

## THE PURPOSEFUL USES OF KNOWLEDGE

Dedications of public buildings occur so frequently these days that I sometimes wonder if they are not in danger of becoming routine-- a habit rather than an occasion. We may forget why we have them--indeed, why we should have them, and that, I think, would be unfortunate. For a dedication is something more than empty pomp. It is the declaration of great purpose, the taking of a public pledge that the building, through those who work within it, will be devoted to the public interest, to the service of mankind.

In the ceremony attending the official opening of the Dental Health Center, the symbolism is especially meaningful, for it is not a new building which is being dedicated but an old building being rededicated to new purposes. Now that it is no longer necessary to the hospital, the building has been assigned to other activities of the Public Health Service--principally, its dental program. The structure will be used as a center for applied research--research which will improve the mastery of the science and practice of dental public health by molding the discoveries of the laboratory and classroom into usable and useful tools for the prevention and control of disease.

What this Center embodies, then, are the basic ingredients of scientific and social progress: the wisdom which moves men to make the fullest use of the resources they have, the innate inquisitiveness which urges them on to the discovery of further knowledge, and the practicality which inspires them to develop ways of employing what they know to better advantage.

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Remarks of the Honorable John E. Fogarty, Member of U. S. House of Representatives from Rhode Island, at the Formal Opening of the Dental Health Center, Department of Health, Education, and Welfare, U. S. Public Health Service, Division of Dental Public Health and Resources, in San Francisco, California, November 6, 1961.



The first of these ingredients, the full use of available resources, is by no means the least important, but it may be the one in most danger of being overlooked or ignored. We in this country are conditioned to plenty. It is part and parcel of our character to be enchanted by what is new, to want the latest model of anything, and this, within reasonable limits, is all well and good; it gives impetus to progress.

Yet it is possible to be so enamoured of the new that we become prodigal in our pursuit of it. We discard much that is still useful; we fail to realize the full potential of existing intellectual and material reserves. Even in the most leisurely of times, such extravagance is unwise and unworthy of us as a Nation. Today, when scientific discoveries occur at so fast a pace that we have difficulty in grasping their implications, the wastefulness of misuse and disuse of our resources is worse than unwise. It is a threat to progress and a danger to our national well-being.

Therefore, while we continue to build new buildings and to unearth new knowledge--and, indeed, we must continue to do both--it is imperative that we take periodic inventory of the buildings and facts to which we already hold title. Undoubtedly there are other buildings, like this one, which represent little more than surplus space to present occupants. Yet reassigned, as this building has been reassigned, they could represent the fulfillment of a vital and long-felt need.



I suggest that the type of intelligent conservation demonstrated here today offers one of the best ways of enlisting more active public support for the extensive research and educational building programs which are still so desperately needed.

It is well to remember, however, that the most valuable of all our resources is knowledge. And since "the essence of knowledge is, having it, to apply it," the value of what we know increases in proportion to our ability to employ it wisely and effectively. Yet today we find ourselves in an ironic situation: We must admit, on the one hand, that what we know is little when compared with what we want to know, and so we continually strive to learn more. On the other hand, we must also admit that much of the value of existing knowledge is, in a sense, dissipated, because we consistently fail to apply it quickly enough or widely enough or forcefully enough.

The great gulf between knowledge attained and knowledge applied is painfully evident to everyone connected with the practice of public health. And nowhere is the existence of such a gulf more tragic, for public health is concerned with the welfare of millions, and each failure to employ fully every known method of prevention and control means the continuation of pain which could have been eased and the presence of disease, even of death, which could have been prevented.

The inability to secure complete public acceptance of the Salk vaccine is one notable example of the disastrous lag between possibility and actuality. The fluoridation of public water supplies is another. Here is a preventive measure capable of reducing the attack of dental



caries--the most common of all human diseases--by as much as 60 percent. It has been available for longer than a decade. Yet today only a fourth of the American people have the protection which fluoridation offers.

There are scores of other, varied examples which, though less dramatic and less well known, are nonetheless disturbing and nonetheless demanding of attention and corrective action. Many of them are to be found in the field of dentistry and they affect the very base of dental health activities.

Many dental diseases can be controlled, and others prevented, through regular dental treatment. Yet the majority of the American people have evidently not been convinced, for in any given year, some 60 percent of them fail to see a dentist. The daily practice of a few simple oral hygiene procedures is also an effective disease control. Yet vast numbers of children and adults have evidently not been motivated strongly enough to follow them.

Disadvantaged groups--the aged and chronically ill and the mentally disturbed child--are in serious need of dental treatment. Dental science has developed the necessary instruments and techniques to meet these needs. These techniques go largely unused, however, because the community public health programs which should be using them do not exist, and dentists in private practice have neither been taught nor urged to learn how to use them.

The cost of dental care is a serious deterrent to wide-spread use of dental health services. Recent extension of group purchase plans to dentistry holds a promise of solution. But these plans have yet to be fully developed or broadly applied.



Epidemiological investigations in other health sciences have revealed much about the prevalence of diseases and the socio-environmental factors affecting them. Yet epidemiology has not been fully employed in the dental field. As a result, the cornerstone of much dental public health programming is missing.

Public health agencies are just now beginning to give emphasis to dental programs. Efforts to expand such programs have been weakened by a lack of well-qualified, professionally trained personnel. Until the establishment of this Center, not a single site existed in the United States for the provision of organized field training for dental public health workers. Yet at least a decade ago the American Public Health Association and the American Board of Dental Public Health both focused attention on the need for practical training for those who would enter this field.

There is a growing shortage of dentists throughout the Nation. We know this. Yet the additional dental schools necessary to train more dentists have yet to be built. The effectiveness of efforts to reduce the impact of shortage by utilizing auxiliary personnel is diluted: no thoroughgoing investigation has been made to determine the duties an auxiliary can and should perform. The building of adequate training programs for auxiliaries necessarily waits upon that determination.

And so the record reads. Much could be done and should be done and yet we have accomplished relatively little in putting our knowledge to work.



It's against that background of great need and unrealized potential that the Dental Health Center begins its activities. And certainly against that background, the avowed purpose of the Center--to narrow the gulf, to reduce the time lag between the discovery and application of knowledge--is altogether wise and fitting.

Many of the projects already scheduled by the Center--the epidemiological and environmental studies, the development of community dental health education techniques, the plans for further research in the care of the disabled and the studies designed to extend the use of prepaid dental coverages--strike at the roots of problems I have mentioned. Others will be added as time and opportunity permit.

Who can say what these programs will mean to the future? It may well be that this Center can be the necessary mechanism for a study of the methods of dental education--that it can assist in determining the content of effective undergraduate and graduate curriculums, that it can test the practicality of modern educational devices for the dental school. Perhaps research conducted by the Center will pave the way for a practical definition of the role of dental auxiliaries by demonstrating what work--and how much work--these aides can perform. And perhaps as a result there will be a constructive change in the pattern of dental practice.

Perhaps the studies of those born with that terrible disfigurement known as cleft lip and palate will provide the long-sought clue as to its cause. And perhaps it will be possible then to develop measures effectively preventing this tragic facial deformity. As a result of a chain of events started here at the Center, the mother of the future may not have to look so fearfully at her new born child to see if his face is complete.



Whatever the content of programs undertaken in the years ahead, the staff evidently have no intention of devoting their time solely to the cultivation of theories and abstractions. Theory will always have great and lasting value. But here, in this Center, the emphasis will continue to be placed on application, on using what is known to better purpose--and this, too, is of great and lasting value.

Capitalizing on its field location, the Center will be able to draw upon the rich intellectual, social and scientific resources of this great San Francisco Bay area. It will profit from, and in turn contribute to, the experiences and know-how of hospitals, of colleges and universities, of public health and community agencies.

And the program of short-term and resident traineeships which the Center will offer--not only to Americans but to foreign students as well--gives assurance that what the staff of the Center learn, they will gladly teach. The successful fulfillment of their stated aims will not only strengthen public health programs in this country but will be of value and influence on an international level.

Not all of the Nation's dental health problems can be solved or even attacked at the Dental Health Center. Extensive Federal aid proposed in the legislation I have introduced in the Congress, will be required to build the schools we need to train dentists and to provide the scholarships we must have to recruit capable students. There is also a recognized and growing need for Federal aid to dental public health programs--aid which State and community agencies must be prepared to use wisely by recognizing--and meeting--their own share of responsibility.



But, in many programs in many areas, this Dental Health Center can provide indispensable leadership and direction. If much of the improvement we seek can be attained only through trial and error, then let there be enough elbow room in this Center to permit trials and enough courage to risk error. If much of what should be done is as yet either unrecognized or unacceptable in some quarters, then let the staff of the Center take the long view, unrestricted in their freedom to ask and to act--and to prod.

I would like to think of the opening of this Center as symbolic of the opening of a new era in dental public health. I would like to apply to it some words of Thomas Jefferson, to say that "this institution will be based on the illimitable freedom of the human mind . . . not afraid to follow truth wherever it may lead, nor to tolerate error so long as reason is free to combat it." For if, in the Dental Health Center, those words can be brought fully to life, then the science and practice of public health will be immeasurably enriched, and our lives and the lives of future generations will be better because of it.