Reflections: Health and Medicine

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It is a special privilege for me to have the opportunity to meet today with you in celebration of the 60th Anniversary of ABMAC (American Bureau for Medical Advancement in China). To have provided training as ABMAC has for nearly 500 physicians and nurses is in itself an outstanding accomplishment, and what a remarkable group, as Dr Pierson described for us this morning. ABMAC's role has been an evolving one, as was recounted in the history, but the underlying theme of support, of training of tomorrow's leaders seems to me to be the soundest and ultimately the most productive investment which any foundation or organization can make. It is not always the favored policy, particularly in recent years, as organization and foundation directors increasingly seem to want some sort of pay-off by the end of perhaps three or four or five years. Investments in people, when done with vision and prescience, require time before the "investment" matures--and that may be 10, 20, even 30 years. I would pay special homage to ABMAC in having exhibited the wisdom and prescience in maintaining a focus on investing in people--clearly a nation's most valuable resource.

This hotel holds special memories for me because it was here that I stayed on my first trip to Asia in 1961. Taipei was a somewhat different place then. That year El Tor cholera had spread from its Indonesian home to the Philippines and major epidemics ensued. I was asked by the National Institutes of Health to visit the Philippines to ascertain whether the conditions were right and the government agreeable to undertaking cholera vaccine field trials. Cholera, at that time, was greatly feared, accompanied, as it was, by case-fatality rates of as much as 30 to 40%. I was told, however, that there was a man named Bob Phillips, then working at the Naval Medical Research Unit in Taipei, who had some unorthodox ideas about treatment of

health care delivery of relevance to all countries. There is much to be learned in operating this system and much to teach others about surveillance, about quality assurance standards, about cost-effective management. A strong research program would greatly facilitate that process. And last year at STAG, I suggested to the Premier that, for this purpose alone, setting aside 1/4 to 1/2% of gross health expenditures would be a reasonable beginning.

Finally, you have taken the enlightened action of setting national health goals and priorities in a comprehensive national health plan.

One has to ask the question as to what one could possibly do for an encore--where does one go from here?

The challenges you face today closely resemble those faced by our own health system and those of other industrialized countries. As in Taiwan, populations throughout most of the industrialized world have never been healthier than they are today. This inevitably breeds complacency. From long experience, we know that politicians and the general public alike, will increasingly take good health for granted forgetting that this status was won at a price and that it requires maintenance. They too often blithely ignore the fact that if such measures as vaccination and the provision of safe food and water are not sustained, serious problems can and will recur and that the cost of recouping losses can be many times greater and more painful than sustaining the achievements. Such has happened, for example, in the United States within the last ten years with resurgent outbreaks of both tuberculosis and measles. Moreover, there is a need now, as never before, to be prepared for the unexpected--the new and emerging infections--to detect them quickly, to assess their epidemiology and to set in motion control measures. This can only happen with a strong public health infrastructure.

This problem is heightened by the fact of health care reform taking place across the world. In most countries, the focus of reform to date has dealt primarily with mechanisms for the delivery and payment for curative care services. Sometimes preventive services are also considered but seldom very seriously. Public health is

For Taiwan, I would like to comment upon three particularly important challenges each of which, if properly addressed, offers the possibility of greater contributions to improving the nation's health than could the combined efforts of such high technology programs as ICUs, cardiac surgery, cancer chemotherapy, or organ transplantation.

1. The first is smoking--one of the greatest scourges of contemporary life. As you yourselves have documented, one in five deaths among those over 35 is related to smoking and the costs to this society are estimated to be more than NT$ 14 billion. You in Taiwan, as we in the United States, are engaged in a steadily escalating campaign to reduce, if not eliminate, smoking. But progress is slow. Nicotine has been shown to be as addictive as cocaine and heroin. And those who traffic in cigarettes have shown themselves to be as unprincipled, ruthless and well-financed as all other drug lords. Thanks to public health, we have now begun anti-smoking campaigns but are we doing as much as we can? It seems clear that the ultimate key to success will be the prevention of addiction and, as studies show, this means targeting teenagers and pre-teens. While it is important that present addicts cease smoking, it seems to me that the evidence is there to indicate that the long-term critical strategy is to <u>prevent</u> addiction and so the need to measure success in the program by what proportion become addicted in the first place? It is certain that much more could be done in this regard and that innovative programs to do so are crucial.
2. The second challenge relates to the use of vaccines. Vaccines, as you know, have proven to have saved more lives and prevented more disability than any other medical procedure. And yet, as we were to discover during the smallpox eradication program, few of the vaccines available in the 1960s and early 1970s, and in widespread use in industrialized countries, were being employed in most developing countries throughout the world. Indeed, in 1977, less than 5% of children in the non-industrialized world were receiving DTP--a product more than 25 years old or polio vaccine which had been licensed 14 years before or measles vaccine which had been licensed 13 years earlier. Not until public

health professionals became actively involved and aggressively argued the need for these vaccines and led special campaigns did they come into widespread use. Since that time, other vaccines have been licensed and begun to be widely used including hepatitis B, Japanese B, hemophilus influenzae, rubella, mumps, hepatitis A and others. Within the decade, others will become available, strep pneumoniae, rotovirus, RS, dengue and perhaps even an AIDS vaccine. We now have a vaccine which prevents one important form of cancer--hepatic cancer. Others are likely. Almost certainly, new vaccines will be requisite for combating some of the new and emergent infections.

Leadership and a dedicated program staff are requisite to stay current with evolving research; to continually evaluate which of the many potential vaccines would be of greatest utility; to determine which vaccines might be developed and advocated for special groups and to ascertain how and when such vaccines should be given; and finally, to support appropriate needed research. Why do I make a point of this? Because, without continuing active engagement by the public health community, experience shows that needed new vaccines will be delayed in development if developed at all, political support to continue buying vaccines for diseases which are under control will predictably diminish; support for new vaccines will not be forthcoming; and we will fail to realize the enormous potential now apparent in the future of vaccines. This is an important challenge because, I would predict, the new vaccines to become available over the coming decade will result in greater savings in life and disability than has been achieved over the past 25 years.

3. A third major challenge which is sometimes denied as a public health responsibility is the problem of air pollution. Although responsibility for enforcing air quality standards, for diminishing industrial effluents and the like, may be entrusted to engineers and environmental agencies, we need to recall that the one primary reason for concern about the nature and degree of air pollution is its

effect on the health of the public. Only to the extent that politicians and the public at large appreciate the magnitude and severity of health problems caused by air pollution will appropriate efforts be made to deal with it. This is the responsibility of public health and here again the need for surveillance. There are of course many health effects--ranging from mental retardation resulting from lead toxicity to asthma, chronic obstructive pulmonary disease, cardiopulmonary distress and death. One doesn't need to perform elaborate measurements to know that atmospheric pollution is growing steadily and rapidly worse. For some cities, the question is being seriously posed as to whether we might not be approaching the point where large sections of some cities will actually have to be declared uninhabitable for periods of days to weeks. And the dense pall from burning forests in Indonesia which has settled over southeast Asia only serves to dramatize the fact that the problem is here and now, worse than most imagine and internationally of concern. This is a public health issue of catastrophic proportions. Serious measures, indeed heroic measures, will almost certainly be called for--and the longer action is delayed, the more draconian will be the measures needed. Technological innovation can play a key role--electric motors, public transport, catalytic scramblers. But the primary stimulus to this innovation will be, in fact, what public health surveillance brings to the public attention.

As one reflects on each of these problems and on the nation's health agenda, it is clear that however much progress has been made and it is formidable, there remain major tasks ahead. They are challenges for all countries and each country stands to gain from learning of the experiences of others and in publicly sharing its own successes and failures. The ABMAC program can and should continue to play an important role in this process with American and Chinese professionals participating as colleagues sharing important experiences and a forum extending to countries across the world..