Changes in school health education require congruent shifts in dental health education. What these should be is the theme of this presentation. Emphasis is placed on the need for a total approach in health education for children.

# A CASE FOR NEW DIRECTIONS IN SCHOOL DENTAL HEALTH EDUCATION

Emma Carr Bivins, A.B., M.P.H., and Helen S. Lucye, R.D.H., B.S., F.A.P.H.A.

N a well-known magazine, an attractive full-page advertisement appeared with the heading, "Will Your Teeth Live to Be 55?"<sup>1</sup> If you are already 55 and still have your molars, or if you are a beneficiary of the best in modern dental care, you could smile to yourself and say "Yes, my teeth will live to be 55."

The provocative advertisement pointed out that three of every ten people in the United States past the age of 35, and half those past 55, have lost all their teeth. It is easy to add to this a parade of dreary statistics and a dissertation on the dental manpower shortages, all too familiar to you. Enough to say that dental disease ranks first on the nation's list of diseases. The heartening fact, of course, is that the know-how and the tools are already available to cut down drastically on the prevalence of dental disease in the whole population.

However, old problems still exist. How do we disseminate the knowledge of "what-to-do and how-to-do-it" to every individual? How do we challenge or stimulate people into taking initiative for their own dental health, and to turn to the practitioners for regular management and for their more complex dental problems? An obvious answer is that we must do a better job of instructing the young. While we know that oral health practices cultivated at home have the most lasting value, can we rely on the consistency of parental persuasions and guidance? Many feel that the answer lies in better school health programs. Schools, however, are already burdened by multiple outside agencies and institutions pressing for more education on this-or-that health or welfare or social problem. Thus, in seeking the assistance of schools, we must do so in a way that enables them to respond.

#### Why the Division of Dental Health Became Involved in School Dental Health Education

It seems fair, at this time, to share with you the reasons why the Disease Control Branch in the Division of Dental Health became involved in school health education.

From 1962 to 1966, the Disease Control Branch was concerned primarily with community water fluoridation. Today it has a broader mission. In the course of experience we learned that an entire generation of young people had grown up with little or no education about fluoridation. The Bronfman School Health Study<sup>2</sup> of 1963 identified the omission: 70 per cent of the 12th grade students surveyed thought fluoridation was for the purification of water. This isolated fact looms large when you realize that this great public health measure needs the support of enlightened citizens. The story of community fluoridation would be considerably different today if hundreds of thousands of young people, now of voting age, had been given the facts about fluoridation, and had understood the meanings underlying the controversy. In some communities where a school dental health program with some fluoridation emphasis was introduced, the positive impact on community fluoridation attitudes and outcomes has been plain to see.

Last year the division began to look at school dental health education to see how more emphasis might be encouraged, not only on fluoridation but on all preventive dental health measures. Scores of old and new textbooks, hundreds of leaflets and pamphlets, and numerous studies were consulted; and countless conversations were held with teachers, professors of health, and other educational authorities, as well as with proponents of modern learning techniques.

### In the Old Days, School Health Was "Total"

When the three R's were the principal subjects taught in school, "hygiene" was also a part of the curriculum. A considerable part of the hygiene textbooks of the 1920's and 1930's was devoted to "The Care of the Mouth" or "Hygiene of the Teeth." Dental health was placed in the context of total health, and dental health information imparted represented the latest and best available at that time. There was emphasis on prevention, gum disease and how to counteract it, malocclusion, the value of proper nutrition on dental health, twicea-year visits to the dentist, and the right ways to brush teeth. An excellent textbook was that of the late Dr. C.-E. A. Winslow, "Healthy Living,"<sup>3</sup> published in 1917. And Dr. John H. Kellogg said, in his "Everyday Health Series,"<sup>4</sup> that "a man who does not have good teeth is not a sound man."

Man was studied as an entity in those days. However, there were few references to mental health and social well-being. The influences of Freud, the behavioral sciences, the burgeoning urban populations, and the complexities of a technological society were still far away. How much children absorbed and utilized would be hard to say. What did you learn about health "back then" that has stayed with you?

Apparently from the late 1930's until today, the teaching of health suffered from fragmentation. Wars intervened with their special demands. Sputnik changed the American curriculum. New facts about health came fast and furiously, and new social problems arose. Different philosophies emerged as to what phases of health deserved the most emphasis. Voluntary and other health agencies made their demands and offered their specialized publications. In teacher training institutions, instructions on health teaching took a back seat. Dental health education in the schools reflects all this change and resultant confusion.

# Some Pictures of School Dental Health Education Today

Let us put aside, for a moment, consideration of the total school health education program as it used to be, with dental health education as a natural and integrated component, and look briefly at what we see and hear today.

Study of the health textbook series used in the schools today shows dental health material which ranges from excellent to nonexistent. Some of the information is complete, up to date, and pictorially attractive. In other volumes the material is definitely archaic, although it bears comparatively recent publication dates. Some of the writings are totally uninspiring, and some are actually in error. There is little on fluoridation anywhere in the health text series.

Furthermore, despite surveys proving that teachers rely on good textbooks for the development of their teaching programs, only 10 per cent of the schools use health textbooks. Unless the teachers in the other schools have been well trained in methods of teaching health, and in the discriminating use of the vast number of resources available, how can the lack of a comprehensive textbook be accommodated? Also, how much dental health education comes to the surface when other health topics—e.g., LSD, VD, boy-girl relationships, good grooming—claim so much popular attention?

A wealth of good supplementary dental health education material is furnished by councils, associations, health departments and commercial firms. Reports from the 1966 Woodstock Workshop on Dental Health Education<sup>5</sup> spoke of the "tons" of commercially prepared material available, and described the approach to the subject as "stereotyped and S.O.S.—same old stuff." Furthermore, the main complaint of the teachers interviewed across the country is: "We don't know where to get the material!"

The studies on school dental health education<sup>6-10</sup> tend to quarrel with one another. Some say that exposure to an intensive program of dental health education does improve oral practices<sup>8</sup>; others report little change.<sup>6,7</sup> One study showed that dental health education among teenagers did motivate them to improve their oral habits<sup>9</sup>; another found that dental education among teenagers was nonproductive, and concluded that what was not learned in the early years was not adapted into practice at all. $^{10}$ 

Dr. Joseph A. Yacavone, chief of Dental Public Health of Rhode Island, declares that<sup>11</sup>: "Our present methods are neither effective nor adequate. A reevaluation of our methods of education for dental health are in order."

Dr. Marjorie A. C. Young of the Harvard School of Public Health says<sup>12</sup>: "Education for more and better dental health education is obvious and will continue to be of high priority. . . . Meaningful, realistic objectives are fundamental to effective program planning but the dynamic quality of the program is determined more by the 'how' we educate than by the 'what' we teach."

# Back to the Total Approach in School Health Education

There are certainly strong signs that the nation is on the threshold of dynamic new approaches in school health education. The old concepts of total physical health seen in the first decades of the century are being re-embraced, and expanded to include emphasis on positive mental and social health. The new approaches will also include new currently available methods and techniques to help the individual make practical use of the knowledge he has gained about health. There will be more learning by doing.

The first visible movement toward the new day for school health education is the School Health Education Study, a follow-up of the Bronfman survey of problems and needs. This comprehensive plan presents a new "conceptual approach" to curriculum design. Both the advisory committee and its writing team comprise a distinguished and diverse group of medical, public health, and educational personnel who have received help from experts in countless fields.

The foreword of the cornerstone volume in the School Health Education Study<sup>13</sup> series, signed by the Advisory Committee of which Dr. Herman Hilleboe is chairman, reads in part:

"Artificial barriers to health education among schools, colleges and communities must be eliminated. In essence, what is needed is a national commitment to 'good health as a way of life,' from the first school years throughout the life span."

If you have not seen or heard of the School Health Education Study, we commend it to you. It may not represent the only answer to the situation, but it points out significant directions. Its impact should be great.

#### Suggestion for Action

Persons in fields of dental health who are concerned about more effective dental health education in the schools need first to become part of the new coordinated school health education movement and all that it connotes.

A positive force or better school education could be created through the establishment of a national committee or council. This council would serve to:

1. Determine the accurate and current dental information which should be transmitted in texts and teaching.

2. Identify the multiple resources of good dental health teaching material for distribution to schools.

3. Watchdog the developments in the total school health education movement to see that dental health receives its proper emphasis, and to see that there is dental representation in the school health program planning groups.

4. Bolster by all possible means the entire school health education movement now evolving.

5. Join with the larger movement to press for more and better health training of teachers and other school health personnel in their training institutions and on the job.

Such a group would include representatives from dentistry and schools of dentistry and dental hygiene as well as dental assistants. It should also include school nurses, classroom teachers, guidance counselors. professors of health in teacher training institutions, physical education instructors, as well as textbook publishers, and commercial firms and organizations distributing dental health teaching aids to schools.

#### Summary

The tide of school health education is turning rapidly. Of necessity, dental health education must be a part of the total effort in school health education. But before the dental field can capitalize most effectively on what is happening, we need to get together on what we seek to put across through the schools. We need to provide more and better help to the forces attempting to fashion school health education programs that make sense, and have rich meaning for students from kindergarten through college. Let us give more focus to dental health education, and let us place dental health education in the total focus of education for what the Hilleboe committee describes as "good health as a way of life."

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Miss Bivins is with the U. S. Aid in New Delhi, India, c/o Department of State, Washington, D. C. 20521. Mrs. Lueye is Chief, School Unit, Preventive Services Section, Community Programs Branch, Division of Dental Health, Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, Bureau of Health Professions Education and Manpower Training, 8120 Woodmont Avenue, Bethesda, Md. 20014.

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# Summer Courses on Water Pollution Control

Under the auspices of Manhattan College and the Federal Water Pollution Control Administration, two courses will be given at the college June 2-6, 1969, as follows: (1) Stream and Estuarine Analysis; (2) Biological Waste Treatment. There will be invited guest lecturers from various universities.

The enrollment fee for each course is \$175 and registration is limited to 40 participants. Accommodations may be arranged at Van Cortlandt Motel, Broadway near 254th Street or at the Carvel Inn in Yonkers, N. Y. Meals and a limited number of dormitory rooms are available on campus.

For further details write: Donald J. O'Connor, Civil Engineering Department, Manhattan College, Bronx, N. Y. 10471.