

Ten Years After*

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THE Halifax Branch of the Medical Society of Nova Scotia on April 11, 1934, unanimously passed a memorial which was sent to the Mayor and members of the City Council dealing with a number of proposals or changes which they felt at that time were necessary to modernize the Health Department of the City.

I propose tonight, ten years and one day later, to tell you something of the changes which have been brought about, not over this ten year period but, mostly during this past year since May 1, 1943, with the implementation of the recommendations contained in the Rockefeller Survey.

Your memorial prepared the ground and, even though the results were not apparent, I believe that the subject matter of it aided materially when Dr. Brittain made a report on reorganization of all civic departments in 1938 which report was acted upon during 1939, and in October of 1940 the first full time medical health officer with public health training took over as executive officer of the Board of Health.

My efforts in breaking down resistance of Council and finally arriving at the position we find ourselves in to-day has taken time and perseverance, but the efforts I have given, I believe, are in the interest of the community as a whole and the future alone only can show the fruits thereof.

School Health Service brought directly under the control and supervision of the Board of Health. This came about in September, 1943, and since that time the School Health Service has been carried on by a full time medical officer with special training in public health. The number of nurses working in the schools was increased from 4 to 13 and each nurse has a surrounding district to carry out other public health services. New forms have been prepared and records of physical examinations, defects found are reported to parents who are invited to be present at the examination, and a form is provided for the report of correction of these defects by the family physician.

New dental forms, new exclusion forms for infectious conditions; pediculosis, impetigo, scabies, immunization against diphtheria, vaccination against smallpox, and others, to the number of 25 are now used and these are permanent records kept in the schools.

This fall some 1300 children were vaccinated against smallpox by the school physician alone in the schools and the number of conscientious objectors was 0000. Over 95 per cent of all the children have been toxoided or Schick negative, and over 85 per cent of those toxoided have been re-Schick negative within the last three years. Booster doses have been given to over 300 children by the nurses during last fall. The Provincial vaccination law is being enforced and will continue to be so enforced.

Communicable Disease Control. The system with regard to communicable disease control is to be under a full time medical officer with special public health training and his services can be used by the general practitioner in consultation for diagnosis, if requested. The cases, however, under the Pro-

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vincial Act *MUST* first be reported to the (M.H.O.) Medical Health Officer who has the authority to placard the home, or order the removal of the patient to the Infectious Diseases Hospital. All contacts should be quarantined by the doctor attending the case until the release can be made after negative cultures, taken by the public health nurses, or the regulation time has elapsed.

Fumigation is no longer carried out, but instructions for final disinfection, in printed form, are left with the householder and instructions in carrying out this disinfection can also be given by the nurses.

Six immunization clinics are held weekly in different sections of the city, where anyone applying can be protected against diphtheria, whooping cough, typhoid, smallpox, scarlet fever, if they desire it, and the nurses are continually preaching these preventive measures in the homes. All infants approaching 6 months of age are visited by the nurses and the parents advised having immunization carried out by you, as family physician, or at these clinics.

Tuberculosis Control. Here our plans are being laid and with the completion of an additional wing on the present City Tuberculosis Hospital, caring for 69 more patients and with an outpatient department for pneumothorax refills and modern X-ray equipment capable of taking 4 x 5 miniature films and every positive reactor to the patch test in the schools and adults in industry can be surveyed. This, with the present chest clinics for examination of contacts, referred cases, and follow-up of old cases, should in a few years show a marked reduction in our death rate from tuberculosis which has always been high in Halifax, and even to-day is much higher than the rest of this province.

The new hospital will also have an operating suite where modern surgical treatments can be carried out instead of transferring the patients to the Victoria General Hospital, or to the Kentville Sanatorium.

Besides the 13 nurses in the schools, whose work in the districts is to give instructions for the prevention of spread of disease, two nurses are used for concentrated work in the city at large, for communicable diseases and tuberculosis case finding and control, and all 15 nurses are directed by a specially trained and experienced supervisor.

Venereal Disease Control. This condition is far more prevalent than most of you realize and every effort is being made to control it. Changes in the Provincial Health Act at the last session of the legislature will bring us in line with other provinces, and most states in the U. S. A.

The important steps in the control of this condition are:—

1.—Every case must be reported. This is most important or you cannot attempt to control a disease if you have no knowledge of where it is, or how much of it exists.

2.—Every case must be reported by name to the Provincial Department of Health. This is confidential and the name never goes farther than this if the patient continues to take treatment and follow out all instructions. If they fail to do this, then they must be reported by name to special workers, or possibly to the police, to see that the patient is forced to carry out the necessary treatment.

3.—The name of the party, or parties, who may have been the source of this infection, along with a description of them and where they live or might be contacted is recorded so that these promiscuous people may be brought in for examination, and treatment if found infected. This is very effective, and soon shows the source of many infections. The medical health Officer has the authority to examine or cause to be examined, with or without their

consent, and may detain any such person until he is satisfied that they are free from infection, or for treatment until certified free, or in a non-infectious state. This method, or procedure, enables me to have picked up and held prostitutes who have been reported as a source of infection and keep them where douches, tampons, etc., cannot be used to interfere with your bacteriological findings.

It also means that if a person does not co-operate with us and continue his or her treatment, or who, during treatment, infects or exposes another to this infection, we can isolate him or her or detain them and treat them while in isolation and the period in isolation is only as long as the period of infectivity.

Trained social service hygiene workers attempt to co-operate and get the people to come for examinations and to follow out regular treatment in the first instance, but when the patient refuses, or is indifferent to the efforts made, then it is necessary to force them. Similarly, it is almost impossible in professional prostitutes, who use douches at very frequent intervals and always before going to a doctor for examination, to get a proper examination taken under natural conditions. Many of these people reported as sources of infection on more than one occasion and having been examined at weekly intervals and holding your reports sent you from the Provincial Laboratory showing a negative test, have been found positive on the second or third test when held under this section of the Health Act. Do you gentlemen realize that you are held responsible for seeing that every patient you find infected must be told of their condition, and must be provided with a printed form telling them how to act and care for themselves so as not to infect others? How many of you have any of these forms in your office, or have given them out to your patients?

Pre-marital blood examinations are not a law in Nova Scotia, but should be, in my opinion, and, furthermore, it is an excellent practice to always do blood examinations on all cases coming into your office for periodical examinations or for routine check-ups on their physical condition. Many people have syphilis and never know they have it and, since the Red Cross Blood Donor Clinic has been in operation, it has been my unpleasant task to have to announce this to quite a few persons and to make arrangements for their treatment.

At the National Conference for Control of Venereal Diseases held in Ottawa in December, 1943, many important topics were discussed, and a National programme, with Federal financial assistance, is being planned. It is up to us, as medical men, to assist this programme as much as possible. The placing of posters and other educational displays in public places like lavatories of restaurants, wash-rooms in hotels, etc., and giving the public information on gonorrhoea and syphilis; how they are spread; what the symptoms are; that they can be cured; that lack of treatment leads to other serious conditions; are most important, but the lead for this educational programme coming from your Health Departments must have the commendation and backing of the medical profession as a whole if it is going to be successful.

Milk and Food Sanitation. The situation in regard to milk in Halifax to-day is that 30,000 quarts are used daily, and 30 quarts, or 1/10 of 1 per cent, is sold in a raw state. Most of the dairies are doing a grand job of pasteurization, but most of our trouble comes in high counts in the raw product, and the only way to overcome this is by stricter supervision on the farms, and an

educational programme for the farmers with the possible setting-up of a set of provincial regulations so that a uniformity is possible. The Provincial Health Officers' Association in session last year prepared a suitable regulation, in our opinion, and this was forwarded to the Government, but has not as yet been adopted. This was made up from the National code with a few changes to fit local conditions.

The many complaints coming to the Health Department are in reference to housing and most frequently the plumbing and sanitary conveniences not functioning properly. The department now has an engineer who, this coming winter, will be given a special course in sanitary engineering on a fellowship by the International Health Division of the Rockefeller Foundation. All inspection services come under his department and this includes plumbing, restaurants, bakeries, bottling works, ice cream manufacturers, retail grocery stores, barber shops, hairdressing parlors; in fact, all of these plants require a license to operate from the department, and 8 inspectors are kept busy on the routine trips to these plants.

Infant and Maternal Welfare. We have, as yet, done very little in the care of our pregnant and puerperal women, and until after the war, and our full number of personnel is obtained, I see little hope of expanding the present work in this department. Our nurses are instructed, when they find these women, to impress upon them the necessity of periodic examinations during the pre-natal period and refer all cases to the family physician and also to the V.O.N. However, we are entering the infant field and since I have all the births registered through my office in City Hall, I am now able to make up lists and have the nurses follow these babies for immunization purposes right from about 3 months of age, and we hope to open Well Baby Clinics in different areas of the city so that a real close contact can be kept with these children right through the years until we meet them in the schools. The programme of immunization in the homes last year, I believe, was a well worth while experiment in my opinion, and the results are as follows:—

Third dose.....	1,661
Booster dose.....	215
Unfinished.....	55
Total.....	1,950
Refused.....	276
No record of having been done.....	223
No. of children immunized with negative reschick.....	779
“ “ “ “ without negative reschick.....	681
“ “ “ “ Total.....	1,460
“ “ “ “ at Naval clinic.....	54
“ “ “ “ by private physicians.....	2,429
Total number of children registered.....	6,792
Number under six months.....	225

Statistics. This is a new experiment in Halifax and Nova Scotia, but is now a part of most modern health departments. Statistics have been called the modern bookkeeping of health and as such gives one the information to know just where the work of the department should be aimed. If we have cases of infectious diseases reported, then our efforts should be intensified in the control of that condition. If we know the infant death rate is high, then milk, housing, or other conditions affecting it must be our immediate problem.

Statistics are dry to listen to, but then few, I think, will be of interest to you:—

	1936	1941	1943	
Birth rate.....	29.9	41.2	42.9	
Death rate.....	15.1	17.2	13.6	5.9) 8.6)
Marriage rate.....	10.0	21.6	29.8	
Infant Maternal rate.....	73.1	65.6	20.9	
Maternal M. rate.....	4.0	0.7	....
Stillborn rate.....	3.2	3.0	1.5	
Illegitimate rate.....	8.7	6.9	6.3	
T.B. death rate.....	131.5	103.6	....

Cost of all this—

	1933	1943
Total Budget.....	2,057,145	3,036,079
Health Budget.....	15,847	89,421
Percentage Health of Whole.....	0.77	2.95
Per capita cost.....	0.27c	0.839c
Per capita cost to taxpayer.....	.....	.698c
Milk daily consumption average for 3 months.....	.....	46,600 qts.
Raw milk deliveries daily.....	.....	13 qts.
Samples—680 samples, only 7 showed improper pasteurization and 54 showed B. Coli present after pasteurization.		

Permits	Inspections	
	May to October	
Dairy.....	8	53
Restaurants.....	181	1,812
Shops.....	317	2,385
Bakeries.....	20	79
Bottling works.....	13	14
Ice Cream Manufacturers.....	2	4
Licensed plumbers.....	28	....
Barber shops, etc.....	97	....

Water—1270 samples during last 10 months and outside of period August and September, only 3 have shown B. coli since October 1, 1943. We have now had sterile samples reach the laboratory and the average count in month of March was only 29.43 per c.c. and no B. coli found on any occasion.

Last summer I found the water in the North West Arm fairly highly contaminated by sewage. The following steps to correct that condition are already completed or in the process of being completed: all private sewers on the city side, now enter the main sewer and not direct to the Arm. A grit chamber is being built at Chebucto Road so that sand and gravel coming down that large sewer can be collected and will not choke the main Arm sewer as now happens. Chlorinating equipment to chlorinate the effluent from the main sewer at Chain Rocks is contemplated and also under consideration are large sedimentation tan's here which would operate in the summer months and then cleaned out during the off season for bathing.

Health Insurance

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THE two major social and economic questions before the people of Canada to-day may quite properly be said to be Health Insurance and Social Security, not forgetting the allied question of Unemployment Insurance. The latter, of course, is not only finalized in detail but has been well established, enabling it to function with some degree of satisfaction and with promise of greater satisfaction as time passes. Undoubtedly there is a vast room for improvement. The continued application of the enforcement of the provisions of the Unemployment Insurance Act, however, will undoubtedly, in my opinion, disclose the deficiencies in it and the inadequacy of the entire Act unless it is supplemented by other means of protection.

The two outstanding pressing social and economic problems of the day, however, may well be accepted as transcending all others of this kind. They are fundamentally problems which perhaps affect the laboring classes more than any other. Organized labor has always stood solidly behind any plan or scheme which would not only benefit its membership, but those outside of it. And this takes in every family. The larger the family the greater the need for health insurance and social security. Both are so closely interwoven that they automatically go hand in hand.

Leaders and students of organized labor in Canada cannot but be impressed with two notable reports which were submitted by the Honourable Ian MacKenzie, Minister of Pensions and National Health. They are known as "Health Insurance," prepared by a House of Commons special committee on social security, and "Social Security for Canada," prepared by Dr. L. C. Marsh, for the advisory Committee on Reconstruction.

It has been my pleasure to give these voluminous reports but casual consideration, due to limited time. It is my intention, however, to continue to study the comprehensive reviews of social security and health insurance contained in these reports. They contain a tremendous fund of information, valuable suggestions and far advanced recommendations to improve and raise the standard of services in their respective fields.

Social Security and Health Insurance, as stated, are so closely interwoven in the science of economy, that it is quite impossible to deal with them as separate units. It is my purpose, however, to endeavor to do so in a brief way.

Notwithstanding the fact that both questions are allied, they are, nevertheless, distinct and separate; either one could be made to function successfully without the other, although it could not but be denied that the success of either one would be as great or beneficial with each other.

In giving a comprehensive review of the report of the Federal Government Advisory Committee on Reconstruction, Dr. L. C. Marsh, was careful to state that the committee was fully aware, the "report is essentially a preliminary appraisal, not a final blueprint with all the details filled in. In particular the report leaves open a number of alternatives, makes no decisions on rates of benefits and contributions, and incorporates no actuarial calculations."

I observed with special interest what Dr. Marsh said in his "Prefatory Note." He at once emphasized the fact that the report should be clearly

understood if the best use of it was to be obtained. All will no doubt agree with that. Among other things Dr. Marsh says:

"The field of social welfare legislation, even within the limits accepted in the report, is vast; it is moreover, of concern to every citizen. Progress will therefore depend vitally on a wide understanding of the potentialities, and also the responsibilities and limitations, of social insurance methods."

Social Security, or the lack of it is not new. It is almost as old as the human race. Mr. Morris Stack in a recent publication of the International Labour Office wrote that "the right to social security thus takes its place among the fundamental rights of man." Social Security has been defined by authorities "as the security that society provides through appropriate organizations against certain risks to which its members are exposed. These risks are contingencies against which the individual of small means cannot effectively provide by his own ability or foresight alone. This insecurity is caused by a threat of the loss of earning power, and such loss may come about through accident, old age, unemployment or sickness."

Some years ago the Dominion Department of Labor submitted to a select committee of the House of Commons on Industrial and International Relations four budgets on the cost of living estimates of the average expenditure of average families of five in Canada, such families consisting of man, woman, boy, age 11-13; girl, 7-10; child, 4-6.

Income per annum.....	\$ 900.00	Poverty level
	1,400.00	Min. subsistence level
	1,775.00	Health and decency
	2,400.00	Comfort level

I submit that the above is an interesting table and provides much food for serious consideration. That report was submitted some years ago. It is not without significance to-day, hence my reason for referring to it. It has a striking bearing on a special table of the earnings of male and female employees in Canada, 1941, contained in Dr. Marsh's report on Social Security.

The official table follows:

Earnings (Year)	Male Heads of Families	
	Urban	Rural
Under \$500.....	114,900	103,100
\$ 500- 750.....	85,900	48,500
750- 1000.....	123,200	40,000
1000- 1250.....	191,200	49,500
1500- 2000.....	180,400	35,800
2000- 2500.....	75,000	12,900
2500- 3000.....	27,200	3,700
Over 3000.....	44,800	6,000

While the earning power of the people of Canada is so low social security can never be maintained. Further comment to emphasize this would seem to be superfluous. With such low earning power in a country like Canada, social security could only be enjoyed on a subsidized basis.

With regard to health insurance the stand always taken by organized labor, and the stand taken to-day, is that it must be Dominionwide. If not, then I submit that it can never be made even a partial success, if, indeed, it could be extended such a generous term. Contributory health insurance would only give partial relief. There are thousands in Canada to-day and

there always will be, who will never be able to enjoy health insurance if it is administered solely on a contributory basis. Any such scheme would have to make provision for certain standards. By that I mean any single person earning less than \$800 per annum could not be expected to contribute to it, yet I submit that all such persons should enjoy the benefits of health insurance. For a married man and his wife, without children, it would be necessary for him to have earning power of at least \$1,500 per annum before contributing. Standard classes should be so determined that consideration should be given to a married man with a family.

From the earliest times efforts have been made by organized labor and people in general to provide protection against sickness. It was first provided in the forms of benefits paid by old time Guilds and later on by the Friendly Societies for their own members. The passing of time proved the inadequacy of aid from these societies with the result that it was found necessary for the State, in many parts of the world to provide health insurance, especially for industrial workers. It was in 1886 that voluntary insurance schemes were first established. Germany had compulsory insurance schemes in 1883 and Great Britain in 1911, the schemes proving successful in both Nations.

To put health insurance schemes in effect on a contributory basis would not prove a success in Canada, unless provision was made, as stated, to provide a complete coverage for all, even though it had to be subsidized. The reason for this is substantially proven by the official table showing the low earning power of so many thousands.

Organized labor in Canada and in other countries have made a fine contribution towards protecting its members in the event of illness. Of the eighty-three International Labor Organizations operating in Canada, nineteen provide sickness and accident benefits through their International headquarters. Many of the remaining organizations have benefit features, the administration of which is entirely under the control of the local branches. The nineteen International Unions referred to have dispersed to their members in Canada, for various sickness benefits, a total averaging in excess of two and one half million dollars per year.

Health Insurance is one of the outstanding needs of Canada. Without it Canada cannot proudly declare herself as a Nation. The call-up of the manhood of this country for war established as no other single factor, the thousands of the young men and women of this great country who were found physically unfit for service.

Food for Thought, the official monthly organ of the Canadian Association for Adult Education, under the heading, "The Value of Value," says in part:

"When all over the world human lives are being snuffed out and bodies broken beyond hope of remedy, it may seem strange that we should show a particular concern for health services. Life seems so cheap and futile! But when we realize that more people are unnecessarily destroyed in peace time by disease and ill-health than on all the fields of battle, it is well to keep in mind the war against disease and needless death in which there can be no armistice, no truce and no discharge."

The shocking number of the manhood and womanhood of Canada who were rejected because of physical unfitness, cannot but recall what the prophets have told us and what we have always ignored, namely, that the real wealth of a people is not in its stores of gold but in its strong and vital manhood and womanhood.

The pressing need of health insurance is further emphasized by the number of people who die at a much earlier age than if they were adequately protected. The Minister of Pensions and National Health, in an article declares that on any day an estimated 50,000 Canadian wage earners are idle through illness, which means that about 17,000,000 working days are lost each year. As Mr. MacKenzie says, "much of this wastage is avoidable." He also estimated that a few years ago the cost of ill health to the Canadian people was more than \$250,000,000, a figure which amounted to more than 5 per cent of the entire national income for that year.

Facts cannot be ignored in the consideration of any major social or economic problems. It is interesting to observe, therefore, that according to official figures only 264,804 Canadians had enough money to pay income tax in 1937; in other words only 264,804 people had incomes over \$1,000 a year if single or over \$2,000 a year if married, (according to the incomes assessed for income war tax in Canada, 1939, Dominion Bureau of Statistics). The total population was estimated at 11,120,000, according to the *Canada Year Book*, 1940, and of these 59 per cent or approximately 6,400,000 were adults (20 years of age and over), assuming the same age distribution as shown in the 1931 census, an individual whose income is less than \$1,000 if single and \$2,000 if married, while not necessarily falling into the class of the medically indigent (of which it is estimated that at least 25 per cent of the people of Canada come within that class) would certainly be seriously embarrassed by any but low medical expenses. Since only 264,804 out of the 6,400,000 adults in Canada in 1937 had sufficient income to pay income tax, and on the assumption that on the average each individual paying income tax, had one adult dependent, it may be deduced as a rough estimate that scarcely 10 per cent of the adult population could afford to pay for any but minor medical expenses. Certainly the other 90 per cent would be financially incapacitated by the costs of severe or prolonged illness.

It is roughly estimated by those who have given some study to the major problem of health or other form of insurance that 70 per cent of Canadian wage earners are making less than \$1,200 a year. Applying this proportion to the population as a whole, it may be estimated very roughly that it would cost the Government \$200,000,000 to cover all those earning under \$1,200 and their dependents on a non-contributory basis.

I am optimistic enough to submit that a Health Insurance Plan, although presenting a major problem, is not impossible to work out. Organized labor is solidly behind such a plan. Three groups are involved in the consideration of any such scheme, first the people, second the employer and thirdly the Government. All three must be organized on a contributory basis, not forgetting those who would have to be exempt from contributing due to their low earning power, but nevertheless who would of necessity have to be included to provide a complete coverage for all. Canada has the resources, I feel, to put into effect a satisfactory plan of Health Insurance. It is not in my opinion as to whether the country can afford to do it as much as it is whether Canada can afford not to do it.

By all means let us have Health Insurance for all Canadians.

Aetiological Studies of Tuberculosis

The occurrence of tubercle bacilli on garments and books handled by patients with open tuberculosis.

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and

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THE prevalence of tuberculous disease in its open stage and the opportunity for exposure to infection, years ago led to the idea of the so-called ubiquity of the tubercle bacillus. According to this concept, the bacillus was generally prevalent in nature, and contact with it could not be avoided.

The constant and ever present danger of infection was so emphasized that it was commonly believed that tubercle bacilli were found not only in public and private rooms occupied by consumptives but even that the bacilli existed in the open air. The fear of infection ran riot and went astray to a high degree, not only among the laity, but also among physicians. The pinnacle of this was reached in the common belief that tubercle bacilli were conveyed from the bodies of persons dead of consumption, after burial, contaminating the sod and graves in cemeteries, from which they were disseminated through the air causing infection. The fallacy of this conception has often been pointed out.

For years the public was led to believe that the contagiousness of tuberculosis was identical with that of smallpox, diphtheria, scarlet fever and influenza.

As for the fear of sanatoria and hospitals in which tuberculous persons are cared for, experience has shown that when such institutions are properly conducted, they are in fact safer to live in, as regards the danger of acquiring an infection, than any other public place or hospital. Brown states that at Trudeau Sanatorium only one case of tuberculosis developed during a period of thirty-six years. The educational programmes in such institutions have been developed to a high plane. The patients are instructed how to control their cough and how to dispose of their sputum. The experience and effect of this educational program is well demonstrated in the fact that physicians, nurses and also the general employees in tuberculous hospitals and sanatoria do not develop tuberculous disease more frequently than similar individuals in general hospitals.

Ornstein and Meyerowitz found that the tuberculosis rate among the nurses in a general hospital was approximately the same as that among nurses in a tuberculosis hospital.

When the biological relation of the tubercle bacillus to tuberculosis was established, the fact of its communicability was preached and insisted upon without regard for the actual mechanism and mode of infection, and the dicta of many authorities has been blindly accepted by their followers. On close scrutiny it seems that many statements were based upon inference rather than upon actual facts. Unfortunately this state of affairs, however, still exists to some degree and it seems about time to revive this old shop-worn subject and to attempt to evaluate some of the theories which to some have become a dogma, by presenting new experimental evidence.

In discussing the aetiology of pulmonary tuberculosis we have had thrust upon us so many half truths that the sober students of pulmonary tuberculosis are in accord upon only one fact, established forty-nine years ago, that pulmonary tuberculosis is due always to the presence of tubercle bacilli in the lungs. At first thought the aetiological chain seems complete. The tubercle bacilli grew and multiplied in the lungs producing, as the disease progressed, ulceration into the bronchi through which bacilli escaped into the open by means of sputum, which was carelessly deposited upon floors, platforms, sidewalks, etc. From these places the bacilli somehow gained an entrance into the body of a new host. Consequently, to prevent the spread of the disease this cycle must be broken at some point.

We definitely know that the tubercle bacillus does not propagate outside of the living body, and that if we speak of ubiquity we must infer only that the majority of people come in contact with it some time during their lives.

We also know that infection with the tubercle bacillus occurs, as a rule, through exposure in house and family, and at all events, that it occurs indoors, in consequence of direct or indirect contact with persons whose morbid discharges contain the organisms.

The tubercle bacillus is very resistant to destructive influences and if undisturbed may retain its viability for some time, depending upon many factors.

The transmission of the infecting agent, has been studied ever since the discovery of the bacillus by Koch.

The classical studies of Cornet and Flugge paved the way for the voluminous studies which overflowed the medical literature some quarter of a century ago. Out of the masses of investigations the following facts were established which met the approval of most students in tuberculosis.

1. Persons with open pulmonary tuberculosis may expel in speaking, singing, and coughing, particles or droplets of various size in which tubercle bacilli may be found, for a distance of several feet. (Flugge theory).

2. These droplets may gravitate to the floor becoming attached to dust particles and if the particles are small they may arise by the air current and be inhaled by individuals who thus become infected. (Cornet theory.)

3. Objects and especially toys may be soiled with raw sputum contaminating the hands of adults and children, thus carrying the bacilli to the most important portal of entry, the mouth. (Krause theory).

4. Eating utensils coming in contact with the mouth of an open case may also become a source of infection when used by healthy individuals. (Cummings theory.)

We shall make no attempt to evaluate the various avenues through which the transmission may occur. Experimental evidence published by Brown, Pasquera and Petroff and others suggests that direct contact of moist infecting material namely sputum harboring bacilli which must come in direct contact with the mouth, is the most logical portal of entry. Here also we must include spraying of droplets directly into one's face, which in such case are deposited on the lips, and the mouth again becomes the portal of entry.

We feel that the subject of aetiology of pulmonary tuberculosis is still far from settled and for that reason, from time to time we shall present experi-

mental studies and publish our findings, even if they are in disagreement with accepted views.

The studies which are about to be reported concern problems important, not only to hospitals and sanatoria, but also health workers, sociologists and the epidemiologist. In these studies we shall present experimental evidence pertaining to the following two questions: 1. What is the danger of transmission of the bacilli through books which have been handled by patients with open tuberculosis? 2. Are the garments of patients with open pulmonary tuberculosis contaminated with tubercle bacilli and how should they be disinfected?

Books as a Source of Infection

Books read by consumptives probably are occasionally contaminated by sputum in the form of droplets expelled during coughing or speaking as the book is closely held to the face and at a level that any droplets expelled may readily be deposited upon the paper. Also they may be contaminated by licking the thumb or finger when turning the pages. Transmission of infection to a second reader appears most likely to occur when the recipient with moist thumb or finger handles the contaminated page, supposedly harbouring the bacilli. There is a general agreement that large portions of the bacilli deposited upon the book pages become dry and non-viable after a short period of time.

Problems pertaining to transmission of tuberculosis by this means have received scant attention and up to the present no satisfactory solution has been arrived at. Kenwood and Dove have studied the transmission of infection by books handled by patients with tuberculosis and acute contagious diseases. These authors exposed papers to coughing patients and dried them for one month, after which the washings from the paper surfaces were inoculated into guinea pigs of which not a single animal developed tuberculosis. Six other papers were smeared with moistened particles of sputum and dried for one month in attempting to infect animals, only one guinea pig developing tuberculosis. They also studied books exposed under natural conditions. Eight books were studied and the washings were inoculated into sixteen animals, two of which developed tuberculosis.

Tytler, Tattersall and Ward in a report to the British Joint Tuberculosis Council based mainly on Kenwood and Dove's study, state that they are reluctant to belittle the risk of infection from books, but admit that possibility of transmission through such channels is extremely small.

The studies presented here are an attempt to discover whether infection, in guinea pigs at least, follows exposure to what many have by inference referred to as sufficient exposure for infection of man.

Experimental Data

Books as a source of transmission. Four patients with advanced pulmonary tuberculosis, having uncontrollable cough and expectorating profusely sputum of gaffky 6 to 8, were asked to handle some old books which previously had been used by other patients also with open tuberculosis. The patients were very cooperative after the nature of the experiment was revealed to them. They were instructed to be as careless as possible, to cough on the marked pages, to wet their thumbs with saliva after coughing and to contaminate the corners in turning the pages. The pages so contaminated were also marked. After such treatment the books were delivered to the laboratory. The marked pages were

carefully scraped with a sharp sterile razor blade. The scrapings were collected in sterile beakers and physiological salt solution was added. Then the mixture was transferred to test tubes, corked and was shaken for one half hour until an even suspension was obtained.

Sixteen male guinea pigs, each weighing approximately 350 grams were selected and tested with 10 per cent old tuberculin intracutaneously prior to injection. One cubic centimeter of the scraping suspension was injected subcutaneously into the right inguinal region using four animals for each book. Every two to three weeks after the injections they were given intracutaneous skin tests using 10 per cent old tuberculin.

One of the guinea pigs died on the forty-second day of inter-current disease (gastronenteritis) and at the postmortem no evidence of tuberculosis could be found. All of the internal organs were normal. A second animal died on the fifty-third and a third on the seventy-sixth day. The necropsy on the last two animals presented postmortem pictures similar to the first guinea pig. Ninety-two days from the beginning of the experiment, a final intracutaneous tuberculin test was given to the thirteen surviving guinea pigs. The whole group failed to react and were sacrificed.

Necropsy: Well nourished animals, all gained weight. Spleen, liver, lungs, lymph nodes and the viscera were perfectly normal, not a single evidence of tuberculosis.

Garments as a Source of transmission. The problem of storing garments during their residence at the hospital has always raised the question of transmissibility of infection from contaminated garments. Scanning the literature we failed to find any reference on the subject based on experimental evidence. Some reference has been made in a passing way, but all has been based on inference and not on facts.

The garments of most of the patients, as soon as they arrive, are stored in special quarters until they are wanted. The patient most of the time wears and navigates in a bath robe.

In the present study, an attempt was made to find out if the wearing apparel of patients with open pulmonary tuberculosis is contaminated with tubercle bacilli. For the purpose, two types of garments were studied, namely, coats which had been stored and the bath robes which were used daily.

It was obvious that the soiling of the garments if it did take place, probably occurred in an area closest to the mouth, such as lapels and the front part.

The following factors were taken into consideration before the experiment was started.

Sputum contains a large amount of albumin and other protein which is a very good adhesive material. No matter how small the droplets expelled by coughing, speaking or sneezing, there is such albuminous material present. Once such droplets have been deposited on any object, they immediately dry, and, if the surface is smooth, they become hard and only by scraping can they be removed. If the droplet or part of the sputum is deposited upon a garment, the adhesive properties are much greater because they penetrate the cloth fibers thus becoming permanently mixed. In such a case the contaminating material must be removed by actually rubbing and scraping.

To accomplish this an aluminum receptacle, which is generally used for

collecting dust by vacuum cleaners, was used. Strips of a moderately coarse grade of sand paper were glued at the lip part which comes in contact with objects to be cleaned. By a trial we found that by rubbing this attachment in a lateral and contra-lateral direction, large amounts of fibers and dust could be easily removed from the garments. To collect such scrapings a vacuum cleaner was used.

A special narrow box three inches square and twenty inches long was constructed. The size was important because when the animals were placed, facing the direction of the inflow of the air, they could not possibly reverse their position. The outlet of the box was connected to a washing bottle containing salt solution for collecting the dust.

Sixteen male guinea pigs weighing an average of 350 grams were selected and tested intracutaneously with 10 per cent old tuberculin before injection.

The patients whose garments were to be studied were instructed to report to the laboratory after one p.m., thus giving ample time to contaminate the bath robes which they were wearing. In the meantime the coats of same patients were delivered from the storing place to the laboratory.

In the specially constructed box two animals were placed, each of which were separated with wire gauze which was firmly fixed so as to form a separate compartment. The inlet was attached to the aluminum receptacle described above. The other end was attached to a glass tube submerged under the salt solution of a washing bottle, the outlet of which was attached to the vacuum cleaner.

After putting the vacuum cleaner into motion, the patients' garments (coats and bath robes) were rubbed with the vacuum cleaner suction attachment in two opposite directions for fifteen minutes. It was evident that considerable dust and cloth fibers were liberated by this procedure. This dust entered the box and was inhaled by the animals housed therein. The outgoing air containing the dirt was bubbled under the saline in the washing bottle. Therefore, this procedure served two purposes: (a) in the box, a direct inhalation for dust infection, and (b) a parenteral one using the collected dust.

The saline washings were centrifuged, the supernatant fluid was discarded and the sediment suspended in two cubic centimeters of saline. One cubic centimeter was inoculated subcutaneously into each two guinea pigs.

The sixteen guinea pigs were kept under observation and periodically were tested intracutaneously with 10 per cent old tuberculin.

Four animals died of intercurrent diseases on the twenty-second, thirty-sixth, forty-ninth and eighty-first days. No evidence of tuberculosis could be found in any one of these animals.

On the one hundred second day the remaining twelve animals were tested intracutaneously with old tuberculin, and at the twenty-fourth and forty-eighth hours were all negative. They were then sacrificed.

Necropsy: Well nourished animals, all had gained weight. Spleen, liver, lung and lymph nodes were normal. No evidence of tuberculosis.

Summary

1. We have been unable to demonstrate viable tubercle bacilli on books handled by patients with open tuberculosis.

2. We also were unable to infect guinea pigs with dust collected by scrapings from garments worn by patients with open tuberculosis.

3. This failure, however, should not give rise to a sense of false security and to a laxity of precautionary measures.

4. It seems at the present time, the best way to ease the mind of the possibility of transmission by a book which has been handled by a patient with open tuberculosis, is to store or quarantine the book for several weeks until the morbid material has completely dried, as it has been shown repeatedly that the drying robs the bacilli of their power of producing disease in animals. This measure was recommended by British Joint Tuberculosis Commission.

5. We have no suggestion of importance to make as to how the patients' garments should be disinfected. Perhaps the safest way is to expose them to the sun and air for a few days before storing away.

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Summer Diarrhea in Babies

Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 8 level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casec gradually eliminated. Three to six teaspoonfuls of a thin paste of Casec and water, given before each nursing, is well indicated for loose stools in breast-fed babies.

Please send for samples to Mead Johnson & Company, Evansville, Indiana.

The Future of Medical Services*

THE Representative Body of the B.M.A., at its meeting in September, amended in varying degree the basic principles which the Council had put before it and which were set out in the Council's Supplementary Annual Report (August 7, p. 19). The amended versions, with a full report of the discussions which led up to them, were distributed over three subsequent issues of the "Supplement." For the greater convenience of the profession, therefore, we give below the principles in the order and form in which they were agreed by the Representative Body. The preamble is a reaffirmation of the principles on which the Association planned its General Medical Service for the Nation.

Preamble

(i) The system of medical service should be directed to the achievement of positive health and the prevention of disease no less than to the relief of sickness.

(ii) There should be available for every individual the services of a general practitioner or a family doctor of his own choice.

(iii) Consultants and specialists, laboratory services, and all necessary auxiliary services, together with institutional provision when required, should be available for the individual patient, normally through the agency of the family doctor.

(iv) The several parts of the complete medical service should be closely co-ordinated and developed by the application of a planned national health policy acceptable to the profession as a whole.

Principles

A.—The health of the people depends primarily upon the social and environmental conditions under which they live and work, upon security against fear and want, upon nutritional standards, upon educational facilities, and upon the facilities for exercise and leisure. The improvement and extension of measures to satisfy those needs should precede or accompany any future organization of medical services.

B.—The efficiency of a country's medical services, both preventive and curative, depends upon the available medical and scientific knowledge, upon the character and extent of medical education, upon the sufficiency and quality of personnel, upon facilities for treatment (including institutional accommodation), and upon the absence of any economic barriers that impede the utilization of such services. Thus, the sufficiency and quality of personnel and facilities for treatment (including institutional provision) should be assured; in order to improve the country's medical services the facilities and resources for medical research should be greatly increased and methods devised for their adequate application; medical education, both undergraduate and post-graduate, should be maintained on a high standard, adapted to modern needs, and brought within the financial resources of any suitable student. Wherever economic barriers prevent an individual citizen taking advantage of medical services such barriers should be removed.

C.—Subject to these general and over-riding considerations the functions of the State should be to co-ordinate existing provision, both official and non-official, to augment it where necessary, and to secure that it is available without economic barrier to all who need it. The State should confine itself within these wide limits, invading the personal freedom of both citizen and doctor only to the extent which the satisfaction of these functions demands.

D.—It is not in the public interest that the State should convert the medical profession into a salaried branch of central or local government service. The State should not assume control of doctors rendering individual or personal health service. The profession rejects any proposal for the control of the future medical service by local authorities as at present constituted.

E.—Free choice as between doctor and patient should be preserved as a basic principle of future health services, and no administrative structure should be approved which does not both permit and encourage such free choice.

F.—It is not in the public interest that the State should invade the doctor-patient relationship. The loyalty and obligation of a doctor rendering personal health service to an individual patient should be to that patient and to none other.

G.—Free choice of doctor should be reinforced by a method of remuneration which relates remuneration to the amount of work done or the number of persons for whom responsibility is accepted.

H.—Every member of the community should be free to consult the doctor of his choice either officially, as when he consults the doctor he has selected under an official service, or privately, as when he consults some other doctor, whether that doctor is a member of an official service or not. Nothing should be done to encourage the splitting of the medical profession into two groups—the official doctors and the non-official doctors.

I.—Consultants and specialists should normally be attached to the hospital. For those persons who wish to be treated in private accommodation, whether part of a hospital or not, private consulting practice should continue.

J.—The central administrative structure should be a corporate body concerned only with civilian health services and should be responsible for all civilian health services. This central administrative body should be advised on medical matters, including personnel, by a medical advisory committee representative of the medical profession, which should be at liberty to publish its findings. Locally, new administrative bodies, responsible to the central authority, should cover wide areas and should be representative, directly or indirectly, of the community served and, in appropriate proportion, of the local medical profession and voluntary hospitals. They should be advised on medical matters, including personnel, by local medical advisory committees representative of the local medical profession, which should be at liberty to publish their findings. These administrative changes should be regarded as foundation changes to be agreed before other changes are initiated.

K.—All branches of medical practice should be regarded as a single service, and it is undesirable that a detailed scheme for general practitioners should be framed and put into operation without corresponding arrangements for other branches of practice.

Interim Proposals

L.—That, pending the consideration and completion of the foundation, administrative changes mentioned in J above, as a step towards the satisfaction of Assumption B there should be extension of national health insurance to include dependants of insured persons and others of like economic status and to cover consultant and specialist services and laboratory and hospital facilities as well as general practitioner service. The service should be improved from time to time as recommended by the profession. Those persons with incomes above an agreed limit could, if Parliament decides to make the service available to every member of the community, be permitted to become voluntary contributors to the extended service. A reconstruction of insurance committees would be necessary.

M.—There should be initiated, by arrangement and agreement between the Government and the profession, organized experiments in the methods of practice, such as group practice, including health centres of different kinds, which should extend to general practitioner hospital units attached to general hospitals. Future developments in group practice should depend upon the results of such clinical and administrative experimentation.

Further Decisions of the A.R.M.

The following additional recommendations relating to the future of medical services were also adopted:

1. In the opinion of the Representative Body the creating of a whole-time salaried State medical service is not in the best interests of the community. (This was carried by 200 votes to 10.)

2. This meeting would not approve of any extension of health services until the medical personnel is again available.

3. A comprehensive medical service should be available to all who need it, but it is unnecessary for the State to provide it for those who are willing and able to provide it for themselves.

4. There shall not be any extension of services under the National Health Insurance Act until satisfactory terms and conditions, including an adequate capitation fee, have been agreed.

5. All practitioners on the "Medical Register" shall have the right to participate in any health service.

**NINETY-FIRST ANNUAL MEETING
OF THE
MEDICAL SOCIETY OF NOVA SCOTIA
WHITE POINT BEACH, JULY 5th AND 6th, 1944**

PROGRAMME

TUESDAY, JULY 4th

2.30 p.m. Executive Meeting.

WEDNESDAY, JULY 5th

9.00 a.m. Registration.

9.30 a.m. First Business Session.

Addresses by Dr. Harris McPhedran and Dr. T. C. Routley.
"Questions and Answers", Health Insurance.

11.30 a.m. "Modern Trends in Obstetrics", by Dr. N. W. Philpott, Royal
Victoria Hospital, Montreal, Quebec.

Discussion to be opened by Dr. T. A. Kirkpatrick, Kentville, N.S.

12.10 p.m. "Venereal Disease Control in Nova Scotia", by Dr. E. L. Eagles,
D.M.H.O., Windsor, N.S.

Discussion to be opened by Dr. J. S. Robertson, Yarmouth, N.S.

1.30 p.m. Luncheon with address by Dr. J. W. Smith, Liverpool, N.S.,
"Memoirs".

2.30 p.m. "Bronchogenic Cancer of the Lung", by Dr. E. A. Broughton,
Toronto, Ontario.

Discussion to be opened by Dr. D. M. MacRae, Halifax, N.S.

3.10 p.m. "Anaesthesia", by Dr. C. A. Donkin, Bridgewater, N.S.

Discussion to be opened by Surgeon Lieutenant Commander
C. C. Stoddard, R.C.N.

3.40 p.m. "War Medicine", by Colonel W. P. Warner, Consultant in
Medicine, R.C.A.M.C.

Discussion to be opened by Dr. K. A. MacKenzie, Halifax, N.S.

4.20 p.m. "The Management of Cardiac Failure", by Dr. Harris Mc-
Phedran, President, Canadian Medical Association.

Discussion to be opened by Dr. A. E. Blackett, New Glasgow, N.S.

5.00 p.m. Adjournment.

7.00 p.m. Annual Dinner (Informal).

Address by Mr. T. H. Raddall, "Early Medicine in Nova Scotia".
Presidential Address, "Dr. Henry Farish".

THURSDAY, JULY 6th

9.00 a.m. Second Business Session.

10.00 a.m. "The Use and Abuse of Sulphonamides and Bromides", by Dr.
E. A. Broughton, Toronto, Ontario.

Discussion to be opened by Dr. J. W. Reid, Halifax, N.S.

10.40 a.m. "Fractures of the Hip", by Dr. Norman H. Gosse, Halifax, N.S.

Discussion to be opened by Squadron Leader H. A. Fraser, R.A.F.

11.10 a.m. "Penicillin", by Surgeon Commander MacLeod, R.C.N.

11.50 a.m. "Breech Delivery", Coloured Movie, by Dr. N. W. Philpott,
Royal Victoria Hospital, Montreal, Quebec.

The golf course will be available without charge to any who wish
to play.

Personal Interest Notes

A THREE day meeting of the Nova Scotia Society of Radiographers was held in Halifax during May. Dr. W. H. Eagar of Wolfville, senior radiologist in Nova Scotia, gave the welcoming address, and Surgeon Commander Wendall MacLeod of Montreal addressed the annual dinner on "Health Insurance." Representatives from Prince Edward Island and Nova Scotia were in attendance.

Reception at Province House

Premier A. S. MacMillan was elected deputy grand noble chief of the Scottish Clans of Nova Scotia at a brief ceremony at Province House on April 19th. At this ceremony Doctor M. D. Morrison, Halifax, chief of clan Morrison, John A. Walker, K.C., of Halifax, representing the Cape Breton Gaelic Foundation and John M. Campbell, M.L.A., Victoria, chief of clan Campbell, were present. Conferring of the honour by Mr. Walker was made on behalf of clan chieftains by clan registration at the sixth annual gathering and Gaelic Mod held on the grounds of the Gaelic College, St. Anne, Nova Scotia, last July.

Dr. Hugh MacKinnon of Halifax recently visited his brother, Rev. John Y. MacKinnon in London, Ontario, and attended the annual meeting of the Canadian Medical Association in Toronto which was held from May 22nd to 26th. Others attending the annual meeting were Dr. L. M. Morton of Yarmouth, Dr. P. E. Belliveau of Meteghan, Dr. D. F. McInnis of Shubenacadie, Dr. J. G. B. Lynch of Sydney, Dr. P. S. Cochrane of Wolfville, Dr. J. P. McGrath of Kentville, and Dr. H. K. MacDonald, Dr. J. R. Corston, Dr. G. B. Wiswell, Dr. W. Alan Curry, Dr. A. L. Murphy and Dr. H. G. Grant of Halifax.

Dr. Ralph P. Smith, Professor of Pathology, Dalhousie Medical School, Halifax, has been visiting the departments of pathology at Boston, New York, Toronto and Montreal. Mrs. Smith accompanied him.

Dr. and Mrs. S. W. Williamson of Yarmouth visited his mother who is in her 96th year, at Providence, R.I., during May, and returned home via Ontario where they visited their children.

The BULLETIN extends congratulations to Dr. and Mrs. A. M. Marshall of Halifax on the birth of a daughter, Ruth Middlemas, on January 16th; Dr. and Mrs. R. G. Wright of Elmsdale on the birth of a daughter, Susan Elizabeth on January 28th; Dr. and Mrs. J. R. McCleave of Digby on the birth of a son, Charles Frederic Rae on March 15th; Dr. and Mrs. J. A. Donahoe of Shelburne on the birth of a daughter on April 23rd; Dr. and Mrs. C. E. Stuart (Beatrice Ross, R.N.) of New Glasgow on the birth of a daughter, Marilyn Elizabeth, on April 6th.

Dr. M. G. MacLeod of Whycomagh returned in April from over a month's vacation spent in Montreal, Chicago and other Canadian and American cities.

During March Dr. Clement MacLeod, chief medical officer at Camp Hill Hospital, Halifax, attended a meeting of C.M.O.'s from different parts of Canada at the Seignory Club in Quebec.

On May 8th at St. Andrew's Church hall, Halifax, the graduation exercises of the Grace Maternity Hospital were held at which ten nurses graduated.

During the past year a noteworthy gift has been received by Soldiers' Memorial Hospital, Bridgetown, from Mrs. F. S. Messenger and sons, Dr. C. F. Messenger and Mr. Charles Messenger, as a memorial to the late Dr. F. S. Messenger. The gift was the complete re-equipment of the delivery room in the hospital, with the latest and best obstetrical implements and furniture, valued at around \$800.00.

Two of the hospitals affiliated with the Dalhousie Medical School have recently established prizes for efficiency in internship. The Colonel Murray MacLaren Memorial Award was established by the Saint John General Hospital, Saint John, N. B., to the value of \$100.00, which this year was divided between Jean Macdonald of Moncton, N. B., and Francis B. Macdonald of Glace Bay, N. S. This coming year there will be a similar prize of \$100.00 given by the Halifax Infirmary, Halifax, to the interne having the best record there.

Dr. A. F. Miller Honoured

Dr. A. F. Miller, Superintendent of the Nova Scotia Sanatorium at Kentville, was honoured with a degree of Doctor of Laws by Dalhousie University at the annual Convocation held on May 16th.

Lt.-Colonel T. A. Lebbetter, formerly of Yarmouth, and for the past few years at Ottawa, has been promoted to the rank of Acting Colonel.

Surgeon Commander A. A. Giffin, R.C.N.V.R., formerly of Kentville, is at present principal medical officer in command of the large and fully-equipped Royal Canadian Naval Hospital in a Newfoundland base.

Obituary

THE death occurred at St. George, N. B., on April 19th, after a brief illness, of Dr. Frederick Vance Maxwell. Dr. Maxwell was a son of Mrs. James D. Maxwell and the late Mr. Maxwell, and was born in Hopewell, N. S., on March 17, 1907. He received his early education at Hopewell and Pictou Academy, received his M.D., C.M., from Dalhousie Medical School in 1932, and took post-graduate courses in Montreal and New York. He went to St. George in June, 1932, to practise with the late Dr. C. C. Alexander, and on the death of the latter in August, 1933, took over the practice and became a successful doctor and surgeon, well liked by the people of the town and surrounding districts. He was greatly interested in the advancement of education and in the work of the schools in St. George, and recently presented a modern chemistry equipment to the High School. He was keenly interested in sports of all kinds.

He is survived by his wife, formerly Ruth D. Phelan of Montreal; his mother, Mrs. J. D. Maxwell, of Glace Bay and Toronto; four brothers, James D. and Dr. B. Roy of Glace Bay, William S. of New Aberdeen and Malcolm of Hopewell, three sisters, Mrs. Kenneth Dickson, Mrs. Malcolm McDonald and Miss Esther Maxwell, all of Toronto.

The funeral was held from his home on Saturday afternoon, the 22nd, and the service was conducted by Captain (Rev.) Robert McLean of Halifax.

Correspondence

To: Secretaries of
Divisions

184 College Street,
Toronto 2B, June 1,
1944.

Dr. H. G. Grant,
Dalhousie Public Health Clinic,
Halifax, N.S.

Dear Doctor Grant:

RE INCOME TAX—OSTEOPATHS

At our Annual Meeting last week it was reported that the Income Tax Department of the Federal Government recognizes osteopaths as "qualified medical practitioners". The Executive Committee instructed that copies of correspondence dealing with this matter be sent to all the Divisions.

Enclosed herewith you will please find a copy of my letter to the Income Tax Department and a copy of the reply received from the Commissioner of Income Tax.

Comments from your Division will be appreciated.

Yours sincerely,

T. C. Routley
General Secretary

184 College Street,
Toronto 2B, Apr. 1,
1944

Mr. C. F. Elliott, K. C.
Deputy Minister of National Revenue
for Taxation,
Department of National Revenue,
Income Tax Division,
Ottawa, Canada.

Dear Mr. Elliott:

According to the newspapers your Department has ruled that osteopaths are to be recognized as physicians in respect to the taxation of medical bills. Would you please be good enough to advise me if a ruling has been made by your department in this matter.

Thanking you, I am,

Yours sincerely,

T. C. Routley
General Secretary

Ottawa

6th April, 1944

Dr. T. C. Routley,
General Secretary,
Canadian Medical Association,
184 College Street,
Toronto 2B, Ont.

Dear Sir:

In reply to your letter of April 1st., you are advised that for the purpose of section 5(n) of the Income War Tax Act, osteopaths have been classified as "qualified medical practitioners", if they are qualified to practise their profession under any provincial legislation.

Yours faithfully,

C. M. Elliott

Deputy Minister (Taxation)