Dementia secondary to other cause	6
Dementia — alcohol-related	5
Delerium tremens	2
Korsakoff psychosis	2
Alcoholic hallucinosis	2
Alcohol-related personality syndrome	1
Delirium	9
Organic personality syndrome	9
Schizophrenic Disorders	3
Paranoid Disorders	4
Major Affective Disorders	
Bipolar	2
Major Depression	17
Dysthymic Disorder	6
Agoraphobia	1
Anxiety State	1
Adjustment Disorders	12
Personality Disorders	9
Mental Retardation	1
No Psychiatric Disorder	5

\*A few patients had more than one principle diagnosis. DSM-III criteria used in establishing diagnosis.

**TABLE V**  
**REASON FOR REQUESTING CONSULTATION —**  
**OUT PATIENTS REFERRED TO PSYCHOGERIATRIC SERVICE**  
**NOVA SCOTIA HOSPITAL, APRIL 1, 1983 TO MARCH 31, 1984**

Reason	No.
Withdrawn, Unhappy	15
Aggressive	14
Agitated	10
Anxiety	2
Pain or Physical Complaints	2
Mood Swings	1
Other Reasons	7

**TABLE VI**  
**AGE AND SEX DISTRIBUTION**  
**NOVA SCOTIA HOSPITAL PSYCHOGERIATRIC OUTPATIENTS**  
**APRIL 1, 1983 TO MARCH 31, 1984**

	No.	% of Total	Age Range (years)	Mean Age (years)
Male	20	39	50-87	76
Female	31	61	51-91	78
Total	51			77

**TABLE VII**  
**PRINCIPLE PSYCHIATRIC DIAGNOSIS\***  
**NOVA SCOTIA HOSPITAL PSYCHOGERIATRIC OUTPATIENTS**  
**APRIL 1, 1983 TO MARCH 31, 1984**

Diagnosis	No.	% of Total
<b>Organic Mental Disorders</b>		
Primary Degenerative Dementia	15	29
Multi-Infarct Dementia	3	6
Dementia Secondary to Other Cause	3	6
Delerium	1	2
Organic Personality Syndrome	4	8
<b>Major Affective Disorders</b>		
Bipolar	3	6
Major Depression	2	4
Dysthymic Disorder	8	15.5
Adjustment Disorders	9	17.5
No Psychiatric Disorder	3	6

\*DSM-III Criteria Utilised

mental disorder, have provided the stimulus to develop comprehensive specialized services for the assessment and treatment of this age group in many countries.

While the psychogeriatric service at the Nova Scotia Hospital provides inpatient services for a small number of mostly behaviorally disturbed patients, and for a few out-patients, it is evident that only a very small minority of the at-risk population is being served by this facility, the only one of its kind in the province. Patients referred to us have frequently attracted a non-specific diagnostic label, and thorough evaluation has frequently not been done prior to admission due to the absence of a comprehensive assessment/evaluation service in most areas of the province. This brings up the question of how many elderly people in Nova Scotia have undetected but potentially treatable mental disorders — and, therefore, how many elderly people and their families could have their quality of life improved.

The solutions to these problems are complex but are in need of active pursuit. Proposals are being drawn up to reorganize and redevelop psychogeriatric services at the Nova Scotia Hospital (including the possibility of providing domiciliary assessment) and to plan comprehensive services for the elderly throughout the province. The enthusiasm expressed by delegates to a recent conference in Halifax ("Mental and Physical Health Care of the Elderly" May 3-4, 1984) indicates that already the province has a substantial resource base in terms of committed and experienced professionals. Hopefully, this enthusiasm can be channelled successfully into establishing and maintaining realistic services to meet these important challenges. □

# Geriatrics and the Psychiatry of Old Age

Roy Alan Fox,\* M.D., F.R.C.P.(C),

Waverly, N.S.

Geriatrics has been defined in various ways. Alex Comfort has defined it as "the rescue of the misdiagnosed", and an anonymous student defined it as "a second rate speciality looking after third rate patients in fourth rate facilities." However, it is best defined as that branch of general internal medicine which deals with the clinical, preventive, remedial and social aspects of illness in the elderly. Elderly, applies to anyone over the age of 65 years. The geriatrician becomes skilled in dealing with patients with multiple disease states, and it is not surprising that a significant number of patients have psychiatric illness. More than a third of the patients referred to a geriatrician have confusion as a major problem, and sometimes it is difficult to determine if the referral should have been to a psychiatrist.

If the family practitioner needs consultant advice, then with some patients the choice is obvious. For example, the patient who has paranoid or persecutory delusions, or is obviously depressed, the correct choice would be a psychiatrist. If the patient is elderly, then a psychogeriatrician (geropsychiatrist or geriatric psychiatrist) would be most appropriate. The elderly patient who is confused and who manifests inappropriate behaviour such as wandering out of doors, inappropriately dressed at inappropriate times, is right for psychiatric evaluations. The elderly patient who has significant physical ailments including impaired mobility is appropriately referred to a geriatrician.

This division of labour applies in the United Kingdom, to the care of the demented elderly. Those who are mobile and demented are looked after by psychogeriatricians, those immobile and demented by geriatricians. This approach needs to be examined critically to determine if it is the best solution and the one most suitable for local needs.

A cynical commentator on this approach suggests that the demented, agitated patient is referred to the psychiatrist who prescribes tranquilizers. The patient becomes calm, remains confused and is also immobilized. At this point, referral to a geriatrician takes place. The geriatrician immediately stops all drugs and reactivates the patient who once more has the ability to wander. The cycle recommences since the patient is now eligible for the psychiatrist! Although this is a mythical scenario, it is described to illustrate the potential problems with strict division of labour.

## PATIENT CHARACTERISTICS

Any service in the field of health care should be designed to meet the needs of the patient. All too often, patterns of health care are still being developed and modified to meet the needs of the health professional. Perhaps this is why the elderly patient is more likely to suffer at the hands of the health professional; they are less "pliable" and less able to adapt to the confines of modern technological medicine.

\*Professor, Department of Medicine, Dalhousie University Halifax, N.S.

The patients we are discussing are old, usually over the age of 75. The majority are significantly disabled, and dependent on others for help with activities of daily living. A frequent characteristic is that they seem to be 'in the way'. These patients are confused, and perhaps as a result of this may not be overly concerned with their own fate.

## PATIENT NEEDS

Such patients as I have described require certain things if their needs are to be met.

The *environment* should be familiar and non-threatening. Frequently this is best provided at home, often the best place for a consultation. If the patient has deteriorated perhaps due to a new illness, then the patient may need assessment within hospital. Most hospitals are confusing places to be, and do not provide calm environments. Can anything be more unsettling or confusing than an average acute care hospital? Yet, these patients need the resources of a modern acute care hospital and therefore we need to design special areas within these hospitals. In these areas, the surrounding activity should be minimized, and it should be calm. The patient once admitted, is not frequently moved (a common practice). The care providers (whatever the setting) need to be consistent in their approach. Within hospital the nurses, and others, need special training. They need to be comfortable and competent in dealing with all common acute medical problems. They also need to be comfortable in dealing with the confused. They should be aware of the principles of milieu therapy and reality orientation. In such a setting, physical restraints, enforced immobility and pharmacological restraints are kept to a minimum, and the latter used judiciously.

Physicians, whatever their background, need to be comfortable in dealing with the confused and need experience. The physical problems that they will commonly be dealing with are poor mobility and falling, incontinence of urine, and fecal loading and incontinence. Any other disease or intercurrent illness needs rapid identification and treatment. At these times, the dementia is likely to increase significantly with concomitant increased dependency and increased suffering for both patient and care provider. The common problems relating to dementia include overactivity, agitation and insomnia. The physician needs to be aware of the stress and strain of looking after such patients and should be on the lookout for care provider exhaustion.

## TEAM MANAGEMENT

Patients with brain failure need full and careful assessment of all their needs. There are different health professionals who play varying and important roles. The physician and the nurse have already been mentioned.

Social workers play an integral role in management. When kept at home, such patients frequently need a variety of support services that they could provide themselves. If

admission to hospital is required, the social support network needs to be maintained for discharge. Placement in institutions is often inevitable and help is needed here.

Occupational therapy helps in the assessment of needs and in diagnosing the levels of problems. Treatment can be important in helping the patient function at optimal level.

Poor mobility is a common problem and physiotherapy has an important role in assessment and treatment. Both these disciplines are important and contribute to ongoing care but recreational therapy becomes more important as the disease progresses, particularly in a long term care setting.

Dietitians and pharmacists have important contributions to make to ongoing management. Psychologists have an important role in diagnosis, in designing therapy for both the individual and through the environment, and in the support and training of care providers.

The important feature here is a multidisciplinary team approach in both assessment and in ongoing care.

## THE IDEAL

The patient who deteriorates at home, with manifestations of brain failure over a prolonged period of months and years, needs full assessment. Often this is best done at home where it is least disturbing. In order to complete the assessment, full diagnostic facilities are required. This is probably best done in the setting of a Day Hospital. The consultant can be either geriatrician or psychogeriatrician. The consultant needs to provide more than a diagnosis, and more than simply excluding reversible or treatable causes. The family practitioner is likely to require support throughout the management of the chronic states which may go on for years. Help with behavioural changes that produce care provider exhaustion, help with insomnia and help with coping with sudden increase in dependency and worsening of brain failure. The help that is often needed in this latter situation is in diagnosis of underlying intercurrent illness and also in respite care, either on a daily or a term basis.

Apart from consultant support, patients need assessment by other health professionals. If this cannot be done at home or in a Day Hospital, it should be done in hospital. These patients are usually confused and do not fit in to the usual acute medical ward. If admitted to a psychiatric ward, there may be inadequate diagnostic facilities. The medical coverage might also be inadequate since those patients frequently have significant physical problems.

These patients should be admitted to special units in fully equipped, adequate hospitals. The patients can be under the care of family physician, psychogeriatricians or geriatrician, but the consultant support that is needed is in geriatrics and in psychiatry. The most important skills required are those of the nursing staff who are trained to cope with the confused patient and are competent and comfortable with the acutely ill. This unit is a psychogeriatric assessment unit.

To work effectively, such a unit needs other kinds of support. This is a limited and valuable resource, and is not a long term care area. Thus, the psychiatrist and geriatrician will need to move patients through effectively. For placement back home there needs to be good community support services which are well coordinated and integrated. Resources such as geriatric and psychogeriatric day hospital are important. A significant number of patients will need long term care, such resources should be adequate for both the

mentally and physically frail. The geriatricians will also need access to beds where recovery takes longer, reactivation beds.

Such resources will guarantee that the psychogeriatric unit remains viable. Patients can be moved out so that the acutely ill can be coped with.

## PRESENT RESOURCES

At the present time, there is a single psychogeriatric assessment unit in Nova Scotia, at the Nova Scotia Hospital. Such units need to be sited around the Province to meet the needs of the elderly, without requiring them to travel long distances. There is one geriatric assessment unit at Camp Hill Hospital.

Other areas of the geriatric services have yet to be developed. Community support services exist but are generally inadequate and not well coordinated. Long term care at home is possible for the mentally frail but is very demanding. The majority of severely demented patients require institutional care. With a few notable exceptions, Homes for Special Care are not designed to cope with the confused elderly. We need to look at environmental design, and training of the care providers.

## CONCLUSION

Planning for the future requires cooperation between social services, health and housing. Within health, different professions need to come together. Patients often need physicians with different skills and expertise not found in one individual. It is of the utmost importance that the needs of the patients are kept in mind, and territoriality is kept out. The most effective units will necessarily cross traditional department barriers.

It is becoming increasingly important to be able to deal effectively with the confused elderly patient. We must act now if we are to avoid being overcome by an ever increasing problem. □



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# Geriatrics: A Fertile Meeting Ground for Medicine and Psychiatry

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Toronto, Ontario

**The development of the relatively new subspecialty of geriatrics offers a unique opportunity for psychiatry and medicine to move closer together. Geriatricians and psychiatrists working in a collaborative manner can help to diffuse unnecessary tensions, break down artificial barriers and, ultimately, enhance the care of the elderly.**

**A brief description is given of the development of a psycho-geriatric service in a university general hospital. In this setting, the opportunity to expose a wide range of trainees to a positive experience in geriatrics offers the best hope of changing attitudes and patterns of clinical practice. In the face of inevitable pressures by the elderly on the health and social services, innovations in service delivery and education are essential.**

Psychiatry, as a relatively new medical subspecialty, has struggled through some difficult years of growing pains and identity crises. It has been and remains to some extent an enigma to many medical colleagues who have been frustrated, perplexed, exasperated, disappointed and too infrequently gratified by what psychiatry has to offer. However, in recent years a strong movement within psychiatry has encouraged closer ties to mainstream medicine and has attempted to correct the wandering too far towards psychology, metapsychology and sociology. There is a growing recognition that psychiatry must be part of the medical establishment and must respond to the real clinical needs in the hospital and in the community.

Geriatrics, one of the newest medical subspecialties, presents a unique opportunity for physicians to recognize the need to integrate both mind and body. In almost every medical illness of old age it becomes an inescapable fact that the mental and physical aspects of the individual are intimately related. This calls for expertise in both fields in order to establish diagnoses, formulate management plans and organize an effective health care delivery system.

The depressions of late life are known to be associated with an increased physical and psychological morbidity and mortality.<sup>1-3</sup> Depression can be secondary to hypothyroidism, carcinomas and a host of other chronic medical disorders, not to mention the complications of many pharmacological treatments. In particular, the multiple-problem, frail and chronic patient poses a challenge that is unprecedented in modern medical history. The sheer weight of numbers of these patients on the health care and social systems has forced the medical establishment as well as governments to recognize the importance of the elderly in future planning.

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There is considerable evidence that on acute medical and surgical wards psychiatric morbidity ranges up to 50%.<sup>4</sup> Consequently Lipowski<sup>5</sup> has argued convincingly for the need to integrate liaison-psychiatry and geriatric-psychiatry in response to the realities facing general hospitals today. It has become evident that liaison-psychiatry is de facto geriatric psychiatry with particular emphasis on the chronic diseases and organic mental disorders. In this way, true "liaison" is a necessity between medicine and psychiatry.

This need to collaborate has culminated in some centres in the development of joint units in which the psychiatrist and geriatrician are true partners.<sup>6,7</sup> Joint units of this type have attempted to eliminate the unnecessary tension and struggle between medical and psychiatric services when chronic, difficult patients frustrate and challenge the capacity of the system to accommodate them. When geriatric medicine and psychiatry collaborate, the service attempts to meet the needs of the patient rather than moulding the patient to the specific interests of the facility or service. It is a mutual need that can be gratifyingly met by goodwill and effective organization of health care services.

The general hospital setting is the ideal (although not the only) setting from which to launch such a service for the elderly. Because of the multiple medical and psychiatric needs of the patients and the concomitant need for radiological, laboratory investigations and medical/surgical consultation this setting facilitates caring for these patients. Furthermore, the university general hospital offers an opportunity to provide education and training to a wide range of medical and psychiatric trainees in order to prepare them for the realities of clinical practice. Too often in the past, medical students have graduated with a good knowledge of pheochromocytomas and yet are bewildered and overwhelmed when faced with their first demented old lady who has been wandering at night. "They didn't teach me about this in medical school!" Through a positive clinical experience students can be desensitized to the problems of the elderly. In this way, the willingness and necessary skills to deal with the elderly can be enhanced.

At Sunnybrook Medical Centre, University of Toronto, we have developed a psychogeriatric service that is fully integrated into all clinical components of the larger Department of Psychiatry. Thus we have avoided the tendency to isolate geriatrics from the main curriculum. The service is a specialized one, yet by integrating into the Department it can offer exposure in geriatrics to a wide range of trainees. These include psychiatric residents who want a specialized experience in geriatrics, general psychiatry trainees, family practice residents, and medical students as well as geriatric medical residents.

The geriatric psychiatry service and the geriatric medical team have a mutually beneficial liaison. For example, the geriatric medical resident acts as the medical consultant on

the geriatric psychiatry inpatient unit while the geriatric psychiatry resident consults to the geriatric medical wards. When the geriatrician and psychogeriatrician actually become members of the opposite teams, the tendency to dichotomize mind and body is readily diffused. Prior experience has shown that general medical and psychiatry residents often lack the enthusiasm and even the expertise necessary to deal effectively with elderly patients who suffer from both medical and psychiatric problems. By better integrating geriatrics into the general training program this unhappy state of affairs may ultimately be improved.

The opportunity for students to be exposed to geriatrics early on in their training has been shown to be an important variable in improving attitudes towards the elderly.<sup>8</sup> Our own recruitment record is gratifying. Over the past five years, six out of the ten general psychiatry residents who had spent six months on the geriatric inpatient unit have ultimately returned to do further training in geriatrics in their later years of residency. Perhaps, most importantly, we have been able to add a significant geriatric component to the training of general psychiatry and family practice trainees who, ultimately, must carry the brunt of the clinical load that we see looming ahead of us in the not too distant future.

The predictable demographic changes of the coming decades demand a change in attitude and pattern of clinical practice and education. Geriatrics must and will become a greater and fundamental component of medical practice and

training. Furthermore, with a changing attitude within psychiatry and with the growth of geriatrics as a subspecialty, one can hope for an ultimate result that will enhance the care of the elderly. Moreover, a better understanding and improved relationship that might be developed between medical and psychiatric colleagues, is a result that is very much desired. □

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# Colposcopy and Pap Smears: The Necessary Tools for Prevention of Cancer of the Cervix

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In Nova Scotia, the Provincial Pap Smear Registry reports more than 100,000 tests are performed annually.<sup>1</sup> During 1981, it has been estimated 30.5 percent of the female population was screened.<sup>4</sup> Women are being referred now to regionally established colposcopy clinics for further evaluation of suspected pre-malignant and malignant conditions of the genital tract because of abnormal Papanicolaou (Pap) smears.

For varying reasons, both the incidence and mortality of invasive cancer of the cervix worldwide and in Nova Scotia has shown a steady decrease between the years 1965 and 1978. A study by Tupper *et al.* of 1068 patients with invasive cancer of the cervix in Nova Scotia, found no apparent improvement in survival.<sup>2</sup> This has led the authors to stress "the emphasis in this province must now focus on the earlier diagnosis of cervical neoplasia and its precursors." The successful treatment of these precancerous conditions will prevent the development of invasive cancer.

An analysis of the four-year period 1977-1980 was undertaken, supported by a grant from the H.B. Atlee Fund, to determine if the objectives of the colposcopy program were being met.

- a) Is there an age association to the degree of dysplasia?
- b) Would there be close association between Pap smears and the histological diagnosis of colposcopy-directed biopsies?
- c) When conization or hysterectomy were recommended, either due to canal involvement or other decision factor, what was the association between the colposcopy clinic diagnosis and surgical specimen?
- d) To determine the success of treatment modalities used for cervical intra-epithelial neoplasia (CIN). And finally,
- e) How effective is our follow-up surveillance?

## MATERIAL AND METHODS

During the period 1977 to 1980, information was accrued on 1053 patients referred to the colposcopy clinic. The accumulation of the colposcopy data was supported by a grant from the Nova Scotia Division of the Canadian Cancer Society.

Indication for referral included: a) an abnormal Pap smear; b) an abnormal appearing cervix; or c) a lesion elsewhere in the genital tract. Every case evaluated at the Departmental Clinic began with genital tract visualization. Each patient had two Pap smears — one from the exocervix and one from the endocervix — submitted routinely to the MacKenzie Diagnostic Centre, Department of Cytology.

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From the Department of Obstetrics and Gynecology, Division of Obstetrical Oncology Victoria General Hospital, Halifax, N.S.

A specific procedure for obtaining the cytology specimens and fixing the material is recommended: With a saline-moistened cotton-tipped applicator the endocervical smear is taken first. This is transferred immediately to a glass slide and sprayed with fixative (cytospray). Then the Ayre wooden spatula is used to scrape cells from the exocervix and this specimen is likewise transferred and fixed with cytospray. It is imperative the slides be fixed immediately because mucus impedes air-drying of smears, and degeneration of cervical cells is proportional to the rate of air-drying. This degeneration of cells greatly inhibits the ability to access the degree of cytologic abnormality accurately.<sup>3</sup>

Now that cytology has been completed, a colposcopic examination is proceeded with. Those cases which cannot be totally evaluated because of extension of the abnormal lesion into the endocervical canal, require an endocervical curettage which is carried out during the initial visit and/or are scheduled to undergo cervical conization. Another indication for endocervical curettage and possible conization is a significantly abnormal Pap smear, without corresponding colposcopic visual abnormality.<sup>4</sup>

Finally, a pelvic examination is performed to exclude associated pathological conditions of the genital tract.

The current concept, and hence classification, of dysplasias indicates that the usual progression is from an "abnormal" metaplastic epithelium to mild, moderate and severe dysplasia; then to carcinoma in situ (CIS). Concurrent with this, is the classification of CIN-I, CIN-II, CIN-III (with CIN-III encompassing severe dysplasia and carcinoma in situ). For the purpose of this report, the grouping of colposcopy-directed biopsy pathology, will utilize the mild, moderate, severe dysplasia, and carcinoma in situ classification.

## TERMINOLOGY

A woman having commenced menarche, has a transition of cervical epithelium from columnar cells to squamous cells known as metaplasia. As time passes, this metaplastic process progresses toward the endocervical canal, thus creating an area known as the transitional, or transformation zone. It is this area that in some women, will undergo dysplastic change; in other words, these women will have an abnormal transformation zone.

## CLINICAL FINDINGS

Colposcopists entered initial evaluation and follow-up data on 1053 cases during the four-year period studied. Of these, a total of 641 patients were proven, on biopsy, to have either dysplasia or carcinoma in situ on their first visit. All degrees of dysplasia were well represented, with 126 having mild dysplasia, 168 moderate and 168 severe dysplasia, and 179 with CIS.

Figure 1 shows patients with mild dysplasia whose biopsy reports agreed with their previous cytology reports in 47 percent of cases. When moderate dysplasia was found on biopsy, this agreement increased to 78 percent. Finally, close to 10 percent of each group were referred with Paps indicating severe dysplasia to CIS. However, false negative cytology occurs in a greater percentage of mild cases, and even when biopsy showed moderate dysplasia, a false negative Pap occurred in 17 percent of the cases.

#### AGREEMENT BETWEEN BIOPSIES AND PAP SMEARS

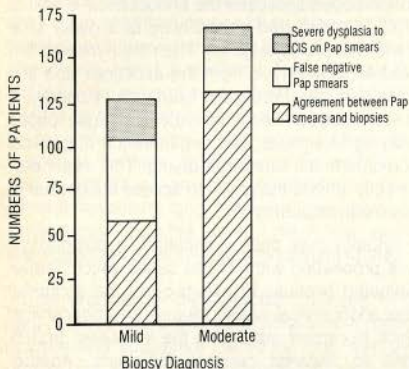


Figure 1

Figure 2 indicates increased agreement to approximately 65-70 percent between biopsies showing severe dysplasia/CIS and cytology. There is a persistent 10 percent false negative rate and, even more striking, 22 percent of patients with biopsy-proven significant dysplasia, present with Paps showing mild or moderate degrees of abnormality.

It has been reported previously that with the progressive nature of CIN, its severity should increase with age.<sup>5-7</sup> This holds true also in our experience: 38 percent of the age group 30-34 have CIS on biopsy compared with 29 percent of the 25-29 age group, 20 percent of the 20-24 age group, and 10 percent of the 15-19 age group.

#### AGREEMENT BETWEEN BIOPSIES AND PAP SMEARS

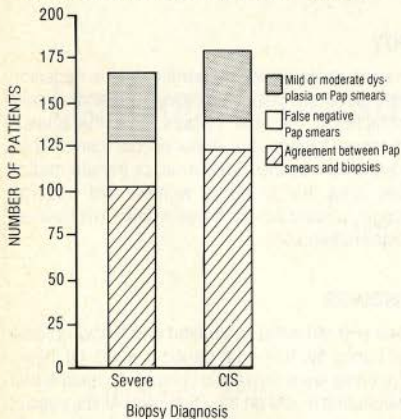


Figure 2

#### TREATMENT MODALITIES

Much has been written regarding the treatment of CIN. The current preference is to treat selected patients on an outpatient basis, either by excisional biopsy, cryotherapy, electrocautery or more recently, by laser evaporation.<sup>8,9</sup>

Prior to colposcopy, it was necessary to hospitalize women with abnormal cytology for definitive diagnostic measures (cervical conization). While the number requiring this procedure has been reduced due to colposcopy, there does remain a need for conization on occasion for both diagnostic and therapeutic purposes. When the extent of the lesion spreads beyond the external os and it is not entirely visible, or if, despite repeated abnormal cytology, no dysplastic change is defined for target biopsy, these women must be coned to make an accurate diagnosis and rule out invasive cancer.

Figure 3 shows that following colposcopic examination with biopsy, there were 51 patients who underwent conization as initial therapy and 104 who had a hysterectomy. Eleven of the 51 women who underwent diagnostic conization have undergone hysterectomy as originally planned. Four had residual dysplasia in the hysterectomy specimen, (three had severe dysplasia or CIS and one mild dysplasia). Seven hysterectomy specimens were negative. One additional patient had a repeat conization for persistent dysplasia.

#### TREATMENTS FOLLOWING BIOPSY DIAGNOSIS

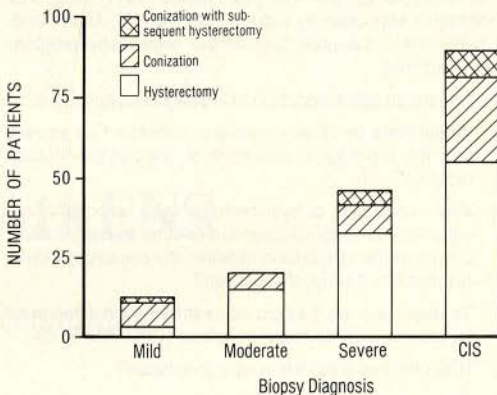


Figure 3

It is quite obvious that conizations are performed more frequently as the severity of CIN increases. This indicates that an extension of the lesion into the endocervical canal occurs more commonly as the degree of CIN increases. The number of hysterectomies performed also increases with the severity of CIN but, since the severity of CIN increases with age, these women may be opting for hysterectomy for sterilization benefits.

Figure 4 reveals that agreement between biopsy and hysterectomy specimens ranges from 55 to 80 percent. Again, there is a high false negative rate for the milder forms of dysplasia. Note that when all degrees of dysplasia/CIS are included, the agreement increased to 70 or 80 percent. One patient with CIS on cervical biopsy and on endocervical curettage had occult invasive Ca in the hysterectomy specimen. Conization is indicated when microinvasive

carcinoma is found on cervical biopsy and/or when CIN is present on an endocervical curettage.

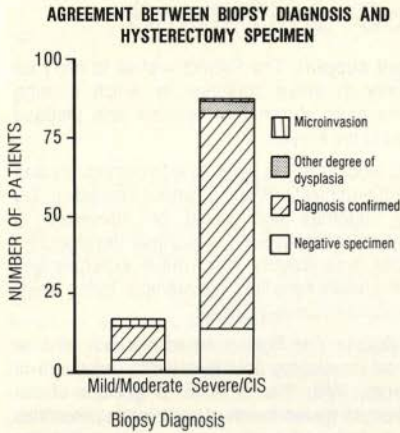


Figure 4

Figure 5 shows that when the biopsy indicated severe dysplasia/CIS, the agreement with the conization specimen was greater than 90 percent. It is somewhat disturbing when one realizes that in 30 percent of the biopsies suggesting mild to moderate dysplasia, the conization diagnosis showed severe dysplasia to CIS. This clearly indicates that in situations where the entire abnormal transformation zone cannot be visualized, a greater degree of abnormality often exists in the endocervical canal. This emphasizes further the need to select patients carefully for conservative treatment. Conversely, patients with disease process involving the endocervix must undergo a conization.

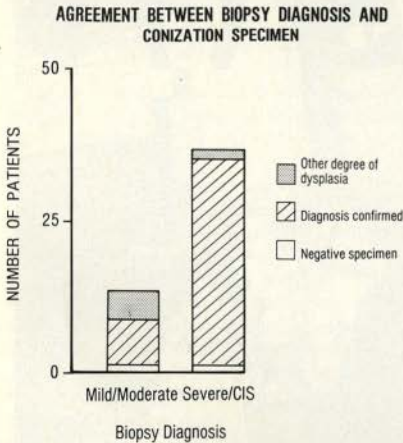


Figure 5

### CRYOTHERAPY

Cryotherapy was the treatment of choice for 49 percent or 316 patients of the 641 cases (all degrees of CIN analyzed). Because this procedure does not require anesthesia, it is very suitable for an outpatient facility after a satisfactory colposcopic examination has been performed. Our clinic utilized the single-freeze technique using a liquid nitrogen applicator, although freon and CO<sub>2</sub> were used when the clinic

was first established. We look for the formation of an iceball 5-8 mm beyond the outer edge of the probe as being adequate.

The greatest single problem has been the apparent patient disregard for the importance of follow-up until our criteria of cure has been satisfied. The requirement of a minimum of 18 months surveillance (with normal cytology and colposcopy findings) was used for follow-up to be considered sufficient. Altogether, 16 percent of the cryosurgery patients had unsatisfactory follow-up.

The cure rate for cryotherapy after the initial treatment and satisfactory follow-up for cases with mild dysplasia was 85 percent. However, the cure rate became progressively worse as the degree of dysplasia increased, so that CIS had a cure rate of only 62 percent after initial treatment. This resulted in an overall cure rate of 68 percent.

There were 88 cryotherapy patients who required further therapy. Nineteen of the patients had an excisional biopsy, of which two required a third treatment to eradicate their disease. Twenty-four patients underwent a second cryotherapy and eight of these went on for a third treatment procedure. Seven were cauterized, of whom two needed further therapy. Twenty-six had a conization and two of these patients went on for further cryotherapy. Twelve patients underwent hysterectomy. One patient, upon returning for follow-up, was found to have an adenocarcinoma of the cervix and was treated with radical pelvic surgery. Clearly, patients undergoing cryotherapy with present techniques require close follow-up. Most persistent problems were identified within the first 6 months post-initial treatment.

### CONCLUSIONS

1. Cervical intra-epithelial neoplasia (dysplasias and carcinoma in situ) are disorders of young women.
2. Cytology still remains the most effective screening procedure. We have found that false negative cytology occurs most frequently with the milder degrees of dysplasia (up to 40 percent) and less so (12 percent) with the more severe degrees. Twenty to twenty-five percent of women with Paps showing mild to moderate dysplasia have severe dysplasia or carcinoma in situ on directed colposcopic biopsies. Therefore, all women with any degree of dysplasia on Pap smear should have a colposcopic examination as the next step in that evaluation (not just a repeat Pap).
3. "Unsatisfactory" colposcopic evaluation must be followed by conization to exclude greater degrees of pathology prior to other treatments being performed (30 percent of conizations for mild/moderate dysplasia had severe dysplasia to carcinoma in situ present). One patient with an ECC showing CIS had microinvasive carcinoma at hysterectomy. A "Satisfactory" colposcopic evaluation should result in NO surprises upon receipt of the hysterectomy histology report.
4. Conservative therapy for cervical dysplasia and CIS must continue to be assessed critically. Patient selection techniques for such conservative treatment procedures must be evaluated and follow-up examinations assured.

Acknowledgements and References on page 129.

# Third World Medical Equipment Assistance Project

This Project is based in Halifax, Nova Scotia, Canada. Its purpose is to provide free of charge *used but serviceable* medical, laboratory, dental, and other health-related equipment to developing countries. The emphasis of the Project is to provide to these countries only equipment that is in good condition and will immediately be useful to the country. It is not intended to provide equipment for which a country does not presently have the technical capacity to use.

The scope of the Third World Medical Equipment Assistance Project is potentially very large. It receives donations of equipment from all four provinces of Atlantic Canada: Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland. In doing so, it has the support of the Departments of Health of these four provincial governments. Through the provincial Departments of Health of these Canadian regions, all hospitals and health care institutions in these provinces are encouraged to donate equipment to the Project as it becomes redundant to their own system. This should ensure a continual and growing supply of equipment for use by developing countries, since the capital budgets for hospitals and other health care institutions in each province is very large. In 1984, this Project intends to ship approximately \$600,000 worth of medical equipment overseas, and to ship increasing amounts in subsequent years as the Project grows.

In addition, since some of the donations to developing countries may involve transfer of technology, this Project intends to evolve certain training programs, whereby Canadian technicians from the Atlantic region could train people in developing countries in the appropriate use of the technologies being represented by medical equipment.

Equipment donated by hospitals and health care institutions to the Project is warehoused in Halifax. It is checked for reliability and serviceability by competent professional technicians who deal with medical equipment in their daily work. It may then be shipped by container or by air, depending on the volume and type of equipment, to a recipient country or region.

It is the intent of this Project to encourage an active relationship of co-operation between the donor country and the recipient country. This active relationship should be carried on in a number of ways:

1 **Matching equipment to needs.** In conjunction with the expressed needs and wishes of the developing country, the Project would like to match its equipment to the requirements of developing countries. This means that the developing country should not simply ask for medical equipment in an undifferentiated manner; but should rather provide lists to the Project of necessary equipment and show where and how it will be used. In this regard, the Project will also consider appeals for specialized equipment in specific cases, e.g. supply of hearing aids, eye glasses, or specific other materials, which in some instances, may be shipped by air. In general, the type of equipment which the Project has available cross the whole range, from simple necessities like linen, right up to complicated anesthetic and radiological equipment.

- 2 **Government support.** The Project wishes to carry on its work only in those countries in which existing governments have shown their interest and pledged their support to the Project.
- 3 The Project would also be working with community and development organizations and business interests in the developing countries and would be interested in particular in establishing links with those development and business organizations which have expertise and interest in the health care field, for example, those which operate clinics or mission hospitals.
- 4 **Customs duties.** The Project would naturally wish to operate in all developing countries with a minimum of encumbrances. With this in mind, a gesture of co-operation from all governments of participating countries is sought in terms of local transportation within the recipient countries, and of custom duties. In particular, a written undertaking from the government of each participating country that custom duties will not be payable on any of the donated equipment at any time would be needed.



Medical Equipment in use in Nicaragua.

In general, the Project's plan for an active relationship between donating institution and recipient countries, calls for a three-way relationship between the Project, community and health development groups in the recipient country, and

Continued on page 129.

## Small-Time Computing for The Family Doc

Marshall S. Godwin, M.D., C.C.F.P.,

Canso, N.S.

The possible use of computers in clinical practice has always been an intriguing concept to me. My personal opinion is that computers will, in the near future, be commonplace in doctors' offices. For the present, however, it seems that good software has not yet been developed — at least not for the Maritimes. The price of a combination hardware and software package is still, in my mind, fairly high, the usual cost being \$20,000.00 to \$30,000.00. Like most people I am waiting for the prices to come down a little more, and for some sort of integrated system to be developed, and perhaps for the storage capacity of hard disk systems to increase even further so that most, if not all, patient information can be placed on the system.

Right now, computers are great for billing purposes and for doing the accounting and keeping a schedule of appointments, etc. But I think the real future of the office computer is more in handling the large base of patient information in an organized fashion rather than in the financial aspects of practice although that will, of course, continue to be quite important. I realize there are clinics that are set up now to handle large database systems for doctors but these are certainly the exception and, for the time being, computers seem to be something that most doctors are thinking about but that's about as far as we are willing to go. We are waiting for the 'obviously best' system to show itself; waiting for the 'fog of confusion' to melt away; and waiting for computers to be shown to be more tangibly useful.

But on to what I intended to write about. Approximately a year ago I bought myself a home computer to learn the basics of computing (if you'll pardon the pun). I started off with a 16k model and taught myself BASIC. I learned all the catchwords so I could talk to salesmen and read books. After awhile I had a good feel for what computers could do and couldn't do and how I could put mine to some use. I upgraded my system and it now consists of a 64K TRS-80\* Colour Computer with a Disc Drive and a dot matrix printer. The whole thing including the computer, disk drive, printer, software, a good supply of mini-diskettes and a colour TV cost less than \$2000.00. If you add another disk drive and a proper monitor you could probably use it has a small office system with the right software but it would be a bit slow and cumbersome. You really need the storage capacity and speed of a hard disk system to make a computer useful in an office.

I keep my system at home and what I would like to do here is to outline how I am using it for medically related activities. Currently, I have four different databases or files that I am 'inputting' data on.

Mailing address: P.O. Box 160, Canso, N.S. B0H 1H0

\*TRS-80 is a trade mark of Radio Shack/Tandy Corp.

### A MEDICAL ARTICLES FILE

In 1977 in the first year of my Family Practice Residency, I started a medical article file whereby I would tear out pertinent articles from medical journals, give each article a number and file them numerically in a filing cabinet. For purposes of retrieval I kept a 8" x 5" index card file of medical topics and the numbers of articles pertinent to each topic were listed on the appropriate index card. If I wanted to review articles on Diabetes Mellitus, I simply pulled the index card on Diabetes and listed on it would be the numbers of all papers I had on Diabetes. The system is cross indexed so that there is also a card on Retinopathy. If I wanted to review Diabetic Retinopathy I simply pulled both index cards (Diabetes Mellitus and Retinopathy) and article numbers that appeared on both cards would of course pertain to Diabetic Retinopathy so I would just pull those articles from my cabinet. I got this idea from one of the staffmen at the Family Medicine Centre.

TABLE I

FIELD: HEADING	LENGTH
1. — ARTNUM	4
2. — ARTICLE NAME	64
3. — AUTHOR	12
4. — JOURNAL	4
5. — DATE	4
6. — MAJ CATEGORY	30
7. — MAIN TOPIC	30
8. — KEYWORDS	107

Total data space = 255

This segment is stored on Drive 0

\*Pro-Color-File is a trade mark of Derringer software.

\*\*These are the different categories under which I enter information for each article in my Medical Article File.

This system of course lends itself quite nicely to being computerized and this was the first thing I did when I upgraded my computer to a disk-based system. Below is a printout of the information fields that I enter information on for each article. An example of 'Major Category' would be Cardiology or Urology or Family Medicine, etc. An example of 'Main Topic' would be Diabetes or Pneumonia or UTI or whatever the article was primarily concerned with. The 'Keywords' is a large category and includes all pertinent words or topics that I might wish to use when recalling the article. As you can see for each article, I also record information on the author, the journal it came from, the date of publication, and the article name. I can therefore retrieve articles by author or by journal or by date, etc.

Since I enjoy working with computers more than 8" x 5" index cards, I find that my motivation to maintain the file is greater. Previously, articles would stack up for months before I got around to entering them into the system. Now since I have computerized, I usually enter the information the same week I receive the journal.

### A PATIENT-CONTACT REGISTER

With this system, I am trying to collect enough data so that after a year I will be able to do an analysis of the types of problems and patients I am seeing — a practice audit is what it is I guess.

Below is a printout of the data fields into which I enter information on each patient. Essentially what I do is bring my MSI cards home each evening and spend about half an hour entering in the information for that day. I record the date, the patient's name, where I saw him (office, OPD, housecall, etc.), what time of day it was (Day, Evening, or Night), the diagnoses, the patient's address, sex, and year of birth.

TABLE II

PRO-COLOR-FILE	
FILENAME: PATCON**	
DEFINED DATA FOR SEGMENT — 1	
FIELD: HEADING	LENGTH
1. — YEAR	2
2. — MONTH	2
3. — DAY	2
4. — LAST NAME	12
5. — FIRST NAME	13
6. — DOCTOR	6
7. — LOCATION	3
8. — ADMITTED	1
9. — TIME (D/E/N)	1
10. — DIAGNOSIS	48
11. — YOBB	4
12. — SEX	1
13. — ADDRESS	3

Total data space = 98  
This segment is stored on Drive 0

\*\*These are the different categories under which I enter information for each patient contact in my Patient-Contact Register.

I practice in a rural area and my patients come from one of seven or eight small communities. When I enter the address, I simply use a 3-letter abbreviation for whichever community they live in. When I finish a year of data collection, it will be interesting to see if there are concentrations of various diseases or problems in various areas.

Probably, there will be nothing very earthshaking in the results of my analysis and it will not mean a lot to anyone except me. But that's o.k. because I'm doing it for me! I like the idea of developing a better understanding of the contents of my practice. Which parts of our catchment area do my patients tend to come from? What types of problems am I seeing most commonly? What is the age and sex distribution of my practice? And so on. Perhaps I'll come up with as many questions as answers but that's o.k. too because the first step in Family Practice research, as in any other research, is to have a question you want answered.

### AN INPATIENT REGISTER

This is the same sort of a thing as the patient contact register except it's a collection of information on the patients I am admitting to our community hospital in Canso. Below is a printout of the information fields I am using to input data. Again it is for practice audit purposes.

TABLE III

PRO-COLOR-FILE	
FILENAME: INPATS**	
DEFINED DATA FOR SEGMENT — 1	
FIELD: HEADING	LENGTH
1. — FIRST NAME	13
2. — LAST NAME	12
3. — ADDRESS	3
4. — YOBB	4
5. — SEX	1
6. — ADMITTED	6
7. — DISCHARGED	6
8. — LEN OF STAY	3
9. — DIAGNOSES	50
10. — DISPOSAL	20
11. — PHYSICIAN	6

Total data space = 124  
This segment is stored on Drive 0

\*\*These are the different categories under which I enter information for each patient contact in my Inpatient Register.

TABLE IV AND V

PRO-COLOR-FILE	
FILENAME: PATFILE*	
DEFINED DATA FOR SEGMENT — 1	
FIELD: HEADING	LENGTH
1. — PATIENT #	4
2. — LAST NAME	11
3. — FIRST NAME	12
4. — SEX	1
5. — YOBB	4

Total data space = 32  
This segment is stored on Drive 0

PRO-COLOR-FILE	
FILENAME: PATFILE*	
DEFINED DATA FOR SEGMENT — 2	
FIELD: HEADING	LENGTH
6. — ADDRESS	16
7. — AREA CODE	6
8. — MSI#	11

Total data space = 33  
This segment is stored on Drive 0

\*These are the different categories under which I will be entering information for each patient who has a file at our clinic. This will serve as an Age/Sex Register among other things.

## AN AGE/SEX REGISTER

The patient contact register and the inpatient register are both concerned with patients that I myself am seeing. The age/sex register will include all 4500 patients on whom we have charts in our clinic in Canso, whether they are seen by me or one of the other physicians practising in the clinic. Information included in this register will be patient name, age, sex, address, postal code, and MSI number. It will thus serve not only as an age/sex register but also could be used to print address labels or send form letters to selected groups of patients if that should be desired for whatever reason.

My purpose in writing this article is to point out that you do not have to spend \$20,000.00 to enjoy some of the benefits of computers in medically related activities. If you buy a home computer you don't have to try and justify it from a business point of view or try and determine if it is cost effective. Look on it as something the family needs and uses the same way you think of your TV set or your car. My wife uses the computer to write letters and keep our Christmas card list on. My children use it to play games and run educational programs, and to learn about computers in general. I use it for the file systems I have outlined above, for programming, for some word processing (like writing this article), and for adventure games which I enjoy. I won't deny that I'm the one who uses it the most — perhaps 80% of the time — but we all have our little obsessions don't we!

## THIRD WORLD MEDICAL EQUIPMENT ASSISTANCE PROJECT

Continued from page 126.

institutional and governmental agencies in the recipient country.

Dawne Cressman, the Project Assistant for the Third World Medical Equipment Assistance Project, will be pleased to provide you with further details.

It is planned that each issue of the bulletin would carry an updated report of the project with news of recent gifts, or recent requests from participating countries.

Finally, apart from its support by the Governments of Health of four Canadian provinces and its links to the City of Halifax through Dr. Paul Cappon, Director of Health Services, also an Advisory Board of health experts, all of whom are familiar with health problems in developing countries. The Official Patron of the Project is the Lieutenant Governor of Nova Scotia. The Project has community support and funding from various agencies, including the Rotary Club of Halifax and the Canadian International Development Agency.

Dr. Paul Cappon,  
Atlantic Co-Ordinator,  
Third World Medical Equipment Assistant Project,  
Director of Health Services,  
City of Halifax,  
P.O. Box 1749,  
Halifax, N.S. B3J 3A5.

## COLPOSCOPY AND PAP SMEARS: THE NECESSARY TOOLS FOR PREVENTION OF CANCER OF THE CERVIX

Continued from page 125.

### ACKNOWLEDGEMENTS:

G. Bisson, M.D.  
A. Bernardo, M.D.  
J. Cooper, M.D.

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### FAMILY PHYSICIAN WANTED

Family Physician, British Columbia. This solo practise will share patient population with one other solo practitioner in a coastal, fishing village. 33 bed hospital with excellent x-ray and lab facilities. Clinic in recently built Nimpkish Health Centre which provides counselling, dental and public health services, and runs an Alcohol Treatment Home. Spectacular natural setting with a mild climate, and excellent fishing. A unique opportunity to practise acute and preventive medicine at a relaxed pace in a bicultural setting. Relocation grant and partially subsidized housing available. Completely furnished office supplied at reasonable rent. Generous minimum income guarantee.

**CONTACT:** Vivian Cook, Director, Nimpkish Health Centre (604) 974-5522

James Leslie, Administrator, St. Georges's Hospital (604) 974-5228

**ADDRESS:** Box 223, Alert Bay, B.C. VON 1A0.

# Current Topics in Community Health

Prepared by: Dr. Frank M.M. White,  
Department of Community Health and Epidemiology  
Dalhousie University, Halifax, N.S.

## PEI PHARMACISTS OPPOSE ADVERTISING OF TOBACCO

The Prince Edward Island Pharmaceutical Association recently passed a resolution recommending cessation of all advertising of tobacco, whether media advertising or instore promotion, to Island community pharmacy owners.

The resolution follows the position of the Canadian Pharmaceutical Association, which along with Health and Welfare Minister Monique Bégin has entered into a joint campaign to encourage pharmacists to discontinue tobacco sales in their establishments.

The program acknowledges that the pharmacist is a trusted health professional and a recognized neighbourhood authority on health care.

The resolution by the Island association notes the prevailing scientific evidence indicating the use of tobacco as injurious to health and the primary function of the pharmacist as co-operating with and supporting the federal government in discouraging the use of tobacco.

**Source:** *The Evening Patriot*, Charlottetown, Prince Edward Island, Monday, May 28, 1984.

### Comment

The ethical stand now being taken by the P.E.I. Pharmaceutical Association supporting the position of the Canadian Pharmaceutical Association deserves active support. Individual pharmacists should be encouraged to follow suit. It would appear that a serious conflict of interest is entailed by any pharmacist simultaneously marketing tobacco products and cough suppressants. This amounts to promoting addictive products while benefiting from the resulting ill-health. Leadership from within the pharmacy profession, as now demonstrated by the P.E.I. Association, would seem essential to resolving this obvious contradiction and deserves acclamation.

## EPIDEMIOLOGY OF FIRES IN BRITISH COLUMBIA

Fire killed 73 people and injured another 375 in B.C. during 1982.

Compared with other causes of death, these statistics may not appear particularly startling. However, they are the outcome of 7,623 fires which destroyed property worth \$157,296,688. Moreover, this cost does not include the personal anguish and hardship that people must bear after losing their homes, businesses and public facilities.

Unlike many "accidents" where the event occurs spontaneously and is unpredictable, most fatal fires are caused by circumstances which could be under control. Arson and natural phenomena (lightning, earthquakes, etc.) are exceptions.

About 48% of all 1982 fires in B.C. occurred in residential facilities. These included one and two family dwellings, apartments, hotels, motels, mobile homes and recreational vehicles (boats, motor homes). These fires claimed 63 lives which is 86% of all deaths and resulted in 285 injuries or 74% of the total.

Large fires receive the most public attention and media coverage. Residential fires, however, continue to be the cause of most fire deaths and injuries.

### Causes

During 1982 investigators were able to classify 78 sources or "igniting objects" of fires. Any of them are potential causes of death or injuries with long term consequences.

Table I shows the causes of fire that resulted in casualties only. Here, the igniting objects are found mostly in the home and many fires might have been prevented with either an early warning system using smoke detectors or careful control of fire sources. Although these igniting objects caused at least one death, any source of fire (mechanical, chemical, thermal) could kill.

TABLE I  
SOURCES OF CASUALTY FIRES GIVING NUMBER OF  
INCIDENTS, INJURED, DEATHS AND MONETARY LOSS  
BY TYPE OF SOURCE, B.C., 1982.

Source or Igniting Object	Number			Monetary Losses
	Incidents	Injured	Dead	
Stove or Range	632	52	5	\$ 4,383,350
Service Water Heater	42	12	1	\$ 1,476,191
Space Heater (Stationary)	160	4	1	\$ 3,143,435
Radio, Phono, Tape Recorder	12	—	2	\$ 164,880
Electric Blanket, pad	14	—	1	\$ 259,424
Transformer	8	1	1	\$ 116,547
Switch, Outlet	31	1	1	\$ 587,359
Electric Wiring (Temporary)	111	5	3	\$ 2,824,185
Smoker's Materials	661	60	25	\$ 7,980,387
Match, Lighter not used with Smoking	813	48	5	\$ 14,205,570
Welding Equipment	42	2	1	\$ 351,847
Hot Ashes, Embers	87	2	1	\$ 800,543
Smoker's Material or Open Flame	96	11	1	\$ 1,231,068
Internal Combustion Engine	782	7	1	\$ 2,674,412
No Igniting Object	182	6	1	\$ 7,516,400
Unknown, Unclassified	1,517	69	23	\$ 66,342,131
<b>TOTALS</b>	<b>5,190</b>	<b>280</b>	<b>73</b>	<b>\$114,016,729</b>

Some fires can start as a dramatic explosion of fuel (gasoline, etc.) or as the subtle smoldering of a cigarette, or as the heating of a faulty or overloaded electrical cord. In these latter cases the igniting object can smolder for many hours, increasing in temperature and consuming surrounding material. Unless there is a detection system, the sleeping occupants of a dwelling receive no warning. This threat



became a fact for 27 people who died in 1982 while asleep at the time of the fire.

**Source:** J.J. Phillon, in: *Disease Surveillance*, 1984; 5: 105-113 (adapted), B.C. Ministry of Health.

### Comment

Very little information has been developed on the epidemiology of fires, and it seems reasonable to include this article from British Columbia as it may have some important lessons for the Maritimes. The full report (9 typed pages) can be made available on request. Of special interest however, may be Appendix 1 which addresses the reduction of fire hazards in the house. This is now reproduced:

### Appendix —

#### REDUCING FIRE HAZARDS IN THE HOUSE

##### Smoking

Careless handling of cigarettes is the most common cause of deaths and injuries in residential fires. If there are smokers in the house, the increased risk of a fire can be reduced by:

1. Depositing cigarettes and cigars in large ashtrays, not wastebaskets.
2. Double-checking the house before going to bed to be sure there are no smoldering cigarettes in chairs and sofas.
3. Keeping matches and lighters in a place where they are not accessible to children.
4. Not smoking in bed.

##### Kitchen

The kitchen is the most common site of origin of house fires. These fires can be avoided or their danger reduced by:

1. Not leaving anything that is cooking unattended.
2. Keeping curtains, towels, washrags, and other flammables away from the cooking area.
3. Mounting a fire extinguisher near the kitchen.

##### Storage

The fire hazards caused by improper storage methods can be reduced by:

1. Storing combustible and flammable materials in safety containers and away from children and potential sources of heat.
2. Keeping storage areas such as attics and basements free of unnecessary items.
3. Not piling clothes and papers against light fixtures.

##### Electrical

To reduce fires from electrical sources, avoid:

1. Overloading multiple-outlet plugs.
2. Positioning large appliances in areas where there is poor air circulation.

**Note:** Appendix II in the report lists the advantages and disadvantages of various types of smoke detectors.

## CHARTING THE COURSE: DIRECTIONS FOR PUBLIC HEALTH IN NOVA SCOTIA

The Public Health Association of Nova Scotia is a multi-disciplinary organization and a long standing advocate of preventive and community health programs in this province. The Annual Conference scheduled for October 21-23 in Halifax, will address the theme "Charting the Course: Directions for Public Health in Nova Scotia".

The program will feature a blend of policy and program oriented sessions, with topics ranging from environmental health (e.g., water quality, oil and gas development), occupational health, home care programming, geriatric assessment, to life style issues.

As occurred in 1983, it is planned that continuing education credits will be arranged with the College of Family Physicians of Canada.

Further information and advance registration may be obtained by writing to:

Sharyn Michaklo, Atlantic Health Unit,  
1600 Bedford Highway, Bedford, N.S. B4A 1E8

**Source:** Public Health Association of Nova Scotia.

### SALMONELLOSIS — ATLANTIC PROVINCES

The number of *Salmonella typhimurium* phage type 10 isolates from human sources in Newfoundland, Prince Edward Island, and New Brunswick has continued to increase since the initial report on this problem (*Canada Diseases Weekly Report*, May 19, 1984). To date, more than 1000 cases of salmonellosis have been reported.

The Newfoundland Public Health Laboratories have recently obtained 4 isolates of *S. typhimurium* phage type 10 from the same lot (323) of mild cheddar cheese manufactured by Amalgamated Dairies Ltd. in P.E.I. One was cultured from an unopened block and another from the unopened end of an opened block. The company distributed this lot in 4.9 kg blocks to retail outlets in Newfoundland. Retail outlets may divide and package the blocks into smaller portions to be sold as that particular store brand. Earlier screening of 100 turkeys, 148 chickens, and 699 other meat specimens failed to identify *S. typhimurium* phage type 10.

On June 25, 1984, the Health Protection Branch requested the manufacturer to recall lot 323 of mild cheddar cheese. Further distribution of cheese from the plant will be stopped until further investigations and product analyses are completed. Newfoundland health officials have ordered all cheese products manufactured by Amalgamated Dairies to be removed from the retail market in the province.

Investigations are in progress to determine the possible source of the epidemic in P.E.I. and the increased number of cases reported from some areas in Nova Scotia and New Brunswick.

**Source:** Lior H., Clark D., Butler R., in: *Canada Diseases Weekly Report* 1984; 10:101.

**Note:** A total of 946 cases of Salmonellosis had been reported by June 9, 1984 in the Atlantic Provinces. This is a 5.7 fold increase over the number reported (167) to the same date in 1983. □

# An Appreciation

## DR. ROBERT O. JONES



Dr. Robert Orville Jones died at the Victoria General Hospital August 26, 1984 after a relatively short illness.

Dr. Jones was born in Digby County, Nova Scotia, in 1914 and completed his schooling in Bridgetown before entering Dalhousie University in Halifax at the age of 16. He earned his B.Sc. degree at 19 and his M.D. at 23. After a year of medical studies in England he began his training in psychiatry in 1938 at the Maudsley Hospital in London, England. In 1939 he went to the Phipps Clinic at Johns Hopkins for two years as a Rockefeller Fellow. There he was among the last to study under Adolf Meyer, renowned for his psychobiologic approach to psychiatry.

In 1941 Dr. Jones returned to Dalhousie University as an associate professor of psychiatry. In 1949 he established a department of psychiatry to which he was appointed as Professor and Head, holding that position for 26 years. He then spent a year as visiting professor at the Royal Free Hospital in London, England. Following this he returned to Dalhousie and continued to play a prominent role at home and afar with a major part-time appointment as Professor Emeritus.

Bob Jones' name will always be associated with the development and practice of Psychiatry in Canada and especially in Nova Scotia. It is given to few physicians to establish an evolving discipline in 1941, in this case psychiatry, and to so greatly influence its teaching and practice for the long period of 43 years. Although he retired as Professor and Head of the Department in 1975, his position of Emeritus Professor and Honorary Consultant resulted in his active interest and participation in the practice and teaching of psychiatry.

The career of service which Dr. Jones has dedicated to his profession and to the world at large is portrayed clearly by a brief summary of his honors, positions and accomplishments. In 1967 he was recipient of the Canadian Centennial Medal and in 1977 of the Queen's Jubilee Medal. In 1981 he was installed as an Officer in the Order of Canada. The British Royal College of Psychiatry elected him as an honorary fellow, the highest award of that college, in recognition of his distinguished career in psychiatry. Dr. Jones was charter President of the Canadian Psychiatric Association and a charter fellow of the American College of Psychiatrists. This college has recently awarded him the prestigious Bowes Honor Award and it will be presented, posthumously, at their annual meeting in February 1985. In 1973 he was made life fellow of the American Psychiatric Association. He was president of the Canadian Medical Association in 1965-66, the only psychiatrist to have held this office. In 1982 he was the recipient of the Canadian Medical Association Medal of Service. He was president of the Medical Society of Nova Scotia, the Nova Scotia Psychiatric, Canadian Mental Health (Nova Scotia Division) and the Atlantic Provinces Psychiatric associations. He was a member of the Royal Commission on the law of insanity as a defense in criminal cases (the "Hall Commission") from 1953 to 1956. Dr. Jones was vice chairman of the council on international psychiatry of the American Psychiatric Association and Canadian representative to the executive committee of the World Psychiatric Association. He was a member of the psychiatric review board of the province of Nova Scotia for several years.

Other honors include the degree of Doctor of Engineering *honoris causa* from the Nova Scotia Technical College in 1970 and Award of Honor of the Nova Scotia Division of the Canadian Mental Health Association in 1977. He was Royal College lecturer in medicine in 1972 and Sandoz visiting professor in psychiatry in 1975. Dr. Jones was active in the Alpha Omega Alpha Honor Medical Society. He has rendered outstanding service in executive duties for and on committees of many national and international bodies as well as his university and teaching hospitals. He has served on the editorial boards of several professional journals. As a recognized authority on many aspects of his discipline, including psychiatry and the law, teaching and the clinical practice of psychiatry, most notably concerning affective illnesses and problems in geriatric psychiatry, Dr. Jones was sought out as a guest speaker in Canada and abroad. He was an active member of the Rotary Club of Halifax.

The influence of Dr. Robert O. Jones has been greatest within Dalhousie University and its numerous teaching hospitals. He served for many years as Department Head in the Victoria General and Camp Hill hospitals in Halifax. His teaching has taken him outside of the university, to the former Maritime School of Social Work, the Nova Scotia Technical College and the Halifax police. Dalhousie medical students and psychiatric residents, remember well his compassionate teaching and exacting standards. The R.O. Jones lectureship, held in conjunction with meetings on the Atlantic Provinces Psychiatric Association, was established in 1974 as a tribute to his role as an educator by his former students and colleagues on the 25th anniversary of the establishment of his department.

Dr. Jones is survived by his wife, Mary, and their two children, David, a scholar of Russian History now at Dalhousie and Louisa Jones Dupont, a linguist and teacher

of French, now living in France. The profession extends deep sympathy to his family.

A memorial service was held on September 6, 1984 in the Sir Charles Tupper Medical Building. The large gathering filling Theatre "A" and "B" bears testimony of the regard and affection in which Bob Jones was held by colleagues, friends, patients and the community. On this occasion four colleagues gave personal expression to his influence on their lives and on his contribution to the profession.

Dr. Jones will be greatly missed but the University, the profession, the hospitals and the community at large will be ever grateful for his many worthy contributions made during his lifetime. □

R.M. MacDonald, M.D. and B.K. Doane, M.D.,  
Halifax, N.S.

As a fitting memorial to the late Dr. Robert O. Jones, a lectureship is being established. This will be titled "The Robert O. Jones Memorial Lecture" and will be included in the "Friday at Four" series.

Contributions should be made through the Dalhousie Medical Alumni Office, c/o Miss B. Blauvelt — cheques made payable to Dalhousie University (R.O. Jones Lecture Funds). Receipts will be issued.

## An Appreciation

### DR. G. RONALD FORBES



Although Dr. Ron Forbes had retired from active practice a few years prior to his death at the age of 86 years on February 25, 1984, his many contributions to his profession, his community and his country will be long remembered. He was a kind, gentle and most capable physician, and the citation on the occasion of his award of the honorary degree of Doctor of Laws by Dalhousie University in 1968 was somewhat of an understatement. The attribute of having been "for 40 years a physician in the Annapolis Valley" was correct. However, many have been physicians for forty years but very few have had the qualities that made Ron Forbes such a unique individual.

Summarizing his long career, he was born in Stewiacke and received his early education in Sydney. He enrolled as a student at Dalhousie University in 1916, but interrupted his studies to serve overseas in the Canadian Artillery. He returned from France in 1918 and resumed his education. He obtained his Bachelor of Science degree and began his study of medicine, graduating from Dalhousie Medical School in 1926. He conducted a very busy general practice in Kentville until the outbreak of World War II. He enlisted in the Royal Canadian Army Medical Corps, serving first at Camp Aldershot and then in Sydney. His talents were recognized and he reached the rank of Colonel, serving as the commanding officer of Number 14 Canadian General Hospital in Italy — the largest medical unit in the Canadian Army.

Following the conclusion of hostilities in 1945, he returned to civilian practice. He had become interested in cardiology, and undertook postgraduate training in Montreal and later in London. When he returned to Kentville, a large segment of his time was taken up by cardiology with, I may say, his usual proficiency. He contributed to the growth and development of the Blanchard Fraser Memorial Hospital throughout the years and up until his retirement in 1974. He also served as the Medical Officer of Health for the town of Kentville for many years.

Dr. Forbes was a member of the Valley Branch of the Nova Scotia Medical Society and a Senior Member of both the Nova Scotia Medical Society and the Canadian Medical Association. He was a member of the College of Family Physicians of Canada, and a Fellow of the American College of Cardiology.

In addition to his professional activities, Dr. Forbes was a 32nd degree Mason and received his 50-year jewel and in 1979 his 60-year bar. He was a past president of the Kentville Rotary Club, and had been a member of both the KenWo Golf Club and the Glooscap Curling Club of Kentville.

To his widow, Helen, his daughters Mary Lou and Sally, his son-in-law and grandchildren, we extend our sympathy.

We miss him very much also! □

Helen M. Holden, M.D. and J.J. Quinlan, M.D.,  
Kentville, N.S.

# Personal Interest Notes

## 1984 CONVOCATION DALHOUSIE UNIVERSITY FACULTY OF MEDICINE

The Dalhousie University Faculty of Medicine Convocation was held on May 18, 1984, when 92 M.D. degrees were conferred. By place of residence at time of enrollment, these graduates were from: Nova Scotia — 65; New Brunswick — 20; Prince Edward Island — 3; and one each from Newfoundland, Manitoba, Antigua and the United States.

**Dr. David Graham Bell**, Liverpool, Nova Scotia, was awarded the Dr. C. B. Stewart Gold Medal. Honorary degrees were conferred on **Dr. H.J.M. Barnett**, neurologist, and on **Dr. C.G. Drake**, neurosurgeon, both from the University of Western Ontario, London.



Drs. Henry Joseph Macaulay Barnett, David Graham Bell and Charles George Drake.



Dr. Gregg Lamont MacLean delivering the valedictory address.

**Dr. David Janigan**, pathologist at the Victoria General Hospital was named Professor of the Year by the Graduating Class. The award, a trophy in the form of a shovel with silver handle and blade, was presented at convocation exercises.

The valedictory address was given by **Dr. Gregg Lamont MacLean**, Charlottetown, P.E.I.



Dr. David Thomas Janigan receiving the Professor of the Year Award from Dr. Alan Arthur Blinn, class president. □

## OBITUARIES

**Dr. Thomas B. Acker**, 87, of Halifax, N.S. died on August 25, 1984. Born in Lunenburg he graduated from Dalhousie Medical School in 1921. He was the first to practise his speciality of Orthopaedics east of Montreal and continued his practice for fifty years. During the war years he was a Major in the Army and assigned to the Christie Street Hospital in Toronto where he cared for injured servicemen on their return to Canada. He is survived by two sons and a brother. Sincere sympathy is extended to his family.

**Dr. Patrick J. Gouthro**, 62, of Sydney, N.S. died on July 5, 1984. Born in Bridgeport, N.S., he graduated from St. Francis Xavier University and from McGill University with his medical degree in 1947. He practised in Sydney for 30 years having spent his first years practising in both Montreal and Winnipeg. He served on the Provincial Medical Board and was past President of Sydney City Hospital Medical Staff. He is survived by his wife, four daughters and three sons. Our sympathy is extended to his family.

**Dr. Donald MacD. Grant**, 79, of Halifax, N.S.\* died on June 25, 1984. Born in Eureka, Pictou County, he graduated from Dalhousie Medical School in 1931. He practised medicine in Noel, Hants County until 1940 when he joined the Royal Canadian Air Force and served in different parts of Canada. He worked for the Workmen's Compensation Board in Halifax for several years and retired as chief medical officer in 1970. He is survived by his wife and two sons. The *Bulletin* offers sincere sympathy to his wife and family.

**Dr. Robert O. Jones**, 70, of Halifax, N.S. died on August 26, 1984. Born in Digby he received his MDCM from Dalhousie University in 1937, and studied Psychiatry in London, England and at Johns Hopkins in Baltimore. On his return to Halifax he taught Psychiatry at Dalhousie where he became the first full time Professor and Head of the Department of Psychiatry. He was President of The Canadian Medical Association in 1965 and received the Medal of Service from the Association in 1982, the same year he was made an Honorary Fellow of the British Royal College of Psychiatry. He is survived by his wife, a daughter and a son to whom the *Bulletin* extends sincere sympathy.

**Dr. Gordon H. Wheelock**, 69, of Wentworth, N.S. died on July 6, 1984. Born in Canning, N.S., he attended Acadia University and received his medical degree from McGill University in 1940. He was surgeon-lieutenant on convoy duty in the North Atlantic with the R.C.N.B.R. during the war. He later practised in Chalk River, Ont. and Wolfville, N.S. He then joined Camp Hill Hospital where he remained until his retirement in 1976. He is survived by his wife, one son and two daughters to whom we extend sincere sympathy. □

### Rose C. Jenkins

B.Sc., B.Ed., M.A. (Education, Counselling)  
Readiness Assessment, Gesell Institute

#### ASSESSMENT AND COUNSELLING

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