Pediat. Res. *12:* 1149–1151 (1978)

The 1978 Presidential Address of the American Pediatric Society*

The Future of Pediatric Education

C. HENRY KEMPE†‡

University of Colorado Medical School, Denver, Colorado, USA

Our Society has not met in New York since 1888, our second meeting. At that time membership stood at 49, attendance 26, and papers read 24. Reading and discussion of 24 papers required 2 full days. It was obviously a leisurely time.

The following year, membership had climbed from 49 to 52 but attendance had dropped from 26 to 19 and these 19 members read 23 papers. Discussion again took 2 days. Why has the APS not returned to New York since 1888? Some of the New York members are said to have felt that New York offered too many distractions for the out-of-towners, while the New Yorkers felt that this was no place to play golf.

Presidential addresses fall into three categories: historical, scientific and the "looking ahead" kind. All historical talks have been delightful, and I was much tempted. The second group consisted of scientific presentations of work done by the president; and I have done some. I started to work on smallpox and smallpox vaccination 33 years ago in 1945, and all but one of my presentations to this society have dealt with the vaccinia-variola group of viruses and smallpox eradication. Routine smallpox vaccination has been discontinued in our country, and variola major, the serious form of the disease, has not been seen anywhere in the world since October 1975. The mild form of the disease, alastrim, had persisted in Somalia and Ethiopia, but again, there has not been a case seen for the past 6 months. The only risk of virulent smallpox now comes from the stored strains remaining in a few carefully guarded deep freezes throughout the world. Clearly smallpox is a subject that will interest few; hopefully its eradication is history.

I have therefore chosen the third kind of presidential address, the one that looks ahead.

Pediatric education has occupied me intensely for 30 years, and over the past 2 years I had the honor to chair the Task Force on Pediatric Education as an arbiter of the 16 members representing 10 component societies. Our society is ably represented by Dr. Doris Howell of La Jolla; the SPR by Dr. Vincent Fulginiti of Tucson; the Academy by four practicing pediatricians: Dr. Raymond Christy of Springfield, Dr. Paul Goldstein of New Haven, Dr. James Hecker of Cheyenne, and Dr. Dazelle Simpson of Miami; The Society of Adolescent Medicine by Dr. Michael Cohen of New York, who did much editing as well; The American Board of Pediatrics by Dr. Stanley Crawford of San Antonio and Dr. C. William Daeschner, Jr. of Galveston, who served as vice-chairman and took over much of my work recently; The Ambulatory Pediatric Association by Dr. Morris Green of Indianapolis; The Association of Pediatric Chairmen (AMSPDC), by Dr. Melvin Jenkins, Jr. of Washington, DC, Dr. Henry Nadler of Chicago, and Dr. Jimmy Simon of Winston-Salem; The Academy of Child Psychiatry by Dr. Albert Solnit; The Professors of Child Psychiatry by Dr. Julius Richmond of Washington, DC; and the AMA Residency Review Committee by Dr. William Laupus of Greenville. Dr. Richard Olmsted served as the Executive Director of the Task Force.

Many of our members belonged to three or four of the component societies, but in each case it was their job through the minutes of our monthly meetings and in person to report to the officers of their societies. The Task Force, in turn, offered an opportunity to the officers of all 10 societies to meet with them. We met 1 day a month for 2 long years, generally in the exotic and lush surroundings of the Hilton O'Hare Airport Hotel. One two-day legislative session was held in Washington, DC.

The report of the Task Force on Pediatric Education is now in press and ready for debate. Officers and members of our component societies will receive the document by mail, free of charge. Copies will also be mailed to all current residents and fellows, all deans, and key people in HEW and Congress.

Since one object of this society is the promotion of pediatric education and research, I am delighted to use this occasion to report that the state of pediatrics is far better than any of us had anticipated. Contrary to the concerns expressed over the years that pediatrics might be a dying specialty, let me say that we are more than holding our own at all levels. The Task Force commissioned two studies: one of mothers all over the country at all walks of life and the other of 7000 recent graduates of our residency programs, focusing primarily on those who graduated since 1964.

Fifty-two percent of all mothers interviewed had a pediatrician for their children and expected that pediatrician to look after their children through adolescence. Most of those who didn't have a pediatrician wished they had, if better geographic distribution made it possible. Regardless of who their physician was, 98% of all mothers knew that the pediatrician is best trained to care for children and adolescents. Further, medical students are coming into pediatrics at better than the expected rate of 8%—we got 10% last year. There is no evidence whatever that the development of child health associates and nurse associates has encroached upon the practice of pediatrics; rather it has improved the quality of care given to children and allowed more time per child to the pediatrician.

In 1950, 80% of pediatricians were in solo practice; in 1977, looking at graduates after 1964, that number is 15% and falling. In contrast to internal medicine and surgery, pediatrics has not produced a plethora of subspecialists. Only 6% of nonacademic pediatricians list themselves as subspecialists, and only 10% of all pediatricians are certified by a subspecialty board. Twenty-two percent of all pediatricians in general clinical pediatric practice have developed special interest areas. Among those practitioners completing residency since 1964 the percentage with a special interest area is significantly higher, 81%. In addition to organ-

* Presented at the annual meeting of the American Pediatric Society April 26, 1978, at the New York Hilton Hotel at Rockefeller Center, New York, NY.

† The support received from the William T. Grant Foundation is gratefully acknowledged.

‡ Requests for reprints should be addressed to: C. Henry Kempe, M.D., University of Colorado Medical Center, 4200 East Ninth Ave., Denver, CO 80262.

oriented special interest areas, pediatricians are increasingly involved in biosocial and developmental pediatrics, school health, community health, adolescent medicine, and many are working with child abuse teams.

In the future, groups of pediatricians will be working in some relationship with a center of tertiary care and they will tend to see fewer patients per day than they do now. At present the pediatrician having 3500 children on his books sees an average of 27 patients per day in his office, and he has 4 patients in the hospital, of whom 1 is a sick child and 3 are newborns. Before long pediatricians will see an average of 20 patients per day, if comprehensive personal care is made available to all, and particularly in the areas of biosocial pediatrics and adolescent medicine. Reimbursement must soon be for time spent, not for numbers seen.

Our geographic maldistribution needs to be seriously addressed, most probably by a system of regionalized group practices which require supplemental funding from state or federal sources. The Area Health Education Center concept, begun in 11 states in 1972, and expected in 15 more by 1982, will probably help the maldistribution problem.

We pediatricians are singularly united in the belief that the financial and racial circumstances of a child's parents should not in any way influence the quality and quantity of preventive and therapeutic services. Pediatrics was once in danger of becoming a specialty for children of the upper middle class and well-to-do; no longer! Throughout this country thousands of devoted pediatricians, and every single pediatric training program, provide much needed care to the poor. We estimate that 20% of all pediatric care is given by university clinics and health centers many of which are part of pediatric training programs.

All who care about children must care deeply about the education of those who provide their health services. The Task Force on Pediatric Education was formed because of the recognition that many of the important health needs of infants, children and adolescents are not being met as effectively and as fully as they should be. Our primary goal has been to identify these health needs and to point out the educational strategies that are required to prepare pediatricians of the future to meet them. Evidence for the health needs of children and adolescents are all around us. National action to meet those needs can begin with educational reform. Our major purpose has been to reestablish educational objectives based on the health needs of children.

The concept that educational activities in our departments should relate to the health needs of children was not as universally accepted as you might think. A few feel to this day that it should be the other way around: that the needs of their department should be addressed by a ready supply of sick and funded children, each in their appropriate sub-specialty.

The Task Force has been the only broadly representative group delegated to explore and evaluate the complex factors influencing pediatric education. We involved the entire pediatric community in our deliberations. Early on, we reviewed all published materials and called upon many consultants. This report is a distillation of 2 years of thought, testimony, and research. All recommendations have been voted on and the report is unanimous in all its parts.

The Task Force recognizes that education does not occur in a vacuum, and that educational planning is influenced by considerations other than the health needs of children. Educational funding, manpower requirements, practice systems, distribution of providers, and reimbursement for clinical services are some of those other factors. However, too broad an approach would have diverted us from the central task of improving child health care through educational reforms within the influence of our member organizations. Our recommendations are meant to be both sensible and do-able.

I will focus on two issues which repeatedly emerged as our most important unmet needs. They can only be addressed by commitment of talented people, space, and money.

1. Biosocial and developmental problems adversely affect the health of many children and adolescents and are serious and very widespread. All pediatricians should have the necessary skills to cope with these problems. The Academy's recent Manpower Survey documented a marked increase in the amount of time pediatricians, often with no training, are spending in counseling for school problems and with adolescents.

In our survey of residents, 54% of 7000 recent graduates, rated their residency as giving insufficient experience in biosocial and behavioral problems. Happily, the development of programs in ambulatory pediatrics and adolescent medicine has greatly stimulated attention to biosocial concerns in many residencies, as has increasing awareness of a substantial body of scientific knowledge in the behavioral sciences.

Almost accidentally Task Force members became active with HEW and foundations to develop departmental support. Under the Health Manpower Act, a significant number of departments have obtained supplemental funding for residency programs in comprehensive primary pediatric care, including biosocial pediatrics. Those departments not funded this time around have, with few exceptions, initiated significant changes even without additional funding. The William T. Grant Foundation has embarked on an ambitious program to bring biosocial and developmental pediatrics into the general pediatric training programs by awarding grants-in-aid to departments submitting a plan. A number of Task Force members serve on the Award Committee. We are trying to interest additional private foundations in increasing the number of departments to be funded. Over 20 departments have already submitted applications and at least an additional 25 departments are planning to come in the second time around. In other words, one-third of all departments of pediatrics have written roadmaps that embody recommendations of this Task Force as they relate to the field of biosocial and developmental pediatrics. I have no question that others will follow.

2. The second area of major unmet need involves our adolescents. There are 40 million adolescents in the United States and their health needs are being inadequately met. Many adolescents are deeply troubled, and the health care of this group is particularly deplorable. You may have noted that in all recent HEW Health Manpower publications, "pediatrics" invariably refers to the care of children and adolescents whereas "internal medicine" is mentioned in connection with the care of adult and geriatric patients. This is no happenstance. It is due, in part, to the efforts by members of the Task Force that HEW has decided to affirm the concept that pediatrics includes the care of adolescents, until age 21.

Some say that adolescent medicine is really nothing more than a time period not deserving special recognition and that the adolescent is just "an older child." This is what the internists said about pediatrics for a long time, "the child is a small adult." And that is what was said later about the field of neonatology, "the neonate is a small child." Time has shown that there was a lot to be gained scientifically, educationally, and in terms of excellent patient care by giving recognition first to pediatrics as a specialty, and then to neonatology as a subspecialty. The field of adolescent medicine can no longer be denied.

I am grateful to the departmental chairmen who cooperated with Dr. Robert Blizzard of the University of Virginia in a survey of training of pediatric residents in adolescent medicine. I quote Dr. Blizzard's data with his permission.

Twenty-nine of 40 children's hospitals now have an adolescent ward (72%), whereas 28 out of 89 general hospitals have an adolescent ward (31%). In all, 44% of all medical school hospitals have an adolescent ward. Twenty-nine of 40 children's hospitals have an adolescent clinic (72%), whereas 48 of 89 general hospitals have an adolescent clinic (54%). Sixty-two percent of all services have an adolescent clinic. Many departments currently having neither clinic nor ward are developing both. The majority who had no adolescent ward gave as their reason, "inadequate space." Only two of the respondents did not believe in an adolescent ward. Antagonism by departments of medicine was recorded by

only 7 of 122 respondents. The concensus indicated that there is a great need for training of pediatric residents in adolescent medicine, that administrators are often not understanding, that funding for faculty in these areas is difficult to obtain, that space inadequacies limit the development of wards in many institutions. As for clinics, a few and vocal departments feel that adolescent clinics are not needed, because they "just know" that a subspecialty clinic could or should be able to handle the needs of adolescents better than a general adolescent clinic.

Adolescent medicine has made enormous strides in the short 25 years of its existence. As can be seen in our scientific program here, there is increasingly hard science in this field.

To those who maintain that the fields of biosocial pediatrics and adolescent medicine are as yet too soft to be academically respectable, I suggest that they pay attention to their residents' performances on pediatric oral board examinations in the years to come. We have no problem in devising hard questions in these important areas of pediatrics. Word will get around.

3. Training in the long term care provided to our children with chronic handicapping conditions continues to be grossly inadequate. Other undertaught areas of pediatrics are clinical pharmacology and toxicology, community pediatrics, health maintenance, medical ethics, orthopedics, nutrition, and dermatology. So there is lots to do.

Instead of constantly moaning about whether our residents are being overtrained for what they do, why not face the fact that they are undertrained for what they are being asked to do? There is time in 3 years to touch most bases and with increasing responsibility. The Task Force unanimously recommended that 3 years be required for education in the specialty of pediatrics. Is that do-able? The traditional residency pyramid is not ordained in heaven. If you have 6 Pl 1's and 6 PL 2's and 3 PL 3's, adding to 15, try 5, 5, and 5. It has been done in many places and it works.

Finally, I would like to say a word about the education of pediatric academicians. The continued development of first rate, well qualified persons for academic pediatrics is essential if our specialty is to fulfill its obligation in child health. We hope that pediatric chairmen will assume far greater responsibility for assuring that all fellowships offered under their department's aegis meet demanding standards. Some fellowships seem not to differentiate between the training of technicians and medical scientists. Clearly, every department should have joint activities for all its fellows in such fields as biostatistics, experimental design, medical ethics, etc. Fellows should not be limited to a single technique and thus be bound for life into a narrow spectrum of research, based on the training opportunities provided by a single investigator. We must all make certain that our fellows have the broadest possible orientation in their field of scientific endeavor so that, although they may not master all techniques, they will know the tools of their trade and be able to switch to new techniques as new questions demand new answers. All in all, we would like to upgrade the education of pediatric academicians under broad guidelines proposed by a subcommittee of the SPR and fully approved by the Task Force. None of the above will limit the imaginative educational thrust of either departmental chairmen or fellowship directors. Rather there will continue to be a great variety of programs of excellence at all levels.

Allow me to close on a personal note.

When one surveys all the great, unmet needs of children and adolescents in our country, one could well despair. But I do not!

I see in this room an enormous number of devoted individuals who have made lifelong intellectual and emotional commitments to the service of children. All of us are united in wanting to give each child the very best start in life; our educational programs reflect this wish, as do our research efforts—all are designed to benefit children the world over.

But global concerns can overwhelm and immobilize the best of us. It is just not possible to worry about all the needs of all the children all the time. There lies frustration and total inaction as well.

For each of us there must be only one patient at a time, and, generally, only one major research theme at a time. Thus, one keeps one's sanity and does the very best job.

At the same time, all of us who are devoting our professional life to the cause of children must engage our minds and our hearts on their behalf, each one of us, and wherever we can:

By the quality of our work, by being the child's advocate in our towns, in our states, and by influencing national policy to our best ability.

Do so with passion!

Don't worry about being labeled a do-gooder; just DO GOOD!

Only thus will our children receive their due share of all we have to give.

I wish you godspeed.

0031-3998/78/1212-1149$02.00/0

Printed in U.S.A.