

Editorials

A New Canadian Journal of Surgery

The Editorial Board of the Bulletin is happy to welcome the advent of the first volume of the Canadian Journal of Surgery, and wish for it a distinguished and successful future.

At a period in history when the contributions and influence of Canadian surgery are becoming increasingly important it seems to us most appropriate that this work and research should be reported in a journal of its own alongside the contemporary surgical journals from other parts of the world.

The fact that the two've medical schools of Canada are represented on the Editorial Board by their Professors of Surgery should ensure a journal of the highest quality, and in this respect we are pleased to note that Dalhousie University is represented by its first full-time Professor of Surgery.

Reporting on Deaths in Nova Scotia

This issue of the Bulletin contains an article by Mr. H. E. Naugler, Assistant Deputy Registrar General, which is somewhat disturbing. It indicates that there are serious defects in the reporting of deaths in Nova Scotia.

The possibility that almost 600 burials may take place in this Province each year without a physician's certificate of the cause of death is shocking. It must have serious legal implications and it certainly throws serious doubt upon the validity of mortality statistics, to mention only two of the many problems.

Until recent years it was difficult to check the completeness of the reporting of deaths. One of the side effects of the Governmental Social Welfare programmes has been the almost complete registration of certain population groups. The Federal Government pays Family Allowances to the parents of all children up to a specific age. Old Age Security payments are also made to all persons over seventy years. In addition Old Age Assistance is provided in cases of need for those between sixty-five and seventy years. On the death of any member of these groups arrangements must be made by the family to stop the payment of cheques. Certain penalties are provided if this is not done. It is interesting and somewhat surprising to find that this system of stopping financial payments from the Government is apparently more effective than the standard method of death certification, in spite of the fact that the Vital Statistics Act places responsibility upon a number of people in an effort to assure the registration of death before a burial permit is issued.

The Assistant Deputy Registrar General has been checking the adequacy of death certification at intervals over the last two or three years. He has consistently found that the number of persons whose names are removed from

the list of Children's Allowance or Old Age Assistance because of death, exceeds the number for whom death certificates have been made out by at least ten per cent.

The primary responsibility for obtaining a death certificate from the medical practitioner is placed by law on the funeral director. Nevertheless, the medical profession also has some responsibility and should be deeply concerned about the defect which Mr. Naugler has revealed in the statistics of the Registrar General's Department. It is hoped that physicians will consider ways in which positive assistance can be given to the Registrar General in carrying out this important function. Leaving aside the legal aspects of the question entirely, it is suggested that the medical profession makes sufficient use of the statistical data on death rates that they have an important stake in assuring their accuracy. One might seriously question whether the apparent downward trend in death statistics in this Province in recent years has been a true indication of improvement in the health status, as it is usually interpreted. Comparison with rates in other provinces also becomes useless. Studies of mortality from heart disease, cancer and other causes must also be looked upon with considerable scepticism, unless reporting is relatively complete and accurate.

C. B. STEWART.

Variables In Health Insurance

The following Editorial "Variables in Health Insurance" appears in the September 15th issue of the C. M. A. Journal, and is of such interest that it is being printed herewith for the readers of the Bulletin.

IN pre-war days, someone wrote a detective story called "They wouldn't be chessmen," in which the complexities of the plot stemmed from the fact that the characters persisted in behaving like human beings instead of chessmen. This sort of thing introduces one uncontrollable variable in health insurance. "Disease, gentlemen, does not play the game," said Sir Robert Hutchison. Here is another uncontrollable variable. We are reminded of these two variables in reading some thoughts on the future of health insurance in France, expressed by Doctor J. R. Debray in a lecture to the Academy of Moral and Political Sciences in Paris this spring.* His theme had reference to the proposed national health insurance scheme which has caused great alarm among the French medical profession this year. Since the French nation is mainly composed of independent variables, the introduction of a uniform health insurance plan there is likely to encounter extraordinary difficulties. Nevertheless, many of the points made by Debray are valid outside France, and worth thinking over once again.

He notes that health insurance is often not an "insurance" scheme but an "assistance" scheme; in real insurance, the premiums must balance the benefits otherwise the scheme is bankrupt. In state insurance schemes there is often no balanced budget; the state covers its losses out of general taxation. For humanitarian reasons it is not possible to exclude high-risk individuals, in the way that accident-prone motor drivers are refused auto insurance. And, with the enormous progress in medicine in the last decade, it is very hard to set a budget based on past experience of sickness. Indeed it would have been far easier for actuaries to introduce a health insurance scheme fifty years ago, when a decade of medical progress produced practically no change in the volume of medical care, than it is now in this era of rapid changes in therapy.

Debray fears that the actuaries and financial experts are not sufficiently aware of this; social security organizations, he says, have been developed exclusively on financial and actuarial lines, with disastrous results. As evidence of these difficulties of formulating a national comprehensive health insurance plan, he points to the fact that the United States, the richest country in the world, has failed so far to come up with a satisfactory solution to this basic social problem. What is needed is not an adaptation of medicine to insurance, but an adaptation of the principles of insurance to medicine.

This implies a realization that neither patient nor physician is a robot. Burger remarked that every diagnosis has two faces, like Janus, one looking towards medical technology, and one towards a knowledge of the human personality. If the field of vision of the former face is used exclusively, the physician will become an automaton, and as such easier to handle in terms of statistics and finance, though his assembly-line medicine represents a caricature of the healing art.

*Médécine de France, No. 83, p. 5, 1957.

The adaptation of insurance to medicine also implies a really large measure of control and self-discipline by the medical profession, a philosophy unpalatable to social security "experts" in Europe at least. Yet, as Debray shows, only the profession can produce the basic studies necessary in each specialty to solve the problems of insurance applied for example to psychosomatic disease, and to keep the insurance system in step with advances in medicine.

In other branches of insurance, the onus for the prevention of abuse lies on the insurer, but in health insurance this is no longer a practical concept. The control of the scheme depends on the medical profession and the individual members. There are those who consider that the imposition of rigid control by an outside body will bring satisfactory results, but unfortunately experience suggests that this will maintain neither a high moral nor a high scientific level in medicine.

Lastly, Debray attacks the government proposal to create several classes of physician in France. At the top will be the "hundred greatest physicians" in France, who will have the privilege of charging what they like—but their patients will have to pay the bills themselves. Then will come the "upper-class" fifteen per cent of the profession who can charge according to a first-class tariff, with repayment by the health insurance, followed by the rank and file of physicians at second-class rates. This concept of first-class hospital doctors and second-class general practitioners, current in Britain and Italy, has been accepted by some as the ideal in modern medicine, but Debray suggests that it is already out of date. Modern medicine has put into the hands of the general practitioner potent weapons for the first time in history and he should be encouraged to use them and not, as in Russia, to take his place as low man on the totem pole in the type of hierarchy traditionally dear to the Russian mind.

It should be noted that after Debray's address, the Academy adopted a number of resolutions on health insurance, expressing the hope that any new plan would maintain the liberal and humane tradition of the medical profession, would abstain from lowering the quality of medical care by dividing the profession into classes, would take into account in its budget *all* the problems of France and not just its medical problems, would profit by experience of national health insurance schemes elsewhere, and would encourage the continuation of medical research. To all these hopes we can only say "Amen."

Epidemic Influenza

H. B. Colford, M.D., M.Ph.

Director of Communicable Disease Control, Dept. of Health, N. S.

It is the opinion of many that this country may presently be on the brink of an incipient epidemic of influenza. It would seem timely, therefore, to summarize briefly the knowledge we have regarding past influenza epidemics and to take a look at the progress of the present epidemic in order that we might evaluate more realistically our present situation.

There is no doubt that influenza pandemics of the past carried a high mortality. In the pandemic of 1918-1919, it is estimated that about 20,000,000 persons died. A study of the literature discloses that the large majority of these deaths occurred in cases which were complicated by pneumonia caused by secondary bacterial invaders. The pneumococcus has been most commonly found in pneumonia following influenza though haemolytic streptococcus nonhaemolytic streptococcus, staphylococcus aureus and others have been reported.¹

Recognized and described in ancient times, influenza has obtained epidemic proportions many times in the last four centuries. Perhaps the first real pandemic occurred in 1580 spreading over Europe, Asia and Africa. Short wrote: "This disease raged all over Europe at least, and prevailed for six weeks. Though all had it, few died in these countries, except such as were let blood of, or had unsound viscera."

A virulent pandemic occurred in 1743. Huxham, in England, wrote: "This fever, although exceedingly common far and near, was fatal to few, since, provided that the sick kept within doors in season when they were seized with it, it generally went off on the third or fourth day."

A pandemic outbreak in Asia and Europe in 1782 was complicated by secondary illnesses and appeared to affect the middle age groups in particular. Epidemics in 1790 and 1836 also appear to have singled out older people. Another pandemic occurred in 1889-1891. Most of us can remember the epidemic of influenza which occurred in 1918-1919 which was experienced in all parts of the world. "The disease had a high attack rate, pneumonia complications were common and these cases had a high mortality rate!" Horsfall writes of this pandemic that, "In some instances fulminating infections, which ran an extremely rapid course, occurred and usually were fatal. Some patients died within a day or two after the onset of pneumonia, rarely in a few hours. A wide variety of bacterial species was associated with the pulmonary infections: most important were staphylococci, beta haemolytic streptococci, H. Influenza and pneumococci. In numerous instances, more than one bacterial species was isolated from the pneumonia Lung."² Such was the picture in the pre-antibiotic era.

Reports received from W. H. O. and the United States Public Health Service indicate that the present outbreak of influenza began in Northern China in January of this year. By February, it had spread to Shanghai and by March it had reached Canton. In April, it appeared in Hong Kong with about 500,000 cases and 44 deaths. During the summer, the disease has spread over Asia, Europe, the Pacific Islands, Australia, Africa, and South America. At the present time, the disease appears to have established itself in the United States and there have been reports of outbreaks of influenza-like disease from

most of the provinces of Canada. In few of these outbreaks in Canada, have there been any claim of having isolated the Asian strain of influenza virus.

The disease has been very mild from the beginning, so much so, that in many instances it is difficult to distinguish it clinically from the common cold. The attack rate has been low from the beginning being about 15 to 20%. Complications have been few and the death rate has been extremely low; for example, Chile reported 200,000 cases and five deaths, July 31, 1957. Thailand reported 12,000 cases with no deaths between August 12 and 19. Victoria, Australia, reported 150,000 cases in August, an attack rate of about 10%. Thirty deaths were attributed to the disease. The Phillipines reported 185,000 cases with 441 deaths during the week ending June 1, 1957, a case fatality rate of 0.2 per 100 cases. This is the highest reported.

It has been suspected for many years that the causal agent of influenza is a filterable virus, but it was not until 1933 that the first break was made in establishing the etiology of this disease when Smith and others reported that they had isolated a strain of virus from nasal washings of influenza patients, a strain of virus which was pathogenic for ferrets by the intranasal route. This work was confirmed by Francis (1937) who was successful in isolating a strain of virus from an influenza patient in Puerto Rico. It has subsequently been established that the viruses isolated by Smith and Francis are of entirely different types immunologically and they have been designated types A and B respectively. More recently a third serologic type of influenza C virus has been identified (Taylor 1949, 1951; Francis et al, 1950). Each of the established types are represented by many strains which are alike in many respects. However, individual strains of influenza A virus may not be identical immunologically with other strains of the same type. The same is true of different strains of influenza B virus. Vaccines have been prepared composed of several strains of both A and B viruses. Horsfall writes that, "During epidemics of Influenza A, the incidence of the disease was 70 to 80 per cent lower in vaccinated persons than in those who were unvaccinated (Salk et al, 1945). During epidemics of influenza B, the attack rate was about 90 per cent lower in vaccinated than in unvaccinated persons (Francis et al, 1946)."

The virus isolated from influenza patients during the present epidemic has proven to be a strain of type A not previously encountered. Laboratories have, therefore, begun production of a vaccine containing this strain of virus in order to cope with the pandemic.

It is interesting to speculate as to what happens to the influenza virus during inter-epidemic periods. Many theories have been advanced, the principal of which appear to be (1) the influenza virus exists in extra-human reservoirs from which it emerges from time to time as conditions become favourable. (2) The virus survives by continuous transfer from one human being to another causing sporadic small outbreaks in inter-epidemic periods.³

Characteristic epidemiological features of the disease are: (1) all age groups are susceptible indicating that the period of immunity following an attack must be comparatively short. (2) in temperate climates, an epidemic usually reaches its peak in the winter months. An important exception was the epidemic of 1918-1919 which reached its peak in October in the U.S.A. (3) an epidemic spreads rapidly and may involve large geographic areas in a period of from six to eight weeks. This rapid spread is due to the short incubation period which is from 24 to 72 hours. (4) variation in intensity and extent of spread of different epidemics is dependent on the characteristics of the particular strain of virus, the state of susceptibility against the strain, and the degree of crowding and inter-communication in the affected population.

In the present pandemic, due to modern methods of transportation and increased inter-communication of the population, the disease can be expected to spread rapidly, as it may be spread by talking, coughing, etc. Since the viral agent has apparently been dormant for many years, all ages are susceptible. The disease, however, is very mild with few complications and a mortality rate of about 5 per 100,000. The onset is sudden, with fever, chills, sweats, headache, sore throat, rhinitis, bronchitis, and aching muscles. The duration of the disease is from two to four days.

The persistence of fever for more than one week accompanied by cough indicates the onset of serious complications.

There is no specific treatment for influenza. Standard treatment is symptomatic using analgesic drugs and general measures to reduce fever. To prevent complications, patients should be urged to go to bed and remain there until temperature is normal. Wide spectrum antibiotics should be reserved for the treatment of complications. Achromycin is the drug of choice. On account of the risk of secondary infections, patients should be treated outside of hospital whenever possible.

Because the disease is so widespread and rapidly distributed in a community, isolation and quarantine procedures are not justifiable. The only hope of preventing spread of an epidemic is in the widespread use of a vaccine which contains the prevailing strain of virus. Since, as has been demonstrated this year, hitherto unknown strains of influenza virus can make their appearance so suddenly and spread so rapidly, this method of control has not proven successful to date. In the present epidemic, the best we can hope for from vaccine is to get enough people vaccinated that essential services may be carried on. Of these, hospital and health personnel should be given first priority. It may be possible to vaccinate persons who are at special risk to secondary infections, particularly staphylococcal infections. These include persons with bronchitis, heart failure, fununculosis and pregnant women and the aged. These persons should be given advantage of the vaccine as soon as it is available.

The vaccine is best administered subcutaneously. The dose is 1 c.c. Antibodies may be expected to develop in two weeks after the first dose. Persons sensitive to egg protein or suffering from allergic disorders are not encouraged to take the vaccine.

SUMMARY

1. It is possible that Asian influenza may attack Nova Scotia in epidemic form this year.
2. If the disease comes, it can be expected to be a very mild type, with an attack rate of about 20%, with few complications and a very low case fatality rate.
3. Complications may be treated with broad spectrum antibiotics.
4. It is not expected that vaccine will be available in sufficient quantities in time to prevent the spread of the disease. Vaccine should, therefore, be used on a priority basis with the idea of keeping essential services in operation and preventing deaths in persons particularly at risk to complications.

REFERENCES

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2. Horsfall, F. L., Jr.: *Influenza in Viral and Rickettsial Infections of Man*, edited by Rivers, T. M. J. B. Lippincott Co., Philadelphia, ed. 2, 1952, pp. 392-413.
3. A. D. Langmuir: *Influenza in Preventive Medicine and Hygiene*, edited by Maxy Appleton-Century-Crofts, Inc. ed. 7 1951, pp. 53-64.

Recording and Statistics of Deaths in Nova Scotia

H. E. Naugler
Asst. Deputy Registrar General

THE tremendous value of recordings and statistics of deaths and causes of deaths to the medical profession, public health workers, businesses, organizations and individuals has long been an established fact. Almost one hundred and eighty years ago, men in the field of medicine in Nova Scotia were attempting to fit together statistics on causes of death, to get a picture of those common causes where additional efforts and knowledge might lower the death rates. The results of these attempts at statistics must have been discouraging, for while the legislators were sympathetic and passed certain laws requiring registration of deaths, the recordings were haphazard at best. Further, there was no central point for the collection of those records filed, and the compilation of statistics on an overall Provincial basis was impossible.

Finally, about 1864, a system for registration of deaths was evolved where the recordings were pooled, or centralized. This enabled interested statisticians to compile statistics, and led to the production of statistical reports covering the Province. Unfortunately these reports were printed for only a few years up to and after Confederation. The British North America Act empowered the Dominion Government to collect all records and compile all statistics, thus removing from the Province its' prerogative in this already well advanced field.

Regretably not all the obligations of the Dominion Government under the B.N.A. Act were met. The recording of deaths in Nova Scotia disappeared in 1877, and from then onward for a period of some thirty-one years, there are no records or statistics of deaths and causes of death available.

Finally, in 1908, the Provincial authorities sensed that these records and statistics were a definite need for the advancement of the Province, in the medical and other fields. Legislation was brought about providing for the recording of all deaths in the Province, and this has been carried on to the present day.

Under existing legislation, the funeral director¹ is made responsible for obtaining the personal particulars of the deceased and for the completion of the death registration form with these particulars. The funeral director must then present this registration form to the physician who last attended the deceased. The physician should complete the medical certificate of cause of death in accordance with the International List of Causes of Death, and return the completed registration form to the funeral director. The physician should remember that the law requires the funeral director to file the completed death registration in order to obtain a burial permit. The burial permit is a legal requirement and must be obtained before burial takes place.

If the foregoing procedure is carried out through the cooperation of the physician and the funeral director, almost all deaths would be recorded within about three days of the date of death.

1. "Funeral director" means any person who takes charge of a dead body for the purpose of burial, cremation, removal or other disposition;

It is well to note here that the procedure for death registration places little, if any hardship on either the funeral director or the physician. Any lack of cooperation on their part however and the subsequent non-registration of a death may, and oftentimes does, cause tremendous hardship for relatives of the deceased. This in addition to the fact that hundreds of such cases add together to form the basis for extremely poor statistics.

It is difficult to believe that there are general practitioners and specialists in the field of medicine in Nova Scotia who are indifferent to the needs of relatives of deceased patients and the Province and Country as a whole, and that there are funeral directors, who have placed themselves on a professional level in a reputable business, who flagrantly disregard their duty under the laws of the Province for registration of deaths.

Perhaps the facts would be better established in the report of a survey conducted to determine the extent of unrecorded deaths, and presented to the Vital Statistics Council for Canada at the 1957 annual meeting held in Ottawa in June. The report is presented here in its' entirety.

"In conducting this survey, the third of its' kind completed in three consecutive years, it was decided to wait until after April 1st, 1957, before making any searches. Deaths to be searched were 1956 occurrences, and a minimum of three months would therefore have elapsed following the last possible date of death. Also, with cut-off date of February 28th for statistical purposes, it would be impossible for any deaths not already recorded to be included in the 1956 death tabulations.

To proceed, a list of known deaths, numbering 184, of Province-wide distribution and reported to the Old Age Security Authorities by other than our Vital Statistics office, was obtained. These deaths all occurred during the months of August, September and October of 1956. We were supplied with the names of the deceased, their address, at time of death, and the date of death. Armed with this information, our searching of death indices was started. All those for which no record could be located were double-checked.

The result was that of the total of 184 known deaths for which we searched, we could find records for only 128, leaving 56 unrecorded.

Recognizing the fact that the deaths concerned in this first search were all in the 70 and over age group, we can draw a reasonable picture of the situation by dealing only with this age group at this point.

The 70 and over age group supplies approximately 50% of the deaths recorded annually. Our sample of 184 known deaths shows 30.4% of these deaths unrecorded, five months after the last one could have occurred.

It must be remembered that the foregoing sample is taken from a specific group, namely those of 70 years of age and over who were receiving Old Age Security and who died during the months of August, September and October 1956. It must also be noted that the sample was taken for months when weather, road conditions and such factors would be at their best, with the result that recording was probably at its' best as well.

We should therefore be able to calculate, with some degree of accuracy, that 56 unrecorded deaths in the sample of 3 months indicates 224 unrecorded deaths in the same specific group for the full 12 months. There is no account made of the deaths in the 70 and over age group of those who were not receiving Old Age Security.

As in previous surveys, we were not satisfied to base our findings and resultant opinions on the situation apparent in one specific group. To go farther afield, we selected at random 120 death notices from a newspaper that covers

the Province. These deaths included all ages, were reported from all parts of the Province, and occurred during 1956. To avoid any possible duplication of those already checked in the 70 and over age group, we avoided selection of any death that occurred during the months of August, September and October; these being the months of death for the previously checked specific group.

Of the 120 deaths in this sample we found that there are 11 deaths unrecorded. This is 9.2% of the sample unrecorded.

It is quite possible that deaths for which newspapers print notices might be deaths of more widely known individuals, or of the relatives and friends of such individuals, and that such deaths are more likely to be recorded than those deaths not given newspaper publication. However, with such evidence as supplied by the factual data, there is no need to presume for the purpose of making an analysis.

At this time there are 5756 deaths recorded as having occurred in Nova Scotia during the Calendar year 1956. The random sample indicates that 9.2% of the deaths were unrecorded, and the 5756 recorded deaths therefore comprise 90.8% of all deaths that occurred.

On the basis of these facts, it is evident that approximately 6339 deaths occurred in the Province of Nova Scotia during the calendar year 1956. It is also evident that approximately 583 of these deaths were not recorded up to April 1, 1957, and will not be included in statistical tabulations for 1956.

The results of this survey, together with that carried out in the previous year, must surely express the need for careful study of our death registration programme, and point out to administrators of the programme the urgent need for measures to enforce the Legislative requirements for registration of all deaths."

The foregoing report leaves little to the imagination. It is quite evident that at least 10 percent of the total deaths that occur in our Province annually are not recorded, and that every reasonable means must be utilized to bring about registration of all deaths.

Medical practitioners throughout the Province are aware of the need for accurate medical statistical data on causes of deaths. They know that while some of them might not personally use these data directly, their work is affected, either directly or indirectly, by the compilation of statistics and their analysis by others in the various fields of medicine. It would seem therefore that it is in the interest of their own field of medicine, and in the interest of the families they have become an integral part of, for the medical practitioners to help to insure the recording of deaths of their patients.

A phone call as a reminder to the funeral director who has neglected to ask for a completed medical certificate, might be the simplest and most effective method of bringing about a vast improvement in death recordings, by the attending physician.

It is realized that in a substantial number of cases death occurs without medical attendance, and especially in outlying districts it often happens that the deceased has not been under regular attention of a physician. In such instances, the funeral director is required to notify a coroner having jurisdiction, or the local medical health officer, or a medical practitioner designated by the coroner or by the medical health officer. The coroner, medical health officer, or the medical practitioner so designated, must then inquire into the facts and complete the medical certificate.

In a case where there is reason to believe that death has occurred as a result of violence, unlawful means, negligence or misconduct on the part of others, or under circumstances that require investigation, only a coroner may sign the medical certificate of cause of death.

It is hoped that the medical practitioners will utilize this information, and that through their cooperation, the registration of deaths and subsequent statistics of causes of deaths for the Province will be greatly improved.

THE USE OF HYDROCORTISONE BY LOCAL INJECTION*

A description is given of 18 months experience with local injections of hydrocortisone in 512 cases of various joint and soft-tissue conditions.

For intra-articular injection, hyaluronidase has been combined with the hydrocortisone to insure maximum dispersal. When treating soft tissues, two per cent procaine was also injected to ensure localization.

Good results have been obtained in rheumatoid arthritis, osteoarthritis, traumatic synovitis, hemarthrosis, and lesions around the shoulder-joint.

Hydrocortisone injections have given relief in a high percentage of cases of tennis elbow, golfer's elbow, plantar fasciitis, DeQuervain's syndrome, and tenosynovitis. Traumatic arthritis of the elbow-joint has also been treated.

Few side-effects have been observed.

Kendall, P. H., *Annals of Physical Medicine*, 3: 1-8, January, 1956.

*Medical Abstracts, May, 1956.

THE VITAMIN B₆ REQUIREMENT FOR NORMAL PREGNANCY*

Normal pregnancy increases the daily requirement for vitamin B₆ beyond that amount supplied by the average American diet. Enzymatic studies of maternal and foetal blood and of the human placenta suggest that foetal structures, on the other hand, are well supplied with pyridoxine. Although we are not aware of any clinical harm resulting from maternal B₆ insufficiencies in pregnancy (such as increased incidence of toxemia), certain metabolic abnormalities exist which are readily corrected by pyridoxine supplementations. Existing knowledge supports the contention that daily prenatal supplements should contain at least five mg. of pyridoxine.

Page, E. W., *Western Journal of Surgery, Obstetrics and Gynaecology*, 64: 86, February, 1956.

*Medical Abstracts, May, 1956.

The Rehabilitation Of Workers In Industry

F. Dean Kemper, M.D.,
Regional Physician, Imperial Oil Limited
Halifax, N. S.

Talk to the 3rd and 4th year Medical Students of Dalhousie University at the Victoria General Hospital on Saturday—16th March, 1957.

THIS vast and complicated subject could be discussed from many points of view but today the accent will be on the role of the Industrial Physician. Before we can proceed with a logical discussion of any aspect of the topic, however, it would be advisable to define our terms.

The Industrial Physician

The Industrial Physician is a Doctor who is concerned with the many aspects of maintaining and improving the health of a work-force. It is axiomatic that all industry depends upon manpower. The health of the individual worker, therefore, is of direct concern to management. The field in which such a physician operates might better be called 'Occupational Health'. Most physicians deal with sick people, but the Industrial Physician works with apparently healthy individuals most of whom are in a rather stable environment. One of the most important functions of an Industrial Physician is the carrying out of a preplacement medical examination on all applicants for employment. This is a very comprehensive examination and it will be mentioned in a little detail because it relates to some later remarks which we will have to make regarding rehabilitation. The preplacement examination includes an occupational history, a family history, personal history, past illnesses, functional enquiry, detailed physical examination and certain basic laboratory procedures such as urinalysis, haemoglobin and chest X-ray. Other tests may be performed as indicated to assist in the evaluation of the individual. During the examination the Industrial Physician makes a careful evaluation of the applicant's personality and general intelligence level. The net result is an excellent base line of data which can be used for comparison with information gathered from all subsequent examinations. It is by virtue of such data that the physician is enabled to advise management, as to the proper placement of the individual, that is to say, the examination is not primarily intended to label the applicant as employable or non-employable, but employable under certain conditions. It is self-evident that before the Industrial Physician can fulfill this role adequately he must have a better than average knowledge of the physical, mental and emotional requirements of the various jobs available. Additional medical information is gathered at periodic health examinations which are conducted on the employees at intervals of one, two or three years depending upon their age. These examinations, together with the advice given, are intended to maintain or improve the individual employee's health level.

Disabled and Rehabilitation

These words have been used in Twentieth Century writing in a very loose fashion. 'Dis' is a prefix which signifies a partial or total negation and has a time reference, that is to say, it means,—no longer or less than before. It is in

this sense that it is used in such words as 'disease', 'discontinued', or 'disconnected'. The word 'able' has a descriptive connotation and is used in such words as 'able-bodied', and 'able person', but it also has a dynamic sense in such statements as 'I am able, or unable to do such a thing'. The whole word 'disable', therefore, signifies a change from good to bad and implies that the person who is 'disabled' was at one time 'able'.

The word 'rehabilitation' was originally applied to the restoration of a degraded man's rank and privileges. By the middle of the nineteenth century it was occasionally used to mean restoration of other kinds. But rather suddenly during and after the Second World War it was used to indicate virtually anything that had been mended, renewed or restored. When applied to humans, of course, it means something more than a simple healing process. It means a course of treatment or instruction for the purpose of restoring people already healed of a disease or wound to a life of active usefulness.

The Impact of Disability

Irrespective of the type of disability, disabled persons at first feel different from their fellow workers, and indeed from the rest of the population. They may not only feel different but in most instances feel inferior to their fellows. The feelings of inferiority are intensified if the disability is of a disfiguring nature, and even more so if the disability imposes the necessity of accepting financial or physical support.

In the social situation the disabled person, irrespective of the nature of his disability, finds himself faced with the necessity of re-adjusting his way of life. Prior to his disability he could compete with his fellows in the community according to his physical capacity and ambition. Now restrictions are imposed on him, both at work and at play. Adaptation to this new world is very difficult. On the other hand, the community reacts to a disablement in a variety of ways depending upon the nature of the disability and the manner in which the disabled person accepts it. For example, marked differences exist between the community's reaction to war disability and the disabilities incurred in industry or automobile accidents. The blinded and the tuberculous are often treated with indifference bordering on ostracism.

In the industrial situation the disabled person faces factors which have a direct bearing on his job placement and working efficiency. As examples we may mention the presence or absence of residual difficulties following the disability, for example, painful stump in an amputee; domestic difficulties brought on by the disablement; abnormal psychological reactions to the injury. It is self-evident that disabled persons who were inefficient workers prior to their injury cannot be expected to be satisfactory or well-adjusted workers because they have become disabled.

Employability of the Handicapped

Let us now return to our starting point and reconsider from the Industrial standpoint most of what we have already said. In industry anyone who is physically handicapped requires selective job placement. This is why the replacement examination which was mentioned earlier is of paramount importance. In industry any deviation from normal may be considered a physical disability if it:

- (a) requires a person to modify or change his occupation,

- (b) increases the difficulty of obtaining employer acceptance,
- (c) requires special consideration in job placement or in working conditions to avoid aggravation of the disability or jeopardizing the health or safety of the individual or his fellow workers.

Examples of such defects would be flat feet, defective colour vision, migraine headaches, ocular squints and duodenal ulcer. To state it another way,—any defect is considered a physical disability industrially, if it limits the individual's work capacity. Considered in this light it will be seen that from the industrial point of view the medical role in placing the disabled worker is no different from his role in placing the average applicant. Whatever the person's disability may be, if he is to be matched successfully with a job in which his health and safety will be maintained, and in which his efficiency equals or excels that of an able-bodied person, four requirements must be met,

(1) **Physical ability.**

To avoid frustrations and possible injury it is essential that the workers should have ability to accomplish the job efficiently.

(2) **Personal Safety.**

The worker should not be a hazard to himself. An individual subject to dizzy spells should not work above ground or floor level or around moving machinery.

(3) **Safety to others.**

An individual who has epileptic seizures should not be allowed to drive trucks or buses.

(4) **Personal Health.**

The employment situation should not aggravate the disability of the worker. For instance the person who has heart trouble should not be placed in a situation requiring considerable physical exertion.

To observe these requirements, it is necessary that the industrial physician has information regarding both the worker and the job.

Evaluating the Worker.

We have already outlined how this is done at the preplacement medical examination.

Evaluating the Job.

This part of effective job placement is extremely important and there can be no mass-production technique employed. It is the phase of job placement that has been neglected in the past. The industrial physician is in a unique position by virtue of his close association with the plant and its procedures. He is therefore, able to make or has already made a systematic survey of each job to determine the facts which will fit into the following four categories.

1. Physical demands.
2. Working Conditions.
3. Occupational Health situations.
4. Safety Factors.

Physical Demands—The industrial physician must equate the physical demands of the job to the abilities and capabilities of the worker. The employee must not only work,—he must perform successfully. We must consider requirements such as strength, exertion, visual skill, hearing, talking, etc., as well as the typical physical demands encountered in sitting, walking, climbing stairs and ladders, crawling, lifting, carrying, handling ability, strength, colour perception and depth perception.

Working Conditions—A thorough knowledge of the working conditions is important because of the possible harmful influence of certain conditions upon disabilities. Working conditions include such factors as indoors, excessive heat or cold, excessive humidity, wet working conditions, sudden temperature changes, ventilation and lighting, noise, isolation, etc.

Occupational Health Situations—Occupational health situations must be evaluated very carefully for they may have a cumulative effect. Under this heading we must consider the following,—air pressure extremes, radiant energy such as ultra-violet, nuisance dusts, skin irritants, respiratory irritants, systemic poisons, and asphyxiants. The services of a trained Industrial Hygienist are of great assistance in maintaining control of many of these factors. Where doubt exists as to a potential danger, the proper control measures should be used to bring the situation under control.

Safety Factors—Modern industrial management is rightly concerned that the handicapped be properly placed. It is essential therefore, that any job appraisal give thorough consideration to any potential accident factor. This should include a study of such things as danger of falls from elevation, work on moving surfaces, exposure to moving objects, exposure to falling objects, exposure to foot injuries, exposure to eye injury hazards, the danger of fire and explosion, and the responsibility for the safety of others. The last mentioned refers to occupations where the welfare of fellow-workers or other citizens would be endangered as a result of loss of self-control, defective motor co-ordination or clouded sensorium of the handicapped worker. Such jobs would include,—airplane pilot, overhead crane operator, bus or truck driver.

Putting the Information to Use.

We have now gathered together the necessary information to habilitate a handicapped individual or re-habilitate an injured or partially disabled worker. The Personnel Department, engineers and production specialists and other members of management are all part of the team working toward the same goal—and we should stress that it takes the team approach to solve this tremendous problem. We cannot delve into the myriad parts played by all members of the team, particularly the important community services.

Once the worker is established at his job further repeated observations are necessary. From the Management standpoint to ensure that the worker is productive and to determine whether or not simple alterations in procedure would be beneficial and from the medical aspect to establish beyond doubt that the employee's physical and mental abilities are truly matched with the demands of the job and are not being over-taxed—a situation which leads to frustration and further disability.

The prevention of accidents, industrial or otherwise, is many times more desirable and less costly, emotionally and financially, than injury and prolonged rehabilitation procedures. But in spite of intensive safety training, planning of operations and alterations in design of equipment to make it more fool-proof,

we must proceed on the assumption that industrial accidents will continue to happen. In the team which shares the responsibility of rehabilitating the injured or disabled worker the industrial physician occupies a key liaison position between employee and management.

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- Wittkower, E. D., Canadian M.A.J. 73: 371, 1955.
Ability, Disability, Employability-Zurich Insurance Companies, 1947.
Gingras, G., Health and Industrial Safety 1: 3, 1956.

TRACHEOSTOMY*

The problems that arise when a palliative tracheostomy must be performed are described. It is pointed out that an ideal palliative tracheostomy should fulfill the following requisites: It should be of a lower type: both the skin and the tracheal openings should be large enough and built in such a way as to allow the patient to remain without the tracheostomy tube for long periods of time. The insertion of the tube into the trachea should be a very easy maneuver for the patient. The operation should produce a fixation of the trachea upward and forward. And, finally, this procedure should facilitate rapid epidermization of the tunnel conducting the skin opening with the tracheal opening.

A procedure of tracheostomy is described with the use of a presternal flap in the shape of an inverted U which is sutured to the lower rim of a square window created on the trachea. This operation solves many of the problems that arise when a palliative tracheostomy has been performed.

Bisi, R. H., Surgery. 39: 263-269, February, 1956.
*Medical Abstracts, May, 1956.

AN EVALUATION OF EARLY OPERATION IN ACUTE INFLAMMATION OF THE GALL BLADDER*

The results in 51 early, and 158 elective operations for inflammatory disease of the gall bladder and biliary tract have been studied and compared. Factors considered include mortality, morbidity, complications, surgical trauma, post-operative sequelae, length of hospitalization, and disability.

Early operation is the choice in acute cases (a) if there is evidence that gangrene or perforation are present or impending, or (b) if the patient is in otherwise excellent health.

Elective operation, preceded when necessary by antibiotics and supportive therapy until severe manifestations have subsided, is preferable in the remaining and acute chronic cases.

Shea, P.C., Journal of the Medical Association of Georgia. 45: 41-45, February, 1956.
*Medical Abstracts, May, 1956

Camp Hill Hospital

Its History and Development

by

K. A. MacKenzie, M.D.¹ T. E. Kirk, M.D.² and R. E. Lemoine³

CAMP Hill was originally the designation given to a large rocky knoll situated in the centre of the Halifax Peninsula. This was considered to be a strategic area and was retained as Crown property for use by the Armed Forces of Canada, at the time of the founding of the City in 1749. Even today the original granite blocks with a carved arrow (Crown insignia) are to be found on the grounds.

History reveals that in 1757, 1200 soldiers were encamped in this area awaiting transport to Louisburg. When Boston was evacuated in 1775, troops were stationed here under training to reinforce British forces in U.S.A. during the American Revolution. The military camp was the scene of numerous court martials with some convictions and executions.

In 1833 there was a severe epidemic of cholera in the City and all service cases were treated at this site. This may be considered as the baptism of Camp Hill as a medical centre. With the expansion of the City, the original area became subdivided into Camp Hill Cemetery, the Public Gardens, and some smaller dispositions. Plans were under consideration, whereby the present location would become a Roman Catholic Cemetery. However, in 1843 the military authorities decided to retain the present site, and an area now known as Holy Cross Cemetery was assigned to the Roman Catholic Church.

During the First World War, the facilities at Cogswell Street Military Hospital were soon overtaxed by the numerous casualties being received from overseas. At the beginning of 1917, the Military Hospitals Commission Command took over a residence at Pine Hill College. This was known as the Pine Hill Convalescent Home. Early in the same year, the Department of National Defence, in conjunction with the Hospitals Commission, formulated plans for the erection of a military hospital. Permission to build was granted by the City in March of that year. The erection of new buildings was immediately started. The construction was of temporary material, because it was believed the need for such a hospital would not exceed twenty years. Six connected buildings for patients were completed between Robie Street and Summer Street. These were designated as follows, from west to east: H & J, K & L, Q & R, M & O, S & T, and X & Y. Kitchen and heating facilities were placed in an area immediately north of H & J Pavilion. A building for Administrative Services was located on the eastern side of the property facing Summer Street.

In September the first patients were admitted, the majority of them being convalescent cases. On December 6th, 1917 there occurred the great disaster, the Halifax Explosion. Destruction was terrific and there were a tremendous number of casualties. All available hospital space in the City was required to look after the injured people. At that time, Camp Hill Hospital had a patient

1. Formerly Professor of Medicine, Dalhousie University, and Chief of Service, Medicine, Camp Hill Hospital.
2. Medical Superintendent, Camp Hill Hospital.
3. Recreation Supervisor, Camp Hill Hospital.

strength of 300 and all ambulatory cases were immediately evacuated. Over 1200 casualties were admitted, utilizing corridors, floors and every available inch of space. Additional medical staff was obtained by volunteer physicians and nurses from the City, Province, and outside centres, particularly Boston, Montreal and Toronto.

More new construction was undertaken in 1918. A recreational and vocational building was erected south of H & J and K & L Pavilions. This contained a large gymnasium with bowling alleys, vocational services, and store-rooms in the basement. Prior to completion of this building, orthopaedic appliances were manufactured at the Technical College, and later at this site. Records indicate that a severe gale lifted a large portion of the roof from the vocational building in 1919. Also in 1918, a one storey structure was constructed on the northwest corner of the property to serve as a maintenance workshop and a laundry. It never functioned in the latter capacity. In 1919 a Nurses Residence was built at the corner of Jubilee Road and Summer Street. At this time, the Bellevue Building on Spring Garden Road was utilized to house some of the Administrative Services.

Although Camp Hill Hospital at the outset treated only convalescent cases, its services were quickly extended to look after all surgical and medical problems. This soon resulted in the provision of all the various accessory facilities such as X-ray, E.E.N.T. Clinic, Massage Department, Pathology Department, Dental Clinic, Vocational Training, etc. Patients suffering from pulmonary tuberculosis were treated at the Provincial Sanatorium in Kentville. Additional buildings had been constructed there by the Department of National Defence in 1917, to look after service personnel suffering from this disease. These buildings were ultimately transferred to the Provincial Government. Administrative personnel were assigned to the Sanatorium to assist the latter in dealing with the special problems of service and veteran patients. When the treatment of such cases was completed, they were referred to Camp Hill Hospital for disposal and review by the representatives of the Canadian Pension Commission.

During this period our institution was, at first, a military hospital functioning under the control of the Department of National Defence. Thus all of the staff were military personnel. P. C. 432, dated February 21, 1918, established the Department of Soldiers Civil Re-establishment. This Department took over from the Military Hospitals Commission of the Department of National Defence. It subsequently became responsible for the training and rehabilitation which had previously been under the direction of the Invalided Soldiers Commission. The Director of Medical Services from the beginning until 1919, was Lt. Col. F. McKelvey Bell. He was succeeded by Col. Evans G. Davis, C.M.G., who held the position from 1919 to 1920.

As stated previously, the Department of Soldiers Civil Re-establishment replaced the military administration. This was a somewhat gradual procedure locally, extending from 1918 to early in 1920. Many accessory services were required for the treatment of veterans and these were developed at this time. They included Prosthetic Services, Laboratory Services, Dispensary, Chaplain Services, Physiotherapy, Dietary Services, Rehabilitation and Vocational Training, etc.

In 1928 the Department of Soldiers Civil Re-establishment was changed to the Department of Pensions and National Health. At this time Dr. J. Ross Millar became Director of Medical Services, holding the position until 1942. Also at this time, Camp Hill Hospital became a teaching unit for Dalhousie

University Medical School. The value of the clinical material in the institution was recognized and bedside teaching was established. Certain students were assigned for varying periods for supervised training.

It now became evident that with the increasing age of veterans, a new type of hospital care would have to be provided. Certain older veterans who were unable to maintain themselves in their community, were granted Domiciliary rights and a limited number were admitted under what was known as the Veterans Care Programme. In 1932 the Department decided to admit Sick Mariners to our institution.

In March, 1938, there occurred an event of particular importance to the community and the institution. A Mohammedan mariner, who was unable to speak English, was taken from a ship in a very serious condition. He was seen by the Port Physician and transferred to Camp Hill Hospital with a temperature of 104. Members of the medical staff made a diagnosis of Smallpox and the patient was quickly transferred to the Quarantine Hospital at Lawlor's Island. This institution had not been in use for some years and it was not equipped to provide treatment for patients. However, this was a real emergency and special action had to be taken. The patient was accompanied to the Quarantine Hospital by Miss Mary Lindsay and an orderly from the Immigration Department, but died three days after transfer. Nine days later one of the Camp Hill Hospital orderlies, Mr. R. Smith, developed Smallpox. He was transferred to Lawlor's Island, accompanied by Dr. Hugh Collins, Mrs. M. C. Macdonnell, Miss Mary Lindsay (who had returned), Walter Wilson and an orderly, Mr. William Zinck. The following day another orderly, who had been exposed, Mr. E. Liggins, developed the disease and was also transferred to the Island. All of these remained at the Hospital for a period of about two months, and both the orderlies made a complete recovery. This situation was recognized as an emergency amongst medical authorities. Conferences were held between Federal, Provincial and Civic officials. The Hospital was quarantined and a general city-wide vaccination programme was inaugurated. It was learned that about one-half of the citizens of Halifax were not properly protected by vaccination. Large quantities of vaccine were rushed to the City and Halifax was saved from a serious epidemic by the efficient action of the public health authorities.

In September, 1939 Canada again entered into an international conflict--World War Two. Almost immediately, Camp Hill Hospital became taxed to capacity and in a few months was handling about 1,000 patients. Members of the medical profession joined the Armed Forces in large numbers and those remaining were working night and day. At one time, the number of practising physicians in the City of Halifax fell to 50. This presented a serious problem, both to the public and to hospitals.

Insofar as Camp Hill was concerned, great assistance was obtained from Medical Officers of the Royal Canadian Navy. A large number were attached to this institution where they looked after the medical requirements and also continued the teaching programme. Medical Officers with the City and Provincial Departments of Health, also provided assistance. Many of the specialists who were attached to the institution have since become prominent in Medicine throughout Canada.

Early in 1940, it was found necessary to quickly open the Quarantine Hospital at Rockhead, because of an epidemic of cerebro-spinal meningitis in the Halifax area. It should be noted that sulfa drugs were used in the treatment of this epidemic for the first time, with very good results. In fact, there was only one death from the disease in this area.

In 1944 the Department of Pensions and National Health was divided into two Federal departments, namely, National Health and Welfare, and Veterans Affairs. Veterans hospitals came under the jurisdiction of the latter Department, with little change in administrative routine and policy.

During the closing months of World War Two, it became evident that demobilization would bring many problems to the Treatment Services of our Department. With a large number of veterans requiring treatment for pensionable and other disabilities, it was clear that considerable reorganization was essential. During the winter of 1945, Dr. W. P. Warner was appointed Director General of Treatment Services, and he immediately set about making the necessary plans to provide the best possible treatment for our veterans.

Some of the basic principles of his plans were as follows:

1. The provision of new accommodation and the most modern facilities in our various institutions.
2. The appointment of part-time specialists, who held university appointments, to provide the medical treatment necessary in such hospitals.
3. The establishment of close liaison with medical schools, with the aim of having our hospitals recognized as teaching institutions, both undergraduate and graduate.
4. The establishment of the Doctor of Choice plan, which permitted entitled veterans to receive treatment from doctors of their choice in areas where D.V.A. facilities did not exist.
5. The creation of a clinical research programme.
6. The establishment of close liaison with the medical services of the various branches of the Armed Forces.

All of the above were gradually implemented in the Halifax District. Specialists who had been in the Armed Services were returning to Halifax, and many of these were appointed to senior posts at Camp Hill Hospital. Non-specialists were engaged as general duty medical officers with the responsibility of carrying out initial examinations and recommending treatment, or referral to a specialist if desired. Both the specialist group and the general duty medical officers were paid on a part-time basis, the amount of remuneration being determined by the responsibility which was assigned to the individuals concerned. During the busiest post-war years, i.e. the latter part of 1945 and 1946, examinations and treatment were provided in the temporary buildings which had existed for many years. However, planning was in process for more modern facilities.

In 1947 the old kitchen and boiler house were dismantled, along with the greenhouse. New construction was undertaken, and in 1948 a 250-bed unit with the most modern treatment facilities was opened. At the same time a new power plant was erected on Summer Street. During the same period the Canadian Red Cross constructed a Lodge in conjunction with the new hospital building. This opened in 1948 and was designed to provide recreation for patients, and accommodation and meals for relatives and visitors from out of town.

During this era, the Hospital has had an expanded Intern-Resident programme. Every effort was made to provide the best possible training to this group and we were extremely fortunate in obtaining capable young doctors for such training. We also received assistance from the Armed Services who, on occasion, sent Medical Officers here for post-graduate work.

During this period the Administrative Organization was established, in accordance with the requirements of the Commission of Accreditation. Neces-

sary committees were appointed and a complete outline of the Hospital organization was prepared. By-laws and regulations were approved by the Staff and put into operation.

In the year 1951, an Assessment and Rehabilitation Unit was established to deal with the increasing number of Geriatric cases which were presenting themselves. This was designed to assist the older patients in managing outside of hospital, if such was possible. The Committee in charge of this Unit also reviewed all cases for War Veterans Allowance when the individual was under the age of 60. The most recent figures show Domiciliary Care cases at Camp Hill numbering 130.

In 1952 a new Biological Test Building was constructed. In 1953 the School for Nursing Assistants was established. This was organized to train individuals in the basic principles of nursing and dietetics in order to equip them to act as assistants to graduate nurses. It has served a most useful function in supplying such personnel trained in practical nursing to hospitals throughout the Province.

During these years some demolition and continuous improvements were made to the temporary structures. Ward M & O was closed in 1948 and X & Y and Q & R in 1950. Pavilion A was completely remodeled in 1952. Pavilion X & Y and Wards O & R were demolished in 1954.

It would surely be amiss not to make reference to the many volunteer groups who, over the years, have given their services to provide comfort for the patients of Camp Hill Hospital. The Red Cross Hospital Visitors have brought reading material, smokes and other treats to the patients every Monday afternoon since 1920. The Salvation Army also makes regular weekly visits. Other groups which must be mentioned are: the various Halifax I.O.D.E. Chapters, the Silver Cross Women, the Legion Branches and Auxiliary, the Catholic Women's League, Uncle Mel's Concert Parties, Beta Sigma Phi, Atlantic War Fund Members, B'Nai Brith, Fleet Lines Bus Company, the Capitol Theatre, H.M.C. Dockyard, Wanderers Club, Forum Commission, the various Halifax sports promoters, Halifax Branch of the Red Cross, Church Clubs, the Y.M.C.A. and Y.W.C.A., Ex-Service Clubs, Customs Officers, Lions Club, Rotary Club and Kiwanis Club, and many, many individuals and groups who have devoted their time and energy to make hospital life more pleasant for the veterans. At Christmastime, this assistance not only comes from the Halifax area, but from all over the Province, and even as far away as Ontario.

Since its original construction, Camp Hill Hospital has been visited by some very notable personages. A list of some of these will bring back many memories. It includes: Prince Arthur, Duke of Connaught; King George VI and Queen Elizabeth; Arthur Meighan; Edward, Prince of Wales; Lord and Lady Tweedsmuir; J. L. Ralston; General Montgomery; George Drew; Lord Alexander; J. A. D. McCurdy; Vincent Massey; Alistair Fraser; Dame Flora MacLeod; Princess Elizabeth; the Duke of Edinburgh; and Joan Caulfield.

Of the patients, there have been many who have displayed dauntless courage during their affliction, but there is one who has built this spirit into a nation-wide organization. This, of course, is Walter Callow. Invalided early in his First War career and finally in 1937 completely bedfast, he has shown a spirit of endurance and determination that has defied all medical speculation. Shortly after this, he became totally paralyzed, and in 1939 his sight failed completely. Last year his condition demanded the removal of both legs. Yet, despite all this, he is the active president of a tremendous organization.

Starting with a cigarette fund for servicemen during the last War and then the planning and construction of a special coach to carry wheelchairs, he now heads the Callow Veterans and Welfare League, which operates three wheelchair coaches locally, with new branches being organized across the Dominion and even in the United States. An amazing man—lying in his room at the Veterans Annex, able only to hear and speak with difficulty.

It is most unfortunate that in a writing of this nature, all the Staff cannot be mentioned, especially those who played a definite role in the progress and development of our Hospital—such as orderlies, clerks, maintenance craftsmen, technicians, dietary, cleaning staff, etc. Yet, one must realize that considering the period covered, it is impossible to give complete and accurate details.

As of 1955, the Department of Veterans Affairs has inaugurated a system of Annual Reports for Veterans Hospitals across the Dominion, which will supply pertinent information for the years to come. It is earnestly hoped that the foregoing pages will provide a sketchy record of our Institution from its beginning in 1917, to 1954.

Florence Nightingale, Pioneer of Public Health and Medical Statistics

B. Ruebner, M.D.

THE name of Florence Nightingale is firmly connected in our minds with the Crimean War and the development of the nursing profession. A modern biography by Mrs. Cecil Woodham Smith* not only gives a fascinating picture of her character but also shows that her achievements were by no means limited to the nursing field.

Her long life (1820-1910) overlapped the Victorian era of which she was such a prominent representative. Her father was a rich dilettantish English country gentleman. She was an emotional child, at once humourous and gloomy, with a love for neatness and order. She never earned a regular salary and remained financially dependent on her father for the greater part of her life. As was customary at that time her family made unceasing demands on her. She therefore had to exploit a nervous illness to protect herself and her work from her family. She was beautiful and attractive but refused proposals from several of the most eligible men of her time. Like Joan of Arc she heard inner voices and felt that her work was of such importance that she could not undertake the responsibilities of marriage. While she tried to achieve a mystical union with God her passion was for facts, figures and reforms.

During the Crimean War the British Army venerated her and she, in her turn, fell in love with the ordinary British soldier. After her return to England she set herself the task of improving living conditions in the Forces. She collected facts about Army health, analysed them statistically and then drew up recommendations for improvement. An immense amount of back room work had to be done before she obtained the mastery of detail which made her the supreme authority on this subject in England.

She was the first to present statistical results in the form of pictorial charts. Her influential friends were used to put this material before the Royal Commission on the health of the Army. Often she also submitted recommendations directly to the Secretary of War. In this way she strengthened the position of the Regimental Medical Officer as adviser of the Commanding Officer in matters of health. An efficient system of health statistics and a sanitary code for Army barracks were established. She also introduced educational classes and reading rooms to keep the soldier off the streets and away from the taverns.

In 1861, five years after her return from the Crimea, the Royal Commission on the health of the Army in India was established. By collecting facts from every station she became, without ever having been there, the greatest expert on India. She realized that before the living conditions of the Army could be improved the sanitation and irrigation of the villages had to be reformed. Her influence became immense. Successive viceroys called on her before taking up their appointments to be coached in their duties.

Hospital planning was another of her principal interests. She did not believe in unorganized devotion and therefore introduced a system of bells so that the patients could call the nurses and dumb-waiters to transport food from the kitchen to the wards. Apart from hospital nursing Florence Nightingale

*Florence Nightingale, Constable, London, 1950.

also took a great interest in the English village and did much to make the district nurse the familiar figure which she is today. By analysing the statistics of births and deaths she discovered that in 1871 it was much safer to have a baby at home than in any of the crowded hospitals and she advocated small rooms for maternity hospitals. This was at a time when surgical antiseptics was in its infancy and scientific bacteriology was unknown.

For over twenty years she worked 18 to 20 hours a day for the three causes of nursing, army reorganization and Indian sanitation. She encountered much indifference and opposition but gradually her ideas began to prevail. In the course of her work almost all the great Victorians came to call on her and many became her friends. These included Dr. Farr, the medical statistician, Dr. Jowett, the head of Balliol College, Oxford, General Gordon of Khartoum and many others. She lived long enough to see the adoption of many of the reforms for which she had fought. Her old age was passed in tranquillity and she took a great interest in every nurse at St. Thomas's Hospital, London, the first nurses' training school established by her. She was never a suffragette and thought women doctors were unnecessary so long as there was a shortage of trained nurses.

Quite clearly Florence Nightingale was not only a kindly nurse but had a brilliant intellect, an unsurpassed mastery of detail and a passion for work. One wonders what field she would have selected for reform in the twentieth century? Would she perhaps have become a great civil servant or industrial manager? Surely there can be no doubt that she would have excelled in any profession.

OFFICE SPACE

The undersigned proposes to erect a building which will be primarily for office suites for medical men on Connaught Avenue at Bayers Road, a very desirable and well populated area. If any medical man is interested he may contact Mr. Jack Newman, 4 Armercescent East, Tel. 2-2334 and plans can be drawn up according to individual requirements. All inquiries confidential.

Diabetes Week – November 14th to 21st, 1957

SPONSORED BY THE CANADIAN DIABETIC ASSOCIATION

The Canadian Diabetic Association is a comparative new-comer on the scene of lay medical associations. The objective of the association is to offer help and "diabetic" education to all Canadian diabetics who avail themselves of membership in the Association.

Some of its present objectives are—

1. The establishment of a Canadian Diabetic Centre.
2. The preparation of a practical manual of the use of Canadian Diabetics.
3. The confidential registration of every known diabetic in Canada.

During "Diabetes Week," November 14-21, the Association has asked that physicians will bring to the attention of their diabetic patients the work of this association and the advantages of membership. You are therefore asked to "prescribe" membership in the Association to your patients, and it is our understanding that special "prescription forms" for this purpose have been mailed to all practising physicians.

The Canadian Diabetic Association was formerly elected to affiliate membership in The Canadian Medical Association by Council meeting in Edmonton, June, 1957.

We feel that an Association such as this working hand in hand with the medical profession can do nothing but good in the cause of the diabetic patient.

Doctor B. St.C. Morton of Halifax is the President and Miss Marjorie Thompson of Dartmouth is the Secretary of the Halifax Branch of the Nova Scotia Diabetic Association.

Public Relations Aid For Doctors Offices

Probably the greatest threat to good medical public relations is misunderstanding. The patient who receives medical treatment without understanding why it is or why he receives it, or the one who receives an unexpectedly large, perhaps undetailed bill is a potential source of complaints about the profession.

The solution is prevention of misunderstanding by enlightenment. Let the doctor explain his treatment and why he prescribes a certain course of action.

More important, let him discuss his fees with the patient, preferably in advance. By attempting to estimate his own bill, if possible, anticipating hospital and drug costs, the doctor can eliminate many damaging complaints.

Unfortunately, too often the doctor is loath to introduce discussion of fees. Realizing this — and aware that mutual understanding between doctor and patient is essential to good medical service and good public relations — the Canadian Medical Association's Committee on Public Relations has authorized production of a plaque for use in the doctor's office inviting patients "to discuss frankly . . . any questions regarding service or fees."

The plaque — English and French versions . . . measures 9" x 6 $\frac{3}{4}$ ". Wording in gold is printed on walnut finish paper fused to heavy, 1/8" board. Edges of the plaque are bevelled and gilded. An easel mounted on the back permits standing the plaque on the desk, or hanging it on the wall.

The plaques are now ready for distribution and one free copy in English or French will be sent on request. Additional copies will be available at a charge of 75 cents each.

Requests for plaques should be sent to Mr. L. W. Holmes, Assistant Secretary, The Canadian Medical Association, 150 St. George Street, Toronto 5, Ontario.

National Heart Foundation of Canada

This Foundation was organized in 1956. It is with pleasure that the Bulletin publishes herewith a statement of policy by the President, John D. Keith, M.D., for the information of physicians in Nova Scotia.

"The Provincial Heart Foundation from British Columbia to Quebec are federated in the National Heart Foundation of Canada. It is hoped that in the relatively near future a foundation of the Atlantic Provinces will be established also. The National Heart Foundation gives co-ordination at a national level to the provincial programmes of research and education in the relief of cardiovascular disease.

"Since the problem of heart disease arises in over half the cases seen by the physician in general practice it is obvious that the responsibility for the care of such patients lies in his hands. The basis of the programme of the Heart Foundations of Canada rests on this premise. They do not plan to undertake individual patient care or treatment; they do not intend to build buildings to compete with existing facilities across the country. From a relatively short but firmly established experience they are confident that their policy is one well adapted to stimulate a background of interest in cardiovascular diseases that will steadily assist the general practitioner, the internist and those concerned with research.

"The research programme will complement existing research facilities through the support of research personnel, grants-in-aid of research, or of whole units in the field of cardiovascular diseases. It will also provide a training ground for future cardiologists.

"Educational programmes are both professional and lay. The professional programme makes available to the practising doctor booklets, reprints and other literature to help him keep abreast of the recent advances in the management of congenital, rheumatic coronary or arterio-sclerotic heart disease, etc. Visiting teaching teams organized by the Foundations and sponsored by the local medical societies have held clinics on heart diseases in various parts of the country. These have proved popular as have refresher courses in the university centres also organized by the foundations. Both of these activities will continue to be among their important functions.

"The lay programme will function primarily through the doctor's office. Pamphlets are available to the doctor explaining hypertension, coronary atherosclerosis, heart disease in pregnancy, heart disease in children, and problems the doctor wishes to elucidate in general terms to his patient or relatives. Films and speakers for service clubs, parent-teacher groups and other organizations are also available.

"In summary the Heart Foundations of Canada will operate within the orbit of and support of the medical profession and its research facilities. The co-operation of all physicians in Canada is earnestly sought."

If inquiries are made, the correspondence should be directed to — John B. Armstrong, M.D., Medical Director, National Heart Foundation of Canada, 61 College Street, Toronto 2, Ontario.

Society Meetings

Valley Medical Society

At the annual meeting of the Valley Medical Society held during June at the Nova Scotia Sanatorium in Kentville, the following officers were elected.

President—Dr. G. D. Denton, Wolfville,

Vice-President—Dr. J. Avery Vaughan, Windsor.

Secretary-Treasurer—Dr. Harold R. Roby, Windsor.

Member of the Executive of The Medical Society of Nova Scotia—

Dr. J. P. McGrath, Kentville; alternate, Dr. P. S. Cochrane, Wolfville.

Director to Maritime Medical Care Inc.—Dr. A. A. Giffin, Kentville.

Pictou County Medical Society

At the last meeting of the Pictou County Medical Society the following slate of officers were elected.

President—Dr. J. B. MacDonald, Stellarton.

Vice-President—Dr. V. H. T. Parker, Stellarton.

Secretary-Treasurer—Dr. J. H. Fraser, Westville.

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Dr. F. J. Granville, Stellarton; alternates, Drs. H. B. Whitman of Westville and L. M. Sproull of New Glasgow.

J. H. Fraser, M.D.,
Secretary-Treasurer.

Correspondence

Inverness, N. S., October 15, 1957.

The Editor,
Nova Scotia Medical Bulletin
Halifax, N. S.

Dear Sir:

Doctor G. B. Wiswell, in his article on "Resuscitation of the Newborn," has, I feel, been rather less than kind to machines and makes no mention of the Intermittent Phrenic Nerve Stimulator of which good reports have been made. It has the merit, too, of being fairly safe, even in relatively unskilled hands, provided, of course, that the airway is unobstructed.

Requiring of more skill is the administration of oxygen by means of an intragastric catheter—it has been shown that oxygen is absorbed into the bloodstream from the gastric mucosa—but this might be a worthwhile procedure as Doctor Wiswell recommends a tube in the stomach in any case to aspirate the contents and it might give a few more moments in which to assess the position.

Yours faithfully,

J. M. McKAY, M.D.

Obituary

The death is announced in Kentville of Dr. Maureen Elder, age 75, at the Fraser Memorial Hospital. Born in Halifax, Dr. Elder graduated from Adelphi College, Brooklyn, New York, with a B.A. degree. In 1907 she received her medical degree from McGill University. Dr. Elder first practised in Halifax and was a close friend of Dr. Grace Rice of this City. From Halifax Dr. Elder moved to Montreal where she opened her own practice, and later joined the staff of the Montreal General Hospital. She was associated with this institution until her retirement in 1945. During the late war she was chief anaesthetist at the Montreal General Hospital. She was also active in all branches of war work and was a Captain in the Women's Volunteer Corps.

There are no immediate relatives to mourn her passing.

Dr. Dexter Scott McCurdy, age 69, was killed in a car accident fifteen miles north of Truro on Tuesday, September 24. He was born at Old Barns, Colchester County, in 1888, and was the son of Robert and Nancy McCurdy of that place. He was a graduate of the Colchester County Academy and the Provincial Normal College. In 1916 he graduated with M.D., C.M. from the Dalhousie Medical School. During World War I he served overseas as a Captain with the Camel Corps, a medical unit which was stationed at Taplow, England.

He was a member of the Truro Rotary Club, and was President of the Truro Philharmonic Society. In connection with the latter organization he did much to promote the local musical festival, being General Chairman of the committee. Dr. McCurdy was an Elder of the First United Church, and President of the choir. He was particularly interested in figure skating, and was a former member of the Truro Curling Club. His professional interests included those of work with the Tuberculosis Association and with welfare of crippled children.

He is survived by his wife, the former Edith Trefry of Halifax, one son, William, of Moncton, two grandchildren, Scott and Bruce, two brothers, Leslie B. McCurdy of Montreal, and Frank B. McCurdy of Truro, and two sisters, Mrs. Stanley Smith, Halifax and Mrs. H. N. Munroe, Truro.

Dr. Robert MacLean Benvie of Stellarton, age seventy-eight, passed away on September 17, 1957. He was born in Salt Springs, and was the son of the late Margaret MacLean and Eben Benvie.

A Gold Medalist at Pictou Academy, he later taught school at the Normal College and other schools throughout the Province. In 1907 he graduated from McGill University where he was Gold Medalist, winning the Home Medal for Surgery, and winning the prize for bedside diagnosis. He interned at the Royal Victoria Hospital for a period of two years before he took over the practice of the late Dr. Hugh Munroe in Stellarton. From 1910 onwards until his death he continued to serve the people of his community. His post-graduate activity included a post-graduate course in surgery in London, England. In 1920 he was made a Fellow of the American College of Surgeons. A past president of The Medical Society of Nova Scotia, 1935-1936, he was also an honorary member of The Medical Society of Nova Scotia.

In 1912 he married Mary Murray, and has one son, Dr. R. M. Benvie, Stellarton, one grandson, Robert, and a brother, R. L. Benvie, of Salt Springs.

Dr. Joseph Emile LeBlanc, West Pubnico, died at the New England Baptist Hospital, Boston, at the age of sixty-seven. He was taken ill while on the way to Europe with his wife where they had planned to visit their son, the Reverend Maurice LeBlanc of Rome. He was rushed by plane from Paris to Boston.

Born at Church Point, Digby County, in his teens he entered the St. Ann's College, Church Point, where he obtained his Bachelor of Arts degree in 1910. In 1915 he graduated in medicine from Dalhousie University and the same year commenced practice in Pubnico. In 1924 he received his Master's degree from St. Ann's College. He was an ardent advocate of Acadian culture and history. During his lifetime he was honoured with decorations from many institutions, including L'Academie Francaise, the Government of France, Laval University, the Jacques Cartier Medal, and L'Alliance Francaise.

He held the vice-presidency of the Societe Mutuel L'Assomption for thirty years and was also president of the Public Health Association (Atlantic Division).

Surviving besides his wife, the former Jeanette d'Entremont, are two sons, Reverend Maurice LeBlanc, Rome, and Dr. Paul E., Lyster Station, Quebec, and three daughters, Roseline and Corinne of Montreal and Simone of Ottawa.

Personal Interest Notes

Doctor N. H. Gosse and wife, Doctor Margaret Gosse, are at the present time in Istanbul. They form part of the Canadian delegation to the General Assembly of the World Medical Association. Doctor N. H. Gosse will deliver a paper on the utilization of hospitals and medical care in Canada and the United States. He attended the 1955 assembly in Stockholm at which time he also visited medical centres concerned with the diagnosis and treatment of cancer. It is expected that Doctor Gosse will avail himself of the opportunity to visit medical centres in the Mediterranean area.

Doctor H. J. Davidson, Eye, Ear, Nose and Throat Specialist, of Sydney and North Sydney, N. S., was awarded a Fellowship in the International College of Surgeons on September 12, while attending their Convention in Chicago, Illinois.

B. C. G.*

A report of the Medical Research Council published recently confirms that B. C. G. or volebacillus vaccine can prevent the clinical manifestations of tuberculosis infection, particularly miliary tuberculosis and meningitis. The investigation, which involved 56,700 14-year-old children living in English cities and towns, was well planned, carefully executed, and clearly reported: the results are unequivocal. It is estimated that a general vaccination scheme of children of this age should reduce tuberculosis morbidity between the ages of 14 and 17 by about half; and the more serious type of disease might be reduced even more, for in this investigation meningitis or miliary tuberculosis developed in none of the vaccinated children but in six of the unvaccinated.

Yet, as the report points out, "although it is now more than 30 years since B. C. G. vaccine was first used in man" this "is the first controlled trial of the vaccine to be undertaken in Great Britain." When it was eventually undertaken in 1950, B. C. G. had already been in use in many countries since its introduction in France 25 years previously: and though much of the published evidence of its value was invalid, and justified the initial scepticism with which it was regarded, there had also been several extensive planned investigations almost all of which suggested very strongly that B. C. G. was useful. None was unassailable; close critical examination showed possible sources of error in each. But it now seems that too much attention was paid to the fact that bias had been introduced into these trials; and not enough attention was given to the possibility that this bias had not materially affected the results. Professor John Francis, who insisted in 1949 that what was needed was not so much an adequate trial of B. C. G. as a campaign for its use, argued that exceptionally severe criteria of efficacy were being applied, in Great Britain to this vaccine: "the evidence supporting the value of B. C. G.," he said, was "better than the evidence supporting the value of any other immunological procedure in man."

Lancet. 1: 309, March 3, 1956.

*Medical Abstracts, May, 1956.