

# PUBLIC HEALTH SERVICE.—AN APPEAL FOR MORE EFFECTIVE ORGANIZATION AND STANDARDIZATION

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THE mouth hygiene problem, as it faces the American Dental Association, is a national issue. The answer to the great question which we as a body should consider, is assisted, but not decided, by reports or exhibits from various localities demonstrating their individual accomplishments or by personal theories on educational or operative procedure.

These items should be a part of our program, obviously, but the logical end and aim of our deliberations is the national extermination of the most prevalent of all human diseases.

There are certain facts that we cannot escape. The present prevalence of dental caries is the blackest blot on the history of medical achievement and the burden of responsibility rests squarely upon our shoulders. No other group of scientists can reasonably be expected to share even a portion of our burden. Wherever the trail may lead it is ours to follow to the end and we are falling short of our duty if we leave a spot on the trail unexplored.

There is no other single disease in the entire field of pathology that has received the attention of so large a group of specialists. In this country, where dentistry is supposed to have reached its highest development, there are more than forty thousand individuals educated and delegated to solve the problem. This highly specialized force of workers, which has not varied much during the past ten years

in relative size compared to population, has concentrated intensively on this one pathological enigma. With what effect?

We are justifiably proud of the wonderful products of mechanical and artistic ingenuity that have been brought forth to repair or replace lost human tissue. Mechanically and artistically we have "made good." But is this not about all? Have we made material progress in the real solution of the problem?

Is it not a fact that today approximately ninety-five per cent of our school children are afflicted with dental caries just as they were ten years ago? Is it not a fact that we have succeeded, during the past decade, in increasing the daily use of the toothbrush to an extent equal to only about two per cent of our population? Is it not a fact that, after these years of study, we are still unable to offer anything definite in dietetic instruction to assure the building of sound, healthy teeth?

Whether or not we may accept the evidence of statistics which seem to substantiate these statements, the following proposition cannot be questioned. The dental profession in this country is, as a whole, following at the heels of the enemy, satisfied for the most part in rebuilding the towns he has sacked. No offensive force has yet been organized which has been strong enough to meet the invading horde and effectively retard its progress. And this, I would respectfully

submit as the most important question that faces the American Dental Association today.

Without meeting this issue nationally; without concerted national action; without a broad, comprehensive, national effort to solve the problem there can be no reasonable promise of far-reaching effect. I thoroughly appreciate the attempts that have been made in the past to analyze and answer this problem nationally and I surely have no criticism to offer on the methods employed. We are only interested in the factors that now influence our study of the question and the suggestions presented in this paper are based on my conception of the situation facing us today; as follows:

1. Under existing conditions, pending more positive conclusions on diet and nutrition, our public health work must be centered on the extension of education emphasizing the importance of mouth cleanliness and on the establishment of dental infirmaries.

2. The solution of the problem in these two fields is at present being attempted by hundreds of individuals and separated groups of public spirited citizens, each single unit pursuing a course of expensive, experimental development.

3. There is, under this system (or lack of system), an inconsistent and unnecessary waste of labor and funds; there is hardly a movement in any community that is accomplishing maximum results at minimum expense, and we, as a specially delegated group of scientists, in ignoring this dissipation of energy and money, and failing to organize a standardized program of public health procedure, are not developing our highest efficiency.

And this brings me to the gist of the message I would deliver to you in this paper. I believe that the national solution of the great problem that faces us may be briefly expressed in two words—organization and standardization. We will consider these two items in reverse order.

It would seem, in these days of big business, unnecessary to emphasize the value of standardization. The fact that it is not in evidence in the field of public health would indicate that its value in that particular connection is either ignored or questioned.

I made my first public appeal for the adoption of standards in mouth hygiene educational service in a paper presented at the Fourth International Congress on School Hygiene at Buffalo in 1913, and in submitting my argument for standardization, I will quote somewhat from that paper and my yearly reports as president of the Dental Hygiene Council of Massachusetts, mainly to emphasize the fact that we are facing the same situation today that we faced ten years ago.

Following my address at Buffalo, I directed the organization and maintenance of the department of extension lectures under the National Mouth Hygiene Association, which was instituted mainly to test the practicability of my scheme for a standardized lecture service.

As this educational item practically illustrates the general subject I will describe its development at some length, though many of you are acquainted with its details if not its results.

My general theory was that there is but one story to tell and one best way to tell it to a given type of audience; that an ideal lecture for any type of audience must be interesting, impressive and authentic; that it should not express any one-man ideas but the carefully determined consensus of expert opinion; that a series of lectures could be constructed through the co-operation of medical and educational specialties covering the subject in more effective form than that which any one man could possibly conceive or execute; that the finished products, appropriately illustrated with lantern slides, could be issued for the use of physicians, dentists, public health nurses and others who were fitted to present the subject before public audiences,

thereby saving many hours of individual research and labor.

I delivered the first lecture of the series before the Dental Hygiene Council of Massachusetts, two dental societies, and audiences of school physicians, school teachers and school nurses, for the special purpose of promoting discussion and criticism that would suggest changes for improvement. Manuscript copies were subsequently edited by many other medical and educational authorities.

When finally issued it was recommended as a standardized lecture on the "Care and Use of the Human Mouth", and although the financial condition of the association made it necessary for this department to be self-supporting which required a rental fee for the use of manuscript and slides and a sale price that would permit a profit, this first experimental, standardized educational item reached, at a conservative estimate, more than two million auditors, was translated into several languages, is being used today by many of our own state and municipal health departments, dental societies and other organizations and individuals and has successfully proved the reasonableness of the theory advanced.

There is an insistent demand, not only for a continuance of this service (which has, through force of circumstances, been abandoned), but for its extension into broader fields. The scheme, as demonstrated, in the first steps of its infancy reached more people with effective instruction on the whole subject of mouth hygiene than any single educational item that has ever been issued before or since, and yet its possible field of development was touched on the surface only. I will offer a suggestive illustration of one of the possibilities in the extension of such a service.

Several months ago I addressed a letter to the school children of Massachusetts from the State Health Department. It was framed in juvenile terms and carried, in short form, the story of mouth hygiene and a paternal appeal for mouth

cleanliness that would meet the requirements of the child mind. Copies were furnished to local school departments, most of whom were quite willing to cooperate, one being supplied for each school building, and the letter read to each class by the school teacher. Compare the simplicity of such a scheme with the difficulties of organizing a corps of lecturers to meet these six hundred thousand auditors. And a like letter addressed to "The American School Children" could be carried to twenty millions with no added complications other than a clerical force sufficient to handle the machinery of a simple and somewhat automatic system.

The presentation of our subject from the public platform is, however, but one small branch of the service demanded of us. All forms of educational literature should be standardized. There is a continual and ever increasing need for this material and it should always be constructed to represent the consensus of opinion.

As I have stated in a recently published paper: "We sit in session at dental society meetings and receive from the lips of numerous theorists, numerous theories. It is quite fitting and consistent that we should hear all sides of the story—all evidence in the case. But the public should never hear any expression other than the verdict. And the verdict represents our expression of standardization."

I believe that any piece of literature issued for public instruction dealing with any phase of the public health problem, is a very serious document. No one would attempt to defend a system of public health education sanctioning the issue of contradictory items of instruction and no one can deny that this situation exists in hundreds of cases. In each case the writer presents *his* individual theory or belief, but neither *his* theory, nor *your* theory, nor *my* theory can consistently be considered as possessing decisive weight.

The foregoing does not begin to touch the needs of standardization in the educational field but it is not the purpose of this paper to go far into detail.

What of the operative field? The public clinic is a comparatively young institution. How many there may be in this country at the present time no one knows as we have no national organization to compile statistics.

One of my first moves in organizing the mouth hygiene work in the Massachusetts State Health Department was the registration of all dental infirmaries or other movements for philanthropic dental service operating in the state. At that time (April, 1919) there were approximately fifty; at present we have recorded about one hundred. Not only is this work increasing in Massachusetts; we know that it is extending rapidly everywhere.

These important health institutions, with very few exceptions, are being conceived, organized and managed by inexperienced individuals, dentists and others, who are taking their first experimental steps in a new field.

It would probably be hard to find a representative of "big business" who would not condemn such a method as an unnecessary gamble against great odds. It seems to be the generally accepted theory that the situation is unfortunate, but unavoidable. I believe that it is *not* unavoidable.

The average dental clinic is organized by a small group (rarely more than ten per cent) of the dentists in a given community, working in conjunction with a women's club or some other lay organization interested in social service.

They meet in joint conference and committees are appointed to study and arrange details. Finally, after much research, a more or less definite plan is adopted and they approach the school committee and board of health with an argument based on the personal opinion of a group of individuals who have hastily studied and attempted the solu-

tion of a problem they have never before seriously considered. The "powers-that-be," after several weeks of deliberation, accept the proposition reluctantly, possibly with a little financial aid, more probably with permission only for the establishment of the proposed institution in one of the public schools. Some sort of an examination of the teeth of the school children seems to be the proper thing and this is proceeded with, sometimes with no definite object in view, usually with no comprehensively arranged system.

The selection of the clinic equipment is next in order and this is found to be not the least of the difficulties as the proper equipment for a dental clinic is quite unlike that of a private office, though this fact is seldom discovered until the work is well under way. After several weeks of tiresome effort on the part of the few willing workers the clinic opens for business.

Perhaps not until then is it discovered that special rules of operative procedure should be adopted which are again unlike those which govern the practitioner in private practice.

Finally, however, we will suppose that, in an exceptional case, after many failures, many changes of plans, many months of hard labor and experiment, the institution develops into an efficient stage, delivering maximum production at minimum expense, with a system that runs like clock work. It has required at least six months to develop the idea to its present point of efficiency. It would not take as many days for the same group of individuals to establish another clinic just like it, on the same efficient plane, with no necessary expensive development or experiment. This, in simple illustrative terms, expresses the basis of reasoning which has brought me to the conclusion that there is a very evident demand for the standardized dental clinic.

The standardization of the dental clinic is not a complicated procedure. It simply means the adoption of definite

or standard rules of organization, equipment, operative procedure and general management applicable to the various types of institutions demanded, such rules being formulated, not from the narrow viewpoints of a small group of men, but after careful study of all available data, investigation and research covering the factors of influence in connection with successful and unsuccessful institutions.

This is, perhaps, a sufficient suggestive argument on the principles of standardization. To be effective it must be extended nationally.

We have made some progress in the direction of standardization in our work in Massachusetts but it is obvious that its value always will be in direct proportion to the size of the representation which we accept as the authoritative voice and this means that it can never be completely worked out within the narrow limits of Massachusetts, or New York, or California.

The first article in the first issue of *Oral Hygiene* published in January, 1911, from the pen of the late George Edwin Hunt was entitled "What Is the Best Way," and the author quite reasonably presents the following question: "We have been seeking the answer for more than ten years. Can anyone say that we have found it?"

Now, in 1922, with due regard for all the altruistic labor of our unselfish workers during the eleven years that have elapsed, may I be bold enough to answer "We have not." We have not found the best way. We are still floundering in the mire of uncertainty. We are still dealing with an unsolved problem.

I have presented what I conceive to be at least fifty per cent of the ultimate answer. There remains the other half—the question of organization. My conception of a national organization of our forces that will meet the demands of the hour is based on the following theorem:

1. It must constitute a concerted movement, representing the collective sentiment of the dental profession and

should be sponsored by the American Dental Association.

2. It should be directed or headed by a central organization, acting as a clearing house, where the general problem and all of its ramifications may be practically dealt with.

3. This central bureau, or parent organization, should be under the management of a carefully selected director, a good organizer, with executive ability and broad vision, these characteristics being of greater importance than his scientific knowledge of medicine. Such a man, if he is selected from the dental profession, could, obviously, only be found among our most successful practitioners and he should receive ample remuneration to preclude the requirement of personal financial sacrifice. Certainly his economic value to the country would be much greater than that of any practitioner in private practice.

As there is always some uncertainty attendant upon such a public service appointment it might be necessary to accept a director on part time basis who would be unwilling to entirely relinquish his practice.

4. The director should be backed by a paid clerical force sufficient to maintain the detail work of his department. Willing workers will always be available for assistance in all sections of the country but the main organization, to promise success, must not be built on the flimsy foundation of volunteer service.

5. An advisory committee of specialists should be appointed to decide upon important matters and check up the activities of the organization but the director or manager should be unencumbered by that intricate executive mechanism too often in evidence in connection with public movements, which is being rapidly cleared from the field of big commercial enterprises.

6. The work cannot be financed by the dental profession and there is no reason why it should. There are several national public service institutions at

the present time seeking a way to spend money effectively in this field.

Conditions of today are not those of yesterday. Ten years ago the big organizations interested in public health needed argument to convince them of the importance of mouth hygiene. Today they are not asking *why* the mouth deserves attention. They are asking *how* it shall be given the attention it deserves. They are willing to co-operate.

They are anxious to know "What is the best way", and, when it is presented, they will be found amply able and willing to finance it.

7. A logically developed movement, built along practical lines on a solid national foundation, will have the co-operation of state and municipal health departments for the very simple reason that it meets their selfish needs. Place at the disposal of public health officials a national information bureau, able to furnish them with authoritative advice on the most practical methods of dealing with the problems in the mouth hygiene field and they could hardly pursue an independent program of research and experiment and justify themselves to the satisfaction of their departments of ways and means or their constituency.

The production of the proposed organization would come mainly under five heads:

1. A series of standardized lectures, with appropriate lantern slides, constructed to conform to our present knowledge and carefully kept up to date, setting forth the subject in the various forms necessary to meet the demands of audiences of average adults, special classes of adults, upper grade school children, kindergarten pupils, teachers and normal school students, physicians, dentists, nurses and other special groups.

2. Comprehensive standardized literature, likewise varied in form to cover all special educational fields, the printed matter sold or manuscript furnished for copy, or both.

3. Standardized exhibit material, furnished by the organization, or through the organization, but in any event determined by careful analysis of past experiments and present exhibits to be most effective for demonstration purposes.

4. Authoritative information representing the consensus of opinion backed by practical experience as well as theory on the organization and maintenance of dental infirmaries and other movements for philanthropic dental service to meet the needs of varying types of communities, financial and other conditions.

This would involve an elaborate and far reaching standardization of equipment and operative procedure.

5. Authentic statistics on all phases of the work determined by exhaustive analysis of past and present movements, research on the physical and economical effects of mouth disease and in many other fields of investigation.

There is no reason why the work of the proposed organization should be limited to the items stated, though it is probable that under these five heads will be found our fields of greatest needs. Individuals, organizations and communities are calling for helpful, authoritative council and effective ammunition. It is not difficult to furnish the material that is most needed to give the mouth hygiene movement broad extension. Not interest, nor enthusiasm, nor even finance is needed to assure strong offensive action against the most prevalent of all human diseases. These items are now available.

The key note is *system*. System, extended through combination, abolishing the wasteful experimental effort of isolated groups and bringing about a concerted movement along the most direct path to the desired end has been responsible for every great commercial advancement since the dawn of our era of big business. It is as applicable and as necessary in the public health field as in the realm of commerce, and it will produce the same results.