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THE MEDICAL OFFICER
A
COÖPERATIVE SOCIAL FORCE
IN
RURAL DISTRICTS

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COLLECTIONS

HOW A MEDICAL HEALTH OFFICER CAN BECOME A COÖPERATIVE SOCIAL FORCE IN RURAL DISTRICTS

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IMAGINE that it may not be without value to the younger public health officials and other workers to have a retrospect presented of the evolution of public health organization and methods of work during the thirty-five years since the first Provincial Board of Health in Canada was established in Ontario, in 1882, and which has become the model for most others in Canada. The Ontario Public Health Act of 1884 based upon the Consolidated Public Health of England of 1875, has also become the model upon which the public health acts of the several provinces have been based.

The first public health legislation which I am aware of in Canada was that of 1833, which provided in Upper Canada for the formation of Local Boards of Health by Order-in-Council during epidemics. It was the outcome of the cholera in 1832. In 1849, when under the Baldwin Lafontaine Government, the Municipal Act of the United Provinces of Upper and Lower Canada was passed, by which townships, villages and towns became the units of municipal governments; an Act was also passed providing for a Central Board of Health being appointed by Order-in-Council, to continue during the period fixed in Order, whenever public health necessities demanded. It will be remembered that 1848-1849 were also cholera years. Under this Municipal Act provision was made for health committees being appointed and health by-laws being passed by each council.

Such then was the situation in Canada until 1882 when the first permanent provincial board was formed and until 1884, when the Ontario Public Health Act was passed providing that each municipal council should annually appoint a local board of health

of five members, who would enforce the Public Health Act and health bylaws instead of the municipal councils. However, as these local boards in villages and many townships represented often a population of only a few hundred persons, it is apparent that while the system like that of the municipal councils and local boards of school trustees, is admirable in bringing home to every ratepayer his responsibility as a citizen for the public welfare in matters of health, yet in the event of epidemic outbreaks of disease it has often been necessarily financially onerous on the ratepayer when having to establish quarantines, erect isolation hospitals and pay physicians especially appointed to care for such patients. The same difficulty existed in dealing with the routine enforcement of health laws relating to nuisances, protecting of wells, disposing of refuse and so on, so that in 1894 the Executive Officers Association of Ontario began the discussion of the advisability of enlarging the unit area for a board of health's operations to the extent that whole time officers would devote all their energies to a county or at least to the area for parliamentary representation. This idea has in part been attempted both in Ontario and Quebec by appointing provincial all-time district medical officers; but it has not removed the financial disabilities often placed upon small municipalities, nor provided for the evolution of a larger conception of the true scope of the work which specially trained all-time county health officers would effect in public health and social development.

In a paper on this subject before the American Public Health Association in 1910, I set out the duties which such officers would perform in the following terms:

"To lend dignity to the office and maintain its work in close relationship with the county organization, a County Board of Health; to meet quarterly or more often in emergency, should such exist, to be composed of the Warden or elected head of the county council, ex officio, and either the senior or junior county judge, along with the medical officer. Such a board, composed wholly of officials, would add nothing materially to the cost, while questions of health, finance and law would have brought to them the experience of men trained to consider each. The health machinery would, of course, be: (a) The laboratory, required to have a minimum equipment supplied by the county, satisfactory to the Provincial or State Board, located centrally and convenient to the work by both rail and telephone; (b) In those counties where some institution as a county tuberculosis hospital or sanatorium

existed, it would often be found of real practical utility to have the medical officer placed in charge, have the laboratory there, and so centralize and enlarge his work; (c) As the county contains a number of townships, towns and villages, which may have already a sanitary officer, these would become, as in England, automatically the local officers of the county officer, with duties defined under the law, such as reporting daily when necessary, all notices of contagious diseases, and carrying out routine inspection, disinfection and policing; (d) The medical officer would similarly receive directly from physicians, or through the local inspectors, reports of outbreaks of contagious disease, and from all practising veterinarians notice of contagious disease in animals, affecting the public health. (e) The medical officer would similarly be medical inspector of the schools of his district, and would naturally carry out the physical inspection of the school children, as well as the inspection of school buildings and the control of contagious diseases. (f) He would also put in force a systematic supervision, not only of the factories in towns, but especially of the rural factories as of cheese, butter and fruit canning. (g) He would likewise systematize, through the township inspectors, the examination of dairies and the supervision of public milk supplies. (g) He would especially through local veterinarians, discover herds where tuberculosis existed, and would gradually organize a meat inspection service through centralizing the slaughter of meat to be sold to the public."

It will be realized, perhaps, how such a scheme is all the more urgent in view of the decreasing rural populations in the township and village municipalities of the Eastern provinces. Thus the census returns for 1911 give the following results:

	1901	1911	Increase
Rural, for all Canada.....	3,349,516	3,924,394	17.16%
Urban.....	2,021,799	3,280,444	62.25%
Quebec, rural.....	992,667	1,032,618	39,951
	1901	1911	Decrease
New Brunswick, rural.....	253,835	252,342	1,493
Nova Scotia, rural.....	330,191	306,210	23,981
P. E. Island, rural.....	88,304	78,758	9,546
Ontario, rural.....	1,246,960	1,194,785	52,184

The actual situation as regards the decline of rural population may be understood when it is known that of 400,000 immigrants

who went to Ontario during the census decade, 30 per cent. stated they were farmers or farm laborers, and yet there was a rural loss of 52,184 in addition to the loss of the total natural rural increase, while even in Quebec, the especial home of the French Canadian peasantry, the annual rural increase for the period was only 0.4 instead of 2.15 per cent., the annual average for the whole province.

To further expose the situation I find that in Ontario in 1914 the population was given at 2,749,840, of which the cities and towns over five thousand in population, held 42.1 of the whole, while 57.8, or 1,587,025, were in the smaller towns, villages and townships, which include about eight hundred municipalities. If each had its medical health officer this would mean one for two thousand. Actually there were in 1916, eight hundred and thirty-seven local boards of health, each with a medical health officer. I find that in the province of Quebec there were ninety-eight cities and towns and ten hundred and ninety-three villages and townships, or roughly, two hundred more than in Ontario. As the rural population in Quebec in 1911 was given as 60 per cent. of a population of 2,022,712, we find that with ten hundred and ninety-three municipalities the population of each is just eleven hundred, in each of which, under the Quebec Health Act, must be a "municipal sanitary authority". It must be remembered, however, that this average does not at all represent the actual situation, since in Ontario there are actually two hundred and sixty villages and towns, the minimum of population being five hundred, while in Quebec the population of the villages must, in many cases, be but a fraction of this. The minimum health unit, however, is that of Nova Scotia, where the Act requires that a health committee must be appointed for each municipal polling subdivision.

In order to complete our statistics, I have endeavoured to find out the distribution of churches and clergy. I find that, roughly, in Canada there are eight thousand Protestant clergy and four thousand Roman Catholic; but it is difficult to ascertain accurately their distribution. I find, however, that Quebec has nine hundred and ninety-four Roman Catholic parishes and that their distribution is largely the same as the municipal subdivisions. In Ontario, as in the other older provinces, every village and many rural communities have churches of some denomination and clergymen ministering to their spiritual needs.

As regards the medical services available I find that there are, in round numbers, seven thousand physicians in Canada, distributed, like the clergy, where they are required.

Many other figures would be necessary to make complete the total persons in some way engaged in public health, religious, charitable and social work, such as the total members of boards of health and sanitary inspectors, the number of layworkers in churches and religious orders and the many charity workers in our cities and towns; but each of us can easily form some estimate of what these are. Now, what we have especially to note is, that while we probably have in our rural areas, which constitute say at least 60 per cent. of the population, and that while probably two-thirds of this is actually agricultural and one-third in villages, yet very few of those representing in any way the educational or professional or social worker persons in these communities reside actually in the townships.

Such then is the constitution of municipal and social forces of the rural communities of Canada, varying but little in the newer provinces except in so far as the population is more sparse and more widely distributed. Indeed these very facts are making the need for newer methods in social evolution there so evident that in Manitoba, district nurses have already begun the work of inspection in schools, and following into their homes those children whose physical and mental needs call for attention. In Saskatchewan already twenty district hospitals have been constructed and it is expected that within two years as many more will have been established at convenient centres, to which physicians will send their patients for treatment under a regular nursing staff, who will also gradually undertake social work by district visiting; while, in addition to this necessary work, Alberta is developing social centres by having erected a "Home House" for the several school teachers of adjoining sections, added to which will be the district social nurse.

Reverting to the old East, it is apparent that for many years the loss of many of the young people of its rural population has become in many districts, little less than a war tragedy. It is as if an extended war conscription had robbed the countryside of 10 per cent. of its young adolescent population in ten years, since in some counties of Ontario this loss has been at least 1 per cent. per year. Closely examined, this condition is both an effect and cause of a social disintegration and destruction of an old time rural life, rich in numbers, in energy, in hope and in action. We have no time to enter upon an explanation of its causes; but I propose to enquire whether its reconstruction cannot be brought about by the coöperation of forces already present. It is abundantly

plain that what every large town and city have to-day developed in abundance of municipal, religious, educational and social organization are almost everywhere lacking in our rural municipalities as centres for unifying and socializing the people. As a basis for rural progress there must be a recognition of the fact that the economic life of this rural population must be adequate in return for the energy exerted and must develop social amenities sufficient to attract and retain a contented rural population. It is apparent that education of an adequate scientific character must be supplied to do this. When it is known that the old village or countryside school, once with its fifty or seventy-five children is to-day often reduced to ten or twenty, it is evident that a young school miss, presiding over a few children of different ages and paid a salary wholly inadequate to encourage permanence in the teaching profession, is in no way going to do more than play with the problem of inculcating those scientific truths, which necessarily form the basis of the permanent upbuilding of the child mind into an interested and progressive agriculturist. In no other single occupation is it pretended to-day that anything but failure can result from the neglect to make use of the most advanced scientific methods.

The war has exposed the real situation as applied to production, resulting from the lack of instruction in science, of the British nation at large, and when it is understood that not more than 5 per cent. of children reach the secondary schools, the full meaning of this can be appreciated. But this work of interesting the child mind in the phenomena of nature around him through scientific teaching must be begun from the earliest school years. Not only so, but extension of methods must be progressive as his mind grows, and school gardens, orchards, greenhouses, dairies and laboratories must be the means whereby the children are not only taught, but the community also brought together. In the good old days the transepts of St. Paul's Church and the churchyard in London were highways and places of meeting and trade for the people, while nothing seems to me more dreary and sad than to see the two isolated buildings along the country roads of our provinces often without grounds or any garden and, except on Sundays, without any sign of human interest attaching either to school or church.

Now what is needed is that the countryside become socialized. In our day of rapid transport we have only the semblance in many cases, of the old-time mediæval countryside open fields, where corn land and meadow and pasture around the villages were dis-

tributed yearly by lot and worked and used in common. How is this socializing to take place? In brief it must be by evolving a new sense of the dignity and national importance of agriculture and rural life. Who are to be its apostles? Unquestionably in addition to the coöperating farmers themselves it must be the clergy, the physicians and teachers. Even though often inexperienced and untaught in these duties, they are still the people's leaders. It is, however, interesting to note that in Quebec many of the clergy in their "Community Houses" are amongst the leaders both in the practice and theory of agriculture; while no doubt many cases exist where the rural clergy interest themselves directly in the practical problems of their people. But this has not been the practice in other communities, and too often the clergymen never gets close even to the public school pupils, nor meets his people except on Sunday, and then in his capacity as their spiritual adviser. The country doctor often comes much nearer to the interests of his community and may at times become actually a leader in practical rural affairs. He would become still more so if, as an all time medical health officer, he could with an equipped laboratory come into close practical relations with this farm life. For instance, the counties are establishing gradually, at least in Ontario, sanatoria for tuberculosis. Here might well be the starting point. Every county has still five to ten such cases per thousand of population, and through the practising physicians the county officer would come to deal not only with tuberculosis but also other problems. The outbreaks of acute contagions in cattle would at once be diagnosed through laboratory tests; the movements of the officer through his district would bring early to his notice fungous and insect diseases of plants, while his practical oversight of the surroundings of cheese factories and creameries would be but a step to his investigating and suggesting improvements in the methods of cheese making and butter making from the bacteriological standpoint. With the careful rural taxpayer I know of nothing which would so soon gain his approval of a progressive public health organization as the practical interest which a trained bacteriologist would take in actual rural production. When a great American industry can afford to set apart half a million annually for investigations in science, it must surely appear essential in an industry like agriculture, whose very future depends upon the application of the knowledge gained in every field of science that organized methods for this purpose be developed. Already these have begun through the appointment of agricultural demonstrators in some of our counties and in the

degree that such are multiplied we have every reason to feel assured that community work in our rural districts will increase. I have suggested that this work demands the closest coöperation of clergy, teachers and physicians, with the people of our rural communities, and I can conceive of nothing so likely to make this possible as the unifying of old school sections into a central or consolidated school, where a number of teachers with a trained science principal and enough buildings and equipment, would create a true educational and social centre for the people. To illustrate how the public sense is still little developed with regard to the health phase of this socializing process I shall give a statement regarding the local boards of health in six of the ten health districts of the province of Quebec, supplied through the kindness of Dr. Pelletier, secretary of the Superior Board of Health and of Dr. McCullough of the Provincial Board of Ontario, who informs me that each of the eight hundred and thirty-seven boards of health has its medical officer. In the Montreal Health District there are seventy-nine parishes, eighteen villages, thirty-two towns, six cities.

Of the important municipalities Montreal spends \$250,000 in health work and employs twenty-seven medical men under a chief medical officer, while the salaries run from \$5,000 to \$1,500. Lachine spends \$15,000, and employs three medical officers, with salaries from \$1,400 to \$450. Westmount pays \$1,000 to its medical officer; Maisonneuve \$2,000 and Verdun \$1,000.

	No. of Municipalities	Boards of Health	Medical Officers	Sanitary Inspectors
Montreal District:				
Urban.....	38	20	25	19
Rural.....	97	59	49	42
Three Rivers:				
Urban.....	9	9	7	2
Rural.....	133	133	66	67
No annual salary to medical health officer except in Three Rivers.				
Quebec:				
Urban.....	22	22	14	7
Rural.....	137	106	27	111
Quebec City pays \$2,000 and \$1,800.				
Levis pays \$400.				
Lauzon pays \$300.				
Most medical officers paid when called upon.				

Fraserville:

Urban.....	4	4	3	1
Rural.....	92	77	20	72

Rimouski has chief of police as its sanitary officer, paid as policeman.

St. Hyacinth:

Urban.....	8	8	1	6
Rural.....	111	111	2	110

No medical officer properly so called at all.

Hull:

Urban.....	3	2	1	2
Rural.....	130	88	52	79

It will be seen from these figures that of the eleven hundred municipalities in Quebec only two hundred and sixty-six have medical officers regularly appointed and that most of these are paid on call by the local board of health and do not receive regular salaries. In Ontario it is the common practice to pay a small salary to the medical officer and to pay him for extra services should the emergency demand it.

Now perhaps it may be said with such an attitude toward matters of public health that any hope must be small of obtaining hearty coöperation of the several social forces which I have mentioned. But I insist that the problem is not so much that of the instrument as of getting any local community to appreciate the need for coöperation toward social ends. Rural inertia, as inertia everywhere, is due to a lack of knowledge or appreciation of the desirability of the ends sought; hence methods specially suited to this purpose must be found. In the old days special agents as preachers and teachers engaged in missions and crusades; but to-day such may be accomplished through the marvellous discoveries of science, may be spread to a thousand places, which the missionary has not time to reach, by means of the press and the cinematograph. Pictures from foreign lands, especially all phases of socializing work in town or country, of rural scenes, and agricultural methods, are to-day being utilized in ever increasing extent to teach through the eye what has not been possible so readily through the ear. If such show a tractor with one man ploughing five furrows at once, it may also illustrate social gatherings, whereat exhibits of agricultural products are intimately associated with pictures and talks telling the simple truths of science upon which actual production is based. But this will be but the beginning since

moving pictures, with statistics telling the relations between the cost of production, the cost of transport, the cost of selling and what the consumer pays will arouse in the rural mind a sense of his relation to the world of affairs outside and help him to appreciate the part which agricultural life should play in the country as a whole.

But I have said enough to indicate what I wish to direct attention to: viz., the importance of arousing in the several educative agencies of our rural communities a consciousness of the need for their adopting an aggressive attitude toward the social life of their communities, and shall leave the matter to be further discussed by those perhaps more competent.