HEART DISEASE AS A PUBLIC HEALTH PROBLEM

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It is no news to you to say that Heart Disease exists everywhere; undoubtedly all of you have instances in your own family. Nor does the mere existence of heart disease make it a public health problem. To become a problem for the public, it must be demonstrated that the public will be benefited by a concerted effort for the control of this disease and that a concerted effort of all concerned, doctors, social workers, hospital and dispensary boards and the public is necessary for its control.

While numbers alone do not make any disease a publis health problem, before it does become such a problem the incidence of the disease must be so great that it has grown beyond the reach of the few actively engaged in combating it. There is no doubt that we do not need an organization for the control of every disease known to man, for instance such a disease as pernicious anaemia, which the doctors and nurses can take care of very well. It is different, however, with heart disease, which in its various forms causes more deaths yearly than any other one disease and which causes as much or more sickness and disability than any other ailment. This includes pneumonia, cancer and tuberculosis, against which much good has been done by adequate organization. It has been shown by reliable statistics that diseases of the heart cause 1/8 of all deaths of all ages and 1/5 of all deaths beyond the age of forty; but, striking as these statistics are, this is not the most important fact which concerns the public. From examinations for the draft and adequate examination of school children in New York City it has been shown that about 2 per cent of children and young adults have heart disease. Examinations by life insurance companies show about the same percentage. That is to say, in a city of three million inhabitants there are about sixty thousand who have heart disease. You may say—"Well! What of it? Let the doctors take care of them!" But there is more to it

than that. This great number cannot properly be taken care of without the aid of the public, and, under present management, the number is increasing. This means not only great and perhaps unnecessary suffering to the individual but a great economic loss to the public. Dr. Halsey has conservatively figured that each cardiac patient admitted to a hospital costs the community $200.00, $100.00 for care and $100.00 from loss of work. In the cardiac clinics in New York in 1922, there were 4,000 under treatment, which would mean a loss of 8 million dollars from this source alone. When you consider that a large number of heart patients, if not properly managed break down and have to enter a hospital repeatedly during a year, you can see what an enormous loss to the community this one disease is. From this one stand point alone, heart disease is certainly a public health problem.

This is not, you can well imagine, the reason why the doctors, nurses and social workers, who are constantly dealing with those handicapped by heart disease, decided that they needed help. Every one who is in any way connected with public hospitals knows that the heart cases fill the wards; not only because there are so many but because the same patient returns time after time with his heart broken down, until the final break-down comes. It was this fact that induced Dr. Hubert V. Guile to start a cardiac class at the Bellevue Hospital in 1911, to see if he could not prevent some of these returns. His results were brilliant, and others rapidly followed his example so that now there are 38 such classes in New York, seven or more in Chicago and many in other cities.

With the establishment of these classes or "cardiac clinics" as they are called, it was soon found that, though much could be done by the clinics, in order to get the best results for the patient many other agencies were needed. Some of these agencies perhaps existed, many of them needed to be enlarged and many other social organizations needed to be formed. It was thought that the entire problem could be handled best by associating all these organizations, and in 1915 the Association for the Prevention and Relief of Heart Disease was formed

in New York City. The war interfered somewhat with the progress of this organization, but following the war it grew rapidly and within the last few years organizations have been started in various cities of the country. Our Chicago organization was launched in April, 1922. In June of that year a meeting of the men from several cities of the country was held in St. Louis under the initiative of the New York association, and it was decided to form a rather loose union of all the organizations existing or that might come into existence in this country.

The purposes of these organizations are, first, education of the public; second, coordination of all organizations in a community which deal in any way with the problem of heart disease and aid in establishment of such new organizations as are needed; third, promotion of research in the problem of heart disease, especially as it relates to public health and the gathering of adequate statistics.

The question which you now ask is: Are such organizations needed and have those which have already been formed justified themselves? It has been stated above that in so far as numbers are concerned, the heart problem offers food for thought to any community, and more especially to the larger ones in which the laboring class makes a good body of the population. It remains to be seen whether this problem has or has not been handled properly without such organizations.

Let us go back to the time when patients suffering from heart disease were treated exclusively in the general dispensary. The patient came to the out-patient department, was examined, was given instructions perhaps and digitalis or other medicine if needed. Among the instructions might be included the recommendation to stop work and rest for a month or so and often to change the occupation. I well remember having a strapping, healthy looking teamster come to me for examination shortly after his discharge from the hospital. He had had a breaking down of his heart secondary to a valvular lesion; his heart had compensated fairly well with rest and he was sent to the dispensary for further

care. He looked well and strong, he was young, only thirty-five, and had a family whom he wished to support. He didn't want charity. My recommendation that he should rest and change his occupation wasn't worth anything. We had no convalescent home to which to send him, and we had no vocational school or employment bureau for the handicapped, in which he could learn a new trade and get adequate employment in that trade. The result was that after a few months, during which he followed his old trade, he was in the hospital again with a broken down heart. This continued for several years until his death. Such cases as this one is what brought about the formation of cardiac clinics and with this, when case after case such as the above were examined, such problems as the above were encountered repeatedly and it was found that cardiac clinics alone could not do the work. All organizations and agencies having to do with heart disease were needed, and above all the public had to be educated so that the proper organizations could be formed.

In Chicago I am better acquainted, our organization is in its infancy, our needs are great; hence I shall describe the situation there. The Cardiac Section of the Illinois Conference of Social Workers, with Miss Schoenfeld as chairman, recently made a study of the heart cases under care at the hospitals and dispensaries in Chicago for a period of two months. Among other striking things it was found that out of 344 hospital cases, 194 of which were adults, 88 were *laborers,* that only five of this number were reported at cardiac clinics after discharge from the hospital and that only eleven were sent to convalescent homes. 46 out of 194 returned to the hospital again broken down within this period.

I cite this small number of cases because they demonstrate better than anything I can say the needs of Chicago for its cardiac sufferers.

We have in Chicago at this time seven or more cardiac clinics for adults and children—some excellently equipped, some not so completely. The first need of any special clinic, especially a cardiac clinic, is an adequate social service department. In order to do anything with

out-patients, one must first know home conditions and adjust them to the needs of the patient, be that patient mother, father or child. In adjusting home conditions we come in contact with the schools, with day nurseries, homes for the friendless, with the employer, with the employment bureaus, with the Relief and Aid Societies, with practical housekeepers, in fact all agencies which have to do with social re-adjustment. The social worker makes these contacts; but suppose there is no contact to make, and suppose each social worker tries to work the problem out alone. There is no need for me to repeat that "In union there is strength". The first call then for our Association is the co-ordination of all the agencies concerned, and especially the union of all the cardiac clinics, including the social workers. It is in the cardiac clinics that the needs for other agencies first became manifest and it is by a union of the cardiac clinics and the existing organizations that these needs can be brought before the public and eventually fulfilled.

Our Chicago Association is, as I have said, young. Our first step after procuring an executive secretary was to find out what agencies we already had in Chicago that could help us in our fight against heart disease. We knew that very few agencies were known; we are now convinced that very few agencies exist in Chicago. Why were only eleven out of the 344 discharges sent to convalescent homes? Chiefly because there are in the whole State of Illinois only 242 year round convalescent beds for all conditions. Does that bring home the need? Why did only five cases out of the 344 report at the existing cardiac clinics? The chief reason (there are many others) is that there are too few social workers to follow them up and see that they return; there would be more workers available for those who could be helped if we had some place to send and care for those who cannot be helped, in other words a hospital for chronics, or better a hospital for Heart Disease.

When we started our association, every one of us realized that a perplexing problem was the employment of the cardiac and we hoped to co-operate with the Bureau for the Handicapped. But there is no longer any Bureau

for the Handicapped, and it is up to us to arrange for the proper employment and for vocational training when needed for our own cases. The Illinois State Employment Bureau has a handicapped department with which we can co-operate at present. A majority of cardiacs can work and they can work steadily if they have the proper job or office. In this line more can be done with children, and the earlier we know that a child has heart disease the better it is for that child. The child can then be trained for a suitable occupation and can become a useful, self supporting citizen. For this, we need examination of our school children and examination with the child stripped to the waist. We also need vocational guidance, so that the child, become a man, will not have to seek a job as a laborer on the streets as 88 of the 194 patients did. Whether we should have special schools for cardiac children is still a disputed question. They are carrying on some investigations on this subject in New York where there is a difference of opinion. We may have some facts bearing on the subject in Chicago where we have a special class for cardiacs at the Spalding and one other Public School. At present we need a school or shops where the cardiac who has too strenuous a job can learn a new trade by which he can support himself and family without a breakdown. Then, too, we need some way of lightening the mother's burden in the home. The cardiac mother should not do her heavy work; but who is going to do it for her? There must be a bureau equipped to send some one into the home to relieve the mother of the work she should not do.

All this of course has to do with the relief of heart disease. In a way it is also prevention, that is, prevention of a breakdown of the patient who already has heart disease. So far as the patient goes, he is not concerned about his heart as long as the heart muscle does its work; and if we handle the cardiac properly we are preventing real invalidism. Further, much can be done in the way of actual prevention if the situation is handled adequately.

Most of the cases of heart disease which occur in youth are due to acute articular rheumatism, and the rest are

due undoubtedly to other infectious diseases; a large number of the cases of heart disease beginning in those above forty are due to syphilis. We hope that the active campaign being waged by the various Public Hygiene Associations for venereal diseases will have its effect on preventing the increase in heart disease. We also hope that the campaign for combating heart diseases will decrease the incidence of this disease in the young. In the report previously mentioned it was hinted very strongly that the patients did not remain in the hospital long enough. That is true not only of cardiacs but also of those suffering from infectious diseases. We do not at present have a long enough convalescence for our acute diseases, chiefly because we haven't room enough in our hospitals for our acute cases and because we haven't enough convalescent homes. We stated in the beginning that patients with heart disease occupied a very large proportion of beds in our hospitals. If we had a place for our cardiacs there would be more room in our acute hospitals; we consequently could keep our infectious disease cases for an adequate time and prevent some cases of future heart disease. Thus we have not a vicious but a beneficient circle.

It is well known that rheumatism, the greatest cause of heart disease, follows most frequently an acute tonsilitis, as does scarlet fever. We hope, then, to prevent heart disease by removing the tonsils in those subject to frequent attacks of tonsilitis. Some also hope to prevent heart disease by removal of teeth, but I cannot, from what I have observed, subscribe to that. Naturally bad teeth need proper care no matter where found.

From these facts, you must see that Heart Disease is a Public Health Problem from all points of view. I cannot close without telling what we hope will be the final outcome of our education of the public.

We hope to have what I choose to call a cardiac centre. Here in some pleasant spot with large acreage, conveniently near transportation, we shall have, first, a Heart Hospital. In another part of the grounds will arise a Convalescent Home, in close contact with which will be our workshops, where our cardiac if necessary may learn

a trade. Nearby will be an adequately equipped gymnasium and parade grounds so that we can build up the muscles, and incidentally the heart muscle, before sending our patients out to work. In this way we can tell by proper supervision how much our patients can stand and advise future employers and doctors just what the patient can do. We shall, perhaps, have a separate hospital and surely a school for the children so that we can start them out upon a proper vocation for cardiacs. Scattered throughout the city will be a sufficient number of cardiac clinics from which we shall receive and to which we shall refer our patients. These clinics will be adequately manned with doctors, nurses and social workers, and our Association for the Relief and Prevention of Heart Disease will be the centre and unifying group of all these activities, of all the numerous outside agencies which are or will be formed and to the great public which will then be educated.