## I. INTRODUCTORY COMMENTS

It is a pleasure for me as the 8th Dean of the Johns Hopkins School of Hygiene and Public Health to welcome you to this Convocation being conducted at the close of the 58th Academic year of this School. Today degrees are being conferred upon 228 graduates, the largest number so conferred in the history of this School.

I take special pride in this class - as it is the first to be graduated since I assumed office from Dean Hume on his retirement in February. The warm welcome which you extended to me, your tolerance, your understanding, your frankness have been deeply appreciated. To you I pledge my best efforts in endeavoring to further strengthen and develop a school which has deservedly won such high distinction both nationally and internationally.

This is indeed a happy occasion for myself, for all of the faculty, as we congratulate you on your achievements and welcome you as graduates of the Johns Hopkins School of Hygiene and Public Health.

I would now like to introduce Mr. Robert Davis, Master of Health Science student, Department of Health Services Administration and President of the Student Assembly.

## II. INTRODUCTION OF JOHN HUME AWARDS

This year, for the first time, we take pleasure in presenting to two students the John Chandler Hume Awards - one to a Master of Public Health graduate for academic excellence and professional promise and one to a student in the Department of Health Services Administration for significance of doctoral research. The awards have been made possible by contributions received from the legion of friends and admirers of Dr. John Hume on the occasion of his retirement as Dean of this School in February this year.

Since 1937 when Dr. Hume finished his internship his life has been distinguished by outstanding contributions to public health, both in this country and abroad. He received the degree of Master of Public Health from this School in 1947 and a doctorate in Public Health in 1951. During the period 1955 to 1961, he was Chief of the United States Technical Cooperative Mission in India. But except for this interlude, he has devoted his considerable energies, diplomacy and imagination over the past 29 years to make this School the place of excellence which it is today. As Associate Dean from 1961 to 1967 and as Dean from 1967 until this past February, he has been a central figure in providing the impetus to the phenomenal growth in size and excellence which has occurred. It is most fitting today that Dean Hume himself present these first John Chandler Hume Awards to the two recipients.

## III. CONVOCATION ADDRESS "THE DEVELOPING WORLD"

You who are graduating today are entering a world which is poised for and which will in the next decade undergo profound, even revolutionary changes in the existing health and sickness care systems throughout the world. If we look but ten years ahead, we can foresee in this country some system of national health insurance. This is not a matter of debate - it is a political certainty. But what form can it possibly take which will not bankrupt the nation and how can it be sensibly rationalized within our so-called pluralistic health system (others use the term "sickness care anarchy")? In less industralized countries, the situation is not so different. There is a rapidly growing recognition that a health care system must consist of something more than a medieval religious cathedral called a hospital, manned by white-coated priests serving a minute number of rich in the major cities. Health care must be extended into the villages. Again, it is not a matter of debate, it is an absolute political necessity. But how does one do this within the constraints of available funds and manpower?

At long last, I believe we are seriously asking the critical first question - do more and better trained physicians necessarily mean better health for the population as a whole? As medicine is now practiced, it is clear that more and better trained physicians do indeed mean that more services are rendered to sick people. The logarithmic increase in the cost of sickness care documents that something is being done or, at least, charged for. Whether the population is significantly healthier is quite another question. Not only in health, but in such fields as energy and defense, there is the distinct glimmering of recognition that the expenditure of yet more money in the purchase of yet more commodities and services of the same type as before may improve a situation marginally or not at all. Moreover, we are reminded again and again that resources are finite and that choices are essential.

In this country, we <u>have</u> made a number of hit-and-miss choices, some ill-considered and narrowly focused. One of the albatrosses with which we are now burdened is the apparently innocuous and sensibly humanitarian "End Stage Renal Disease Program". This was casually slipped into already drafted legislation in 1972. It provided for dialysis centers for those with severe renal disease. Within four years, the cost of the program had exceeded $1,000 million and this cost is expected to double within very few years to $2,000 million. In all, it will benefit 70,000 persons. To me, the figure of $2,000 million is of incomprehensibly large magnitude - more simply it can be translated into personal terms of $10

for every citizen in this country every year. All this for maintenance - not cure. A faint trace of enlightenment, however, comes from the Oversight Committee of the House Ways and Means Committee which stated that it "knows of no disease which is so costly to the public treasury but for which so little is spent in prevention".

You from the developing countries undoubtedly assume that when I speak of extravagance, I am referring to the industrialized countries. Not at all. I well recall, for example, a health center in Indonesia manned by an ostensibly full-time physician and a staff of twelve persons - the only medical resources for a population of 200,000. Staggered by the apparent magnitude of his task in providing sickness care, let alone any element of preventive medicine, I asked him to tell me what he and his staff did on an ordinary day. In a lengthy preamble, he pointed out that the ambulance had been unusable for more than three years because no spare parts were available and that it was a difficult, isolated post with vast numbers of people. All this was readily apparent. However, he noted that his average day consisted of bandaging two or three cuts or abrasions and dispensing medicine and antibiotics for ten to fifteen cases of respiratory or diarrheal disease. His staff assisted him in doing this - nothing more - besides tending a very handsome flower and vegetable garden. The fact that the health center was sited at a considerable distance from any village and that he attended the clinic for only two or three hours each day undoubtedly helped to keep the workload at a highly manageable level. Is this extravagance?

Or take India. In 1967, a national assessment revealed that it cost between $.25 to almost $2.00 to vaccinate each person against smallpox in the different districts. Contrast this to Africa where in well-managed programs, the cost was $.10 per vaccination. The extreme was encountered in a district of central India. There the national assessment team found one vaccinator who was posted solely for the purpose of vaccinating international travelers. So far as anyone could discover, there had been only one person who had traveled abroad during the preceding three years and, pursuing this further, they found that he had been vaccinated in New Delhi.

One may view all of this with anguish and despondency, but I personally view the present state of affairs as potentially the dawn of a great new era in health care. It is characteristic of a bureaucracy that significant change is impossible without crisis. Traditionally, the practice of medicine as well as the provision of public health services has been the prerogative of the physician. We are members of an ancient, traditional medieval guild - a group of artists not unlike the goldsmiths of the Middle Ages whom one sought out to obtain a piece of jewelry. Each piece was individually hand-

crafted for the client. Beautiful pieces to be sure, but accessible to the very few. The only possible answer to increasing demand was to train more goldsmiths. Eventually, however, mass production intruded and the less skilled were incorporated. Had a similar guild dominated the restaurant business, I suspect we might now have a small, exclusive chain of Michelin 3 star restaurants, all manned by chefs, trained for years in the Cordon Bleu style. Perhaps once a year we might be able to afford to patronize such a restaurant. Instead, we have such as McDonald's - in no danger of receiving a Michelin star - but there is now one McDonald's for every 50,000 people in this country - and they are utilized!

Happily, the prerogatives of our medical guild are beginning to erode. We actually are asking the question as to whether every meal need be prepared by a Cordon Bleu chef. In so doing, we question a system. In questioning it at a time of fiscal crisis, at a time when choices have to be made, we open our minds to consideration of a vast number of new alternatives.

We may even go so far in the health system as to become <u>really</u> concerned as to what can be done to prevent people from becoming sick. In fact, it is even conceivable that Mr. Califano's present agency, which is more properly termed the Department of Sickness, Education, and Welfare, might eventually and <u>correctly</u> be termed the Department of <u>Health</u>, Education, and Welfare.

In a School such as this, we can, at best, provide an education in the principles - in the tools - which may be used to tackle the diverse problems which each of you will face. Current systems and practices in health and health care to which you have been exposed can only be regarded as historical milestones - important to understand for historical perspective - but, I predict, largely irrelevant within ten years.

The problems in each country, in each state or province, in each area will be different and so must the solutions. We have much to learn from each other. Particular solutions in Tanzania or the United States, for example, cannot be directly applied to India. But new principles may be highly relevant. Research findings in parasitic diseases in a Kenyan laboratory may open new horizons in research in oncogenesis in Baltimore. With change occurring as it is, the term "developing country" as it applies to health seems now to me to be irrelevant. We are now in a "developing world".

It is with pride that we now number and honor all of you as alumni of the Johns Hopkins School of Hygiene and Public Health. We look forward to sharing with you the great adventure of the coming decades. To you all - congratulations and Godspeed.