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ORIGINAL

CURRENT PROBLEMS REQUIRING SOLUTION

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(GREETINGS TO HOSTS, GUESTS)

IT IS A GREAT HONOR, AS WELL AS A PERSONAL PLEASURE, TO BE HERE THIS EVENING TO DELIVER THE "BILDERBACK LECTURE." "DR. BILL" WAS ONE OF THIS COUNTRY'S TRUE HEROES OF MEDICINE...DEVOTED TO THE WELFARE OF CHILDREN...A PIONEER IN THE DEVELOPMENT OF PEDIATRIC MEDICINE...AND A CONCERNED AND HUMANE MEMBER OF HIS COMMUNITY OF PORTLAND.

DURING MY OWN YEARS AS AN INTERN AND RESIDENT IN PEDIATRIC SURGERY IN BOTH PHILADELPHIA AND BOSTON, "DR. BILL" WAS A CONSTANT MODEL AND SOURCE OF INSPIRATION. WE KNEW OF HIS ACHIEVEMENTS, EVEN THOUGH A CONTINENT SEPARATED US. PHYSICIANS LIKE YOUR DISTINGUISHED ALUMNUS AND TEACHER, DR. JOSEPH BILDERBACK, WHOM WE HONOR TODAY, HAVE COLLECTIVELY WRITTEN A TRULY ASTONISHING HISTORY OF HEALTH AND MEDICAL CARE IN THIS COUNTRY.

IT'S NOT A PERFECT RECORD AND THERE ARE STILL SOME MAJOR PROBLEMS REMAINING. UP NEAR THE TOP OF THE LIST WOULD CERTAINLY BE THE COST OF CARE. BUT EVEN TAKING THAT INTO CONSIDERATION, WE STILL MUST ADMIT THAT IT WAS THE KIND OF LEADERSHIP DEMONSTRATED EVERY DAY BY "DR. BILL" THAT HANDED ON TO US THE LEGACY OF SKILL, GENIUS, AND COMPASSION THAT ARE THE HALLMARKS OF AMERICAN MEDICINE TODAY.

THE ACHIEVEMENTS OF "DR. BILL" AND HIS COLLEAGUES ARE ALL THE MORE IMPRESSIVE, WHEN WE RECALL WHAT OUR COUNTRY AND THE WORLD ITSELF WERE LIKE 80 TO 90 YEARS AGO. AT THE TURN OF THE CENTURY, ONE-THIRD OF THE AMERICAN POPULATION WAS UNDER THE AGE OF 15. BUT EVEN THOUGH SO MANY PEOPLE WERE CHILDREN, THE INFANT MORTALITY RATE WAS HIGH: OVER 100 BABIES DIED FOR EVERY 1,000 LIVE BIRTHS.

AND FOR THE LUCKY CHILDREN WHO SURVIVED, LIFE EXPECTANCY WAS NOT ALL THAT GOOD. THE AVERAGE WAS 47 YEARS. WHITE FEMALE BABIES BORN IN 1900 HAD THE BEST CHANCE...AN AVERAGE OF 48 YEARS AND 8 MONTHS. BLACK MALE BABIES HAD THE WORST CHANCE...32 YEARS AND 6 MONTHS. THE MAJOR INFECTIOUS DISEASES OF CHILDHOOD WERE SIMPLY OUT OF CONTROL. THE SCOURGE OF INFANCY WAS DIARRHEA, THE DISEASE THAT APPEARS MOST FREQUENTLY IN THE DEATH RECORDS OF INFANTS OF THAT TIME.

THAT SITUATION IS NOW QUITE DIFFERENT. LOOKING BACK ON 1982, THIS IS WHAT THE RECORD SHOWS:

- ° IN ALL OF 1982, WE HAD ONLY 7 CASES OF PARALYTIC POLIO.
- ° WE HAD ONLY 3 CASES OF DIPHTHERIA LAST YEAR, WHICH IS ABOUT AS CLOSE TO ZERO AS YOU CAN GET FOR THIS DISEASE.

◦ THERE WERE ONLY 81 CASES OF TETANUS IN ALL OF LAST YEAR, MAINLY AMONG OLDER PEOPLE WHO HAD NEVER BEEN IMMUNIZED AGAINST TETANUS WHEN THEY WERE YOUNG.

◦ WE HAVE VIRTUALLY ELIMINATED INDIGENOUS MEASLES FROM THE UNITED STATES. LAST YEAR'S TOTAL OF REPORTED CASES WAS OUR LOWEST IN HISTORY -- ONLY 1,697 CASES -- AND MOST OF THOSE WERE GEOGRAPHICALLY CONFINED. THEN, IN THE SECOND WEEK OF JANUARY IN THIS CALENDAR YEAR, 1983, WE HAD NO REPORTED CASES OF MEASLES AT ALL -- THE FIRST TIME THAT HAPPENED IN THE HISTORY OF THE GOVERNMENT'S WEEKLY DATA REPORTING SYSTEM.

◦ WE SEEM TO BE MAKING THE SAME KIND OF PROGRESS AGAINST MUMPS AND RUBELLA AS WELL. FOR EXAMPLE, LAST YEAR'S MUMPS TOTAL OF 5,196 CASES INCLUDED A LARGE NUMBER IN A SINGLE OUTBREAK IN OHIO. IF THAT OUTBREAK WERE TO BE DEDUCTED FROM THE NATIONAL TOTAL, WE COULD SEE THAT THE REST OF THE UNITED STATES REPORTED ONLY 3,421 CASES OF MUMPS -- AN HISTORICALLY LOW FIGURE.

◦ THE SAME IS TRUE FOR RUBELLA. OVER HALF THE COUNTRY'S TOTAL OF REPORTED RUBELLA CASES IN 1982 CAME FROM A SINGLE OUTBREAK IN CALIFORNIA. AGAIN, DEDUCTING THIS ONE OUTBREAK GIVES US A TOTAL OF ONLY 867 CASES OF RUBELLA FOR THE ENTIRE YEAR IN THE 56 OTHER STATES AND TERRITORIES.

EVERYONE INVOLVED IN THIS PROGRAM OF IMMUNIZATIONS AGAINST THE 7 MAJOR INFECTIOUS DISEASES OF CHILDHOOD OUGHT TO BE VERY PROUD OF THE RECORD THAT'S BEEN WRITTEN. THE TOTALS REPRESENT QUITE A REDUCTION IN ILLNESS, DISABILITY, AND DEATH AMONG THE CHILDREN OF OUR SOCIETY, AND A HIGH DEGREE OF RELIEF FOR AMERICAN PARENTS.

CLEARLY OUR SOCIETY IS UNDERGOING GREAT CHANGES IN WHO IT IS, WHAT IT DOES, AND HOW IT LIVES. THESE CHANGES, IN TURN, REQUIRE A MORE CONTEMPORARY RESPONSE FROM MEDICINE -- AMONG BOTH PRACTITIONERS AND RESEARCHERS. SO, FOR THE NEXT SEVERAL MINUTES, I WOULD LIKE TO SPEND SOME TIME...

FIRST, SKETCHING OUT FOR YOU A BRIEF "PROFILE" OF THE DEMOGRAPHY OF THE PATIENT POPULATION OF THE FUTURE.

NEXT, INDICATING HOW FEDERAL HEALTH POLICY IS ADJUSTING IN ORDER TO BETTER SERVE THE SHIFTS IN THE AMERICAN POPULATION PYRAMID.

THIRD, TAKING A LOOK AT A SPECIAL PIECE OF HEALTH POLICY -- NAMELY, FEDERAL SUPPORT OF BIOMEDICAL AND BEHAVIORAL RESEARCH.

AND FINALLY, MAKING SOME SUGGESTIONS AS TO THE WAYS IN WHICH THE MEN AND WOMEN WHO PRACTICE MEDICINE MIGHT DEAL WITH THE SERIOUS PROBLEM OF KEEPING UP-TO-DATE IN THIS RAPIDLY CHANGING SOCIETY.

LET ME BEGIN, THEREFORE, WITH SOME WORDS ABOUT WHAT WE MIGHT CALL "THE DEMOGRAPHY OF CARE."

IT IS ESSENTIAL THAT EACH ONE OF US UNDERSTANDS HOW THE AMERICAN POPULATION IS CHANGING. THIS IS A MAJOR CHALLENGE TO ANYONE IN HEALTH CARE. IT SEEMS CLEAR THAT THE WAYS IN WHICH MEDICINE HAD BEEN PRACTICED -- SO SUCCESSFULLY BY PEOPLE SUCH AS DR. BILDERBACK, FOR EXAMPLE -- WILL PROBABLY NOT BE THE WAYS THAT CAN WORK WELL FOR US IN THE FUTURE.

I'M SURE YOU'VE COME UPON THOSE ARTICLES IN POPULAR MAGAZINES ABOUT

THE "GRAYING OF AMERICA." WELL, THEY'RE ALL TRUE. THE POST-WORLD WAR II "BABY BOOM" GENERATION IS NOW OUR ADULT WORK-FORCE. IT IS THE BEST EDUCATED ADULT COHORT IN OUR HISTORY. IT RUNS OUR FACTORIES AND FARMS, DOMINATES OUR POLITICAL LIFE, AND IS AT THE VERY CORE OF OUR NATIONAL VITALITY. IT ALSO TENDS TO FILL THE SEATS AT LECTURES SUCH AS THIS.

DURING THIS DECADE AND THE NEXT ONE, THE DECADE OF THE 1990s, THIS AGE GROUP WILL MOVE UP AND DOMINATE THE U.S. POPULATION AGE PYRAMID, ACCOUNTING FOR ABOUT 40 PERCENT OF THE PEOPLE OF AMERICA.

THIS GENERATION -- NOW IN ITS MID AND LATE 20s -- IS LIVING BETTER AND WILL BE LIVING LONGER. IT HAS SURVIVED SO FAR, THANKS TO EXCELLENT PEDIATRIC MEDICINE AND THE WIDESPREAD USE OF ANTIGENS AGAINST THE 7 MAJOR INFECTIOUS DISEASES OF CHILDHOOD. AND IT WILL CONTINUE TO SURVIVE AS THE BENEFICIARY OF ABOUT 30 YEARS OF SUCCESSFUL RESEARCH ON THE DETECTION AND TREATMENT OF MOST OF SOCIETY'S MAJOR KILLERS. LET ME GIVE YOU JUST A LITTLE GLIMPSE AT THAT RECORD:

§ IN THE 25-44 AGE GROUP, THE DEATH RATE FROM HEART DISEASE HAS DROPPED BY NEARLY HALF JUST SINCE 1965. IT IS THE LEADING CAUSE OF DEATH FOR SOCIETY IN GENERAL, BUT IT IS NUMBER THREE FOR THIS PARTICULAR AGE GROUP. OF COURSE, THAT MEANS FEWER PREMATURE DEATHS AMONG THE "BABY BOOM" GENERATION.

CANCER, MANKIND'S MOST PERSISTENT SCOURGE, PRODUCES THE SECOND HIGHEST NUMBER OF PREMATURE DEATHS IN SOCIETY IN GENERAL AND FOR THIS AGE GROUP IN PARTICULAR. WE HAVEN'T SOLVED THE PUZZLE OF CANCER. NEVERTHELESS, WE'VE BEEN ABLE TO DROP THE DEATH RATE FROM CANCER BY 31 PERCENT OVER THE PAST TWO DECADES AMONG PERSONS UNDER THE AGE OF 45 -- THAT "BABY BOOM" GENERATION AGAIN.

§ AND THEN THERE IS STROKE...A COMPLEX DISEASE CLOSELY RELATED TO AN INDIVIDUAL'S PHYSICAL, MENTAL, AND EMOTIONAL HEALTH. IN THE PAST 30 YEARS, WE'VE BEEN ABLE TO REDUCE THE DEATH RATE FROM STROKE BY 49 PERCENT. ONCE AGAIN, THE FIRST GROUP OF AMERICANS TO BENEFIT FROM THIS EXTRAORDINARY ADVANCE IN MEDICINE HAS BEEN THAT SAME "BABY BOOM" GENERATION. IN FACT, THE MORTALITY RATE FROM STROKE FOR THIS AGE GROUP, 25 TO 44 YEARS OF AGE, IS ABOUT ONE-FIFTH THE RATE FOR THE COUNTRY AS A WHOLE.

§ THE LEADING CAUSE OF DEATH FOR THE 25-44 AGE GROUP, UNFORTUNATELY, IS THE MOTOR VEHICLE ACCIDENT. AMONG THE YOUNGER MEMBERS OF THE "BABY BOOM" GENERATION, THE HIGHWAY DEATH RATE IS TWICE WHAT IT IS FOR THE WHOLE COUNTRY. AND WHAT'S WORSE, WE SEEM TO BE MAKING NO PROGRESS IN BRINGING IT DOWN.

EVEN WITH THEIR DREADFUL RECORD ON THE NATION'S HIGHWAYS, MANY MORE MEN AND WOMEN OF THE "BABY BOOM" GENERATION WILL BE LIVING SEVERAL YEARS LONGER THAN THEIR PARENTS. THEREFORE, WE CAN EXPECT THAT, AFTER A DECADE OR TWO INTO THE NEXT CENTURY, APPROXIMATELY 1 IN EVERY 5 AMERICANS WILL BE A SENIOR CITIZEN. AT THAT TIME THERE WILL BE MORE THAN 50 MILLION PERSONS OVER THE AGE OF 65, TWICE AS MANY AS THERE ARE TODAY.

YOU WILL RECALL THAT I SAID THE MEDIAN AGE FOR AMERICANS BACK IN 1900, WHEN "DR. BILL" WAS JUST STARTING OUT, WAS 22 YEARS AND 10 MONTHS. TODAY, THE MEDIAN AGE IN THE UNITED STATES IS 30 YEARS AND 7 MONTHS. BUT IN THE YEAR 2000 WE EXPECT THE MEDIAN AGE TO BE 36 YEARS AND 4 MONTHS.

MANY PERSONS AND ORGANIZATIONS THAT DELIVER HEALTH CARE HAVE SEEN THIS KIND OF NUMBER-WRITING ON THE WALL. THEY ARE BEGINNING TO ADJUST THEIR MIX OF SERVICES TO ACCOMMODATE THE GROWTH IN OUR AGED POPULATION. THEY ARE EMPHASIZING HOME HEALTH CARE AND ARE DE-EMPHASIZING INSTITUTIONAL CARE FOR THE ELDERLY.

NO DOUBT EACH PERSON IN THIS ROOM TONIGHT COULD COME UP WITH ONE OR TWO OTHER APPROACHES TO THE FUTURE, ALSO. BUT THE FACT IS THAT THE ADJUSTMENTS ARE GOING TO BE MADE BY EACH PERSON IN MEDICINE AND HEALTH CARE AND BY EACH OF OUR INSTITUTIONS. I ALSO THINK WE SHOULD RECOGNIZE THAT THOSE ADJUSTMENTS MAY BE MADE ON A KIND OF AD HOC BASIS, SINCE WE HAVE NO EXPERIENCE FOR MEETING SUCH AN HISTORIC SET OF CIRCUMSTANCES. AND WE CAN'T LEARN FROM ANYBODY, SINCE NO OTHER COUNTRY HAS HAD THIS KIND OF EXPERIENCE EITHER.

IF I WERE ASKED TO IDENTIFY THE MAJOR HURDLES WE HAVE AHEAD OF US, I WOULD HAVE TO SAY THEY WERE THE HURDLES OF TOO LITTLE TIME AND NOT ENOUGH MONEY. I SUPPOSE EVERYONE HERE HAS HEARD THAT BEFORE. BUT THE PRESSURES THIS TIME ARE SOMEWHAT UNIQUE. YOU CAN'T "FINE TUNE" DEMOGRAPHY. IT'S ALMOST COMPLETELY BEYOND OUR CONTROL.

WHEN OTHER ISSUES HAVE COME BEFORE US IN THE PAST, WE'VE USUALLY HAD A FEW YEARS TO MAKE SOME ADJUSTMENTS. BUT WE DON'T HAVE THE LUXURY OF TIME ON THIS ONE. I'D SAY WE HAVE A DECADE OR TWO -- AT BEST -- TO PREPARE OUR PHYSICIANS AND NURSES, OUR DENTISTS AND THERAPISTS, OUR TECHNICIANS, ADMINISTRATORS, TRUSTEES, AND SOCIAL SERVICE WORKERS TO DEAL WITH A NATION WITH ABOUT A FIFTH OF ITS PEOPLE WHO ARE AGE 65 OR OLDER.

AS FOR MONEY -- PARTICULAR NEW MONEY TO BUY MORE SERVICES FOR OUR EXPANDING POPULATION -- THAT ALSO IS IN SHORT SUPPLY RIGHT NOW. WE ARE, THEREFORE, LOOKING FOR WAYS TO SHIFT PRIORITIES...BREAK OLD AND COSTLY HABITS...AND DO WHATEVER ELSE WE CAN TO FIGHT DISEASE AND DISABILITY, YET STILL CONTINUE TO RAISE THE LEVEL OF HEALTH AND MEDICAL CARE IN THE UNITED STATES.

I THINK MOST OF YOU WOULD AGREE THAT THE TRADITIONAL WAY TO PROVIDE GOOD HEALTH AND MEDICAL CARE HAS BEEN TO CURE OR REPAIR OUR PATIENTS AFTER THEY HAVE COME DOWN WITH SOMETHING. BUT THAT HAPPENS TO BE A VERY COSTLY APPROACH FOR BOTH THE INDIVIDUAL PATIENT AND FOR SOCIETY AS A WHOLE. IT IS CERTAINLY LESS THAN AN ADEQUATE APPROACH FOR MEETING THE AMERICAN HEALTH NEEDS OF TOMORROW.

WHAT WE ARE DOING, THEREFORE, AS OVERALL PUBLIC HEALTH POLICY AT THE FEDERAL LEVEL, IS SIGNIFICANTLY RAISING THE LEVEL OF INTEREST AND EFFORT IN THE PROMOTION OF GOOD HEALTH AND THE PREVENTION OF DISEASE AND DISABILITY. I DO WANT TO EMPHASIZE, HOWEVER, THAT WE HAVE NO INTENTION OF ABANDONING OR COMPROMISING TRADITIONAL CURATIVE AND REPARATIVE MEDICINE. FAR FROM IT. RATHER, OUR GOAL IS TO ESTABLISH A NEW AND MORE EFFECTIVE BALANCE BETWEEN PREVENTIVE AND CURATIVE MEDICINE.

TO HELP US DO JUST THAT, THE PUBLIC HEALTH SERVICE PUBLISHED TWO BASIC DOCUMENTS ON THE THE SUBJECT. THE FIRST IS TITLED HEALTHY PEOPLE, THE SURGEON GENERAL'S REPORT ON HEALTH PROMOTION AND DISEASE PREVENTION. THE SECOND IS CALLED OBJECTIVES FOR THE NATION, AND IT SPELLS OUT IN SOME DETAIL HOW WE HOPE TO ACHIEVE BETTER HEALTH STATUS AND A REDUCED LEVEL OF DISEASE AND DISABILITY AMONG THE PEOPLE OF THE UNITED STATES. THESE TWO SLIM VOLUMES WERE PREPARED WITH THE HELP OF MORE THAN 500 NON-GOVERNMENTAL EXPERTS FROM ACROSS A BROAD SPECTRUM OF DISCIPLINES. I STRONGLY COMMEND THEM TO YOU.

IN THE OBJECTIVES, FOR EXAMPLE, WE REVIEW 15 DIFFERENT PRIORITY AREAS SUCH AS ACCIDENT PREVENTION, NUTRITION, TOXIC AGENT AND RADIATION CONTROL, DRUG ABUSE, AND SO ON. THIS INFORMATION IS THEN TRANSLATED INTO GOALS WE BELIEVE WE CAN ACHIEVE BY THE YEAR 1990. PERSONALLY, I THINK IT IS ONE OF THE MOST AMBITIOUS PUBLIC HEALTH PROGRAMS IN RECENT MEMORY.

THE KINDS OF OBJECTIVES WE HAVE IN MIND ARE FAIRLY SPECIFIC AND MEASURABLE. FOR EXAMPLE, WE LOOK FORWARD TO ACHIEVING...

- * FULL IMMUNIZATION FOR AT LEAST 95 PERCENT OF ALL SCHOOL-AGE CHILDREN BY THE YEAR 1990...
- * A DECLINE IN THE INFANT MORTALITY RATE FROM THE PRESENT 11.2 DEATHS PER 1,000 LIVE BIRTHS DOWN TO 9 DEATHS PER 1,000...
- * WE'D LIKE TO ACHIEVE LONG-TERM BLOOD PRESSURE CONTROL FOR AT LEAST 60 PERCENT OF THE POPULATION WITH DEFINITE HYPERTENSION, THAT IS, WITH A READING OF 160 OVER 95 OR HIGHER...
- * WE HOPE TO SEE A DROP IN THE NUMBER OF ADULTS SMOKING CIGARETTES FROM THE CURRENT 1 IN 3 DOWN TO 1 IN 4...
- * AND WE LOOK FORWARD TO A REDUCTION IN THE MOTOR VEHICLE FATALITY RATE FROM ITS PRESENT LEVEL OF ABOUT 24 PER 100,000 POPULATION TO A LEVEL OF 18 -- OR EVEN LOWER.

THESE ARE NOT ALL OF THEM. THERE ARE ALL TOGETHER 227 OBJECTIVES AMONG THOSE 15 DIFFERENT HEALTH AREAS. THEY PROVIDE US WITH A FAIRLY DETAILED ROADMAP OF WHERE WE'RE HEADED AND HOW WE HOPE TO GET THERE.

WE KNOW THAT OUR POPULATION IS CHANGING AND WE KNOW THAT A LARGER AND LARGER SHARE OF THE RESPONSIBILITY FOR BETTER HEALTH MUST BE ASSUMED BY THE GENERAL POPULATION. THE AMERICAN PEOPLE ARE GOING TO HAVE TO CHANGE SOME OF THEIR LESS HEALTHFUL HABITS. THAT SEEMS TO BE CLEAR ENOUGH. BUT EQUALLY CLEAR IS THE NOTION THAT SOME CHANGES SHOULD TAKE PLACE IN THE BEHAVIOR OF PHYSICIANS, ALSO. BY WAY OF ILLUSTRATION I'LL SPEND JUST A MOMENT ON "SMOKING." I THINK IT'S A GOOD EXAMPLE.

THE CAUSAL RELATIONSHIP BETWEEN SMOKING AND CANCER AND MOST OF THE CARDIOVASCULAR AND RESPIRATORY DISEASES HAS BEEN WELL DOCUMENTED. WE ALSO KNOW THAT, ONCE A PERSON STOPS SMOKING, HE OR SHE CAN SLOWLY REGAIN CARDIORESPIRATORY HEALTH. IT MAY TAKE 5, 10, OR 20 YEARS, DEPENDING ON THE INDIVIDUAL AND THE DEGREE OF DAMAGE DONE. BUT WE KNOW THAT THE BODY WILL RESPOND AND IT WILL TRY TO REPAIR ITSELF.

BUT WHAT ABOUT THE PERSON WHO IS, SAY, 60 YEARS OLD AND HAS SMOKED FOR THE PAST 40 YEARS? SHOULD A PHYSICIAN ADVISE THAT PERSON TO STOP SMOKING, TOO? I WOULD CERTAINLY HOPE SO. BUT I HAVE TO TELL YOU THAT WE DON'T HAVE MUCH EVIDENCE YET THAT SHOWS PHYSICIANS AND OTHER HEALTH WORKERS GIVING ANTI-SMOKING ADVICE TO THEIR OLDER PATIENTS. AND THEY REALLY SHOULD.

THE SIMPLE PREVENTIVE COUNSEL -- "STOP SMOKING" -- OUGHT TO BE GIVEN TO PERSONS OF ALL AGES. WE MUST ELIMINATE ANY FEELINGS THAT, FOR SOME OLDER PEOPLE, A CHANGE OF HABIT MAY BE "TOO LATE." FOR THOSE ELDERLY PATIENTS -- AND FOR THEIR FRIENDS AND FAMILY, TOO -- THE ADVICE MUST BE OFFERED VIGOROUSLY AND REPEATEDLY: DON'T SMOKE.

MY SECOND EXAMPLE INVOLVES PHYSICAL FITNESS AND EXERCISE. I'M JUST DELIGHTED AT THE NUMBER OF YOUNG NURSES AND PHYSICIANS WHO JOG AND HIKE AND PLAY HANDBALL OR SQUASH. THAT'S VERY ENCOURAGING AND QUITE DIFFERENT FROM THE WAY MY GENERATION SPENT MOST OF ITS FREE TIME. BUT I WONDER IF OUR YOUNG FITNESS-CONSCIOUS PROFESSIONALS ADVISE THEIR OLDER PATIENTS TO KEEP PHYSICALLY FIT, ALSO. THEY MIGHT NOT ADVISE HANDBALL AND SQUASH OR EVEN JOGGING, BUT THERE ARE PLENTY OF GOOD ALTERNATIVES.

THE POINT TO REMEMBER IS THAT ELDERLY PEOPLE NEED TO MAINTAIN THEIR MUSCLE STRENGTH, TOO, IN ORDER TO LIVE FULL AND ACTIVE LIVES. THERE IS A REAL DANGER THAT, THROUGH INACTIVITY, OLDER PEOPLE BEGIN TO GAIN WEIGHT AND LOSE THE ESSENTIAL "TONE" OF THEIR MUSCLES. THAT POSSIBILITY REFLECTS THE OLD SAYING...AND YOU'VE ALL PROBABLY HEARD IT ..."YOU DON'T STOOP BECAUSE YOU'RE OLD, YOU'RE OLD BECAUSE YOU STOOP." IT'S TRUE THAT OLDER PEOPLE WHO KEEP GOOD POSTURE DO LOOK AND ACT YOUNGER THAN THEIR CHRONOLOGICAL AGE.

IN A RELATED AREA, I AM MOVING AHEAD ON ANOTHER MAJOR PROBLEM AMONG THE ELDERLY. WE'VE ALL HEARD OF THE OLDER PERSON WHO BREAKS A HIP AND THEN FALLS. THIS HAPPENS TO THOUSANDS OF OLDER PEOPLE EVERY YEAR. THE RESULTS ARE A COSTLY STAY IN THE HOSPITAL AND A SEVERE LOSS OF INDEPENDENCE FOR THE REMAINING YEARS OF LIFE.

BUT THE TRUTH OF THE MATTER IS THAT THE SEQUENCE IS MOST OFTEN THE OTHER WAY AROUND. AN OLDER PERSON MAY STRUGGLE UP FROM A DEEP, SOFT CHAIR, PUT TOO GREAT A STRESS ON THE HIP, HAVE IT SNAP UNDER THE PRESSURE -- AND THEN FALL. THIS ALSO OCCURS AS OLDER PEOPLE TWIST OUT OF BED IN THE MORNING, UNFOLD THEMSELVES FROM A VARIETY OF SMALL AUTOMOBILES, OR ENGAGE IN WHAT OUGHT TO BE BENIGN SPORTS, LIKE SHUFFLEBOARD.

IT IS OUR HYPOTHESIS THAT A STRONG, RESEARCH-BASED PUBLIC EDUCATION PROGRAM DIRECTED AT THE ELDERLY WILL HELP THEM NEGOTIATE THEIR PHYSICAL ENVIRONMENTS A LITTLE MORE EFFECTIVELY AND, AS A RESULT, WE MIGHT SEE A DRASTIC LOWERING OF THE VERY HIGH NUMBER OF HIP FRACTURES THAT NOW OCCUR AMONG THE NATION'S ELDERLY.

I MIGHT POINT OUT THAT THE "BABY BOOM" GENERATION -- AS IT BEGINS TO REALLY SHOW ITS AGE AT THE TURN OF THE CENTURY -- WILL BE MORE KNOWLEDGEABLE ABOUT HEALTH THAN YESTERDAY'S OR EVEN TODAY'S SENIOR CITIZENS. AND BECAUSE THEY ARE BETTER EDUCATED, I THINK WE WILL SEE MANY CHANGES IN THEIR HEALTH BEHAVIOR -- THE SO-CALLED "LIFESTYLE" CHANGES THAT CAN BE AN IMPORTANT DEFENSE AGAINST DISEASE, DISABILITY, AND PREMATURE DEATH.

OF COURSE, THE MORE WE LEARN ABOUT THE HEALTH AND MEDICAL NEEDS OF THE ELDERLY, THE MORE WE REALIZE THAT WE STILL HAVE A GREAT DEAL MORE TO LEARN -- AND AS SOON AS POSSIBLE. IF THERE IS A CONSENSUS ON THIS MATTER SO FAR, I TEND TO THINK IT REVOLVES AROUND THE IDEA THAT RESEARCH -- PARTICULARLY BASIC BIOMEDICAL AND BEHAVIORAL RESEARCH -- IS ONE OF THE MAJOR PRIORITIES OF GOVERNMENT IN THE TASK OF GEARING UP FOR THE FUTURE.

AT THE PRESENT TIME, THE FEDERAL GOVERNMENT CONTRIBUTES ABOUT 55 PERCENT OF ALL MONEY FOR BIOMEDICAL AND BEHAVIORAL RESEARCH...AND THAT INCLUDES BASIC RESEARCH, APPLIED RESEARCH, AND DEVELOPMENT. LAST YEAR, THE FEDERAL TOTAL CAME TO JUST UNDER \$5 BILLION DOLLARS. OF THAT AMOUNT, CLOSE TO \$3.5 BILLION WENT TO SUPPORT BASIC RESEARCH.

WHILE PREPARING FOR THIS EVENING, I WAS DELIGHTED TO DISCOVER THAT THE UNIVERSITY OF OREGON HEALTH SCIENCES CENTER WAS AWARDED \$8.8 MILLION IN FISCAL YEAR 1982 BY OUR NATIONAL INSTITUTES OF HEALTH. THOSE FUNDS WENT TO SUPPORT 73 RESEARCH GRANTS, 9 FELLOWSHIPS OR TRAINING GRANTS, AND 1 CONTRACT.

WHAT KIND OF RESEARCH DOES THIS MONEY BUY -- HERE AT OREGON AND ELSEWHERE -- AND WILL ANY OF IT HELP US DELIVER BETTER HEALTH CARE TO THE NEW AMERICAN DEMOGRAPHY? I THINK IT WILL. FOR EXAMPLE...

- * WE ARE COMMITTED TO LONG-TERM INQUIRIES INTO THE NATURE OF THE AGING PROCESS.

- * VIRTUALLY EVERY ONE OF THE NATIONAL INSTITUTES HAS SOME PROJECT DIRECTED AT YIELDING MORE INFORMATION ABOUT LIFE AT THE CELLULAR AND SUB-CELLULAR LEVEL.

- * WE ARE GATHERING A GREAT DEAL OF INFORMATION ABOUT THE IMPACT OF ENVIRONMENTAL HAZARDS, RE-EVALUATING SOME THAT ARE FAMILIAR TO US AND TAKING A NEW LOOK AT SOME THAT ARE JUST BEGINNING TO APPEAR -- OR ARE THREATENING TO APPEAR.

* AND THEN THERE ARE THE AREAS IN WHICH MUCH WORK HAS BEEN DONE, WITH A GREAT DEAL MORE STILL TO DO. THESE AREAS WOULD INCLUDE ARTHRITIS, SENILE DEMENTIA, DIABETES, AND, OF COURSE, THE MAJOR KILLERS -- HEART DISEASE, CANCER, AND STROKE.

THAT IS A VERY EXCITING LIST OF THE KINDS OF RESEARCH PROJECTS WE ARE SUPPORTING PRIMARILY THROUGH THE NATIONAL INSTITUTES OF HEALTH, THE CENTERS OF DISEASE CONTROL, AND THE ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION. BUT WILL IT HAVE BEEN THE RIGHT LIST FOR OUR SOCIETY 20 YEARS FROM NOW?

IF WE WERE TO LAY OUT OUR RESEARCH PRIORITIES...NOW...TODAY...WITH OUR EYES LOOKING FAR INTO THE FUTURE, WHAT KIND OF PRIORITIES WOULD WE CHOOSE? SHOULD OUR EMPHASIS REMAIN HEAVILY ON THE SIDE OF RESEARCH TO BENEFIT THE AGING, OR CAN WE MAINTAIN SOME TYPE OF BALANCE WITH THOSE AREAS THAT CAN BENEFIT PREGNANT WOMEN AND THE NEWBORN. OR SHOULD WE SET UP SUCH PARADIGMS AT ALL? SHOULD WE NOT, INSTEAD, SUPPORT THE BEST RESEARCH OPPORTUNITIES THAT COME ALONG -- REGARDLESS OF WHICH DEMOGRAPHIC GROUPS THEY MAY ULTIMATELY BENEFIT? FOR EXAMPLE...

- § OUGHT WE TO CONTINUE TO RACE DOWN THE ROAD OF THE GENETIC ENGINEERS, OR SHOULD WE REALLY BE INVESTING PRIMARILY IN VIROLOGY AND IMMUNOLOGY, IN ANTICIPATION OF PRODUCING A CLUTCH OF NEW VACCINES?
- § SHOULD OUR FOCUS BE PRIMARILY ON RESEARCH OF THE HUMAN AGING PROCESS, OR SHOULD WE FOCUS INSTEAD ON THE MANY MYSTERIES OF PREGNANCY AND LABOR?
- § OUGHT WE TO EXPEND MOST OF OUR EFFORTS ON THE MAJOR CAUSES OF DEATH IN OUR SOCIETY -- HEART DISEASE, CANCER, AND STROKE -- OR SHOULD WE SHIFT MORE ATTENTION AND RESOURCES TO SUCH RARE BUT PERSISTENT DISEASES AS MYOCLONUS OR WILSON'S DISEASE OR TOURETTE'S SYNDROME OR NEPHROPATHIC CYSTINOSIS...THE SO-CALLED "ORPHAN DISEASES"?
- § THEN AGAIN, MAYBE WE SHOULD INCREASE OUR EFFORTS WHERE THERE IS A HINT OF AN IMMINENT PAY-OFF, INSTEAD OF INVESTING HEAVILY IN THE TOUGHER, MORE PUZZLING, LONG-TERM INVESTIGATIONS.
- § AND FINALLY, SHOULD WE CONTINUE TO CONCENTRATE OUR FUNDS SO HEAVILY IN THE BIOMEDICAL AREA, OR SHOULD WE MOVE MORE AGGRESSIVELY INTO THE BIOBEHAVIORAL AREA -- TO HELP PEOPLE STOP SMOKING AND ABUSING ALCOHOL AND DRUGS AND GET THEM TO EAT BETTER AND MANAGE THEIR STRESS BETTER?

AS CONFOUNDING AS SOME OF THESE CHOICES MAY BE, THEY MUST BE UNDERSTOOD AND WEIGHED. ULTIMATELY, WE HAVE TO CHOOSE. AND OUR CHOICE SHOULD BE THE BEST ONE...THE RIGHT ONE...THE NECESSARY ONE FOR OUR COUNTRY AND FOR MANKIND.

THESE ARE NOT IDLE QUESTIONS. EVERYONE HERE HAS A STAKE IN THE ANSWERS BECAUSE WE ALL LIVE WITH THE TENSION BETWEEN THOSE TWO WORLDS OF MEDICINE: RESEARCH AND PATIENT CARE. AND THE SOURCE OF THAT TENSION REALLY DERIVES FROM OUR OWN ASSESSMENTS OF THE COUNTRY'S FUTURE NEEDS.

I THINK IT IS BECOMING QUITE CLEAR THAT THESE TWO WORLDS OF MEDICINE -- OF RESEARCH AND OF PRACTICE -- NEED BETTER BRIDGES OF COMMUNICATION. THE NEW KNOWLEDGE DEVELOPED BY ONE SHOULD BE QUICKLY ADAPTED TO THE PATIENT CARE PRACTICED BY THE OTHER. AND CONVERSELY, THE INFORMATION DRAWN FROM THE PRACTICE OF ONE MAY INFLUENCE THE DIRECTION OF INVESTIGATIONS TAKEN BY THE OTHER.

THIS WILL ALL TAKE SOME TIME. AND TIME, FOR THE BUSY PRACTITIONER, IS A VERY PRECIOUS COMMODITY. THEREFORE, KEEPING UP-TO-DATE ON RESEARCH MAY BE MORE EASILY SAID THAN DONE. NEVERTHELESS, EACH

PHYSICIAN HAS TO SET PRIORITIES FOR SPENDING TIME, AND I WOULD HOPE THAT BEING CURRENT ON NEW DEVELOPMENTS IN THE BIOMEDICAL AND BEHAVIORAL SCIENCES WOULD RATE HIGH ON ANY PHYSICIAN'S LIST OF PRIORITIES. EVEN MORE TO THE POINT, THE PRACTITIONER MUST MAKE THAT VITAL CONNECTION BETWEEN RESEARCH AND MEDICAL PRACTICE...BETWEEN WHAT RESEARCH HAS TO OFFER AND WHAT HE OR SHE WANTS MEDICAL PRACTICE TO BE.

IN THE QUITE RECENT PAST, WHEN TRYING TO MAKE THAT CONNECTION, THE MEDICAL PROFESSION MAY HAVE TENDED TO COMPLICATE RATHER THAN SIMPLIFY THE PROBLEM. LET ME GO BACK A FEW YEARS TO CLARIFY THAT STATEMENT.

RIGHT AFTER WORLD WAR II -- AND CONTINUING THE MOMENTUM OF THE WAR EFFORT -- THIS COUNTRY BUILT ITS EXTRAORDINARY BIOMEDICAL AND BEHAVIORAL RESEARCH ENTERPRISE. FROM THAT VAST RESEARCH ENTERPRISE HAVE COME VOLUMES OF NEW INFORMATION PRODUCED BY AMERICAN SCIENTISTS REWARDED WITH ONE NOBEL PRIZE AFTER ANOTHER.

UNHAPPILY, NEARLY EVERY NEW ADVANCE IN MEDICINE -- AS IT HAS APPEARED ON THE SCENE -- HAS TRAILED IN ITS WAKE A NEW MEDICAL SPECIALTY...ITS OWN SPECIALTY ORGANIZATION...AND, NEEDLESS TO SAY, ITS OWN SCHOLARLY JOURNAL.

I WILL GRANT THAT THIS PROLIFERATION OF SPECIALTIES MAY ALSO, IN TURN, HAVE CONTRIBUTED TO OUR SUCCESS IN MEDICINE. BUT I BELIEVE IT HAS ALSO PUT SOME ADDITIONAL DISTANCE BETWEEN THE PRACTICING PHYSICIAN AND THE WORLD OF RESEARCH. THERE HAS BEEN A REDUCTION IN THE LEVEL AND QUALITY OF COMMUNICATIONS BETWEEN THE PRACTICING SPECIALIST IN ONE FIELD AND THE RESEARCHERS IN OTHER FIELDS. AND I WOULD HAVE TO SAY THAT THE PROLIFERATION OF MEDICAL SPECIALTIES MAY HAVE BEEN AT FAULT.

I THINK WE NEED TO CONFRONT THIS PHENOMENON OF FRAGMENTATION AND PAROCHIALISM IN MEDICINE, IF WE WANT TO PROTECT THE FUTURE OF MEDICAL PRACTICE IN THIS COUNTRY. AND THE FIRST STEP MIGHT WELL BE FOR THE PRACTITIONER TO BECOME MORE CONSCIOUS OF THE WORLD OF RESEARCH...TO TRY TO UNDERSTAND IT...TO SEE HOW IT RELATES TO HIS OR HER WORLD OF BEDSIDE MEDICINE...AND, THROUGH FEEDBACK MECHANISMS, INFLUENCE THE EVOLUTION OF MEDICAL RESEARCH.

WHEN I HAVE MENTIONED THESE KINDS OF CONCERNS TO SOME OF MY COLLEAGUES, THEY OCCASIONALLY RAISE AN EYEBROW AND WONDER WHY -- AT A TIME WHEN MEDICINE IS FACED BY SUCH FISCAL AND POLITICAL CHALLENGES ON EVERY SIDE -- WHY SHOULD I RAISE THESE QUESTIONS NOW.

MY ANSWER HAS ALWAYS BEEN, "BECAUSE UNLESS THESE QUESTIONS ARE ANSWERED...QUESTIONS THAT DEAL WITH THE VERY SUBSTANCE OF THE FUTURE OF MEDICINE...ANY OTHER QUESTIONS ARE REALLY BESIDE THE POINT." AND I TRULY BELIEVE THAT IS THE CASE BEFORE US.

IT IS MY SINCERE HOPE, THEREFORE, THAT ALL OF US IN MEDICINE STEP BACK FOR A MOMENT OR TWO TO GET SOME PERSPECTIVE ON WHAT WE'RE ABOUT AND CLARIFY FOR OURSELVES AND FOR OUR COUNTRY JUST WHAT IT IS WE OUGHT TO BE ABOUT.

I WOULD HOPE THAT WE'D BEGIN TO SEE THE IMPLICATIONS OF THE DEMOGRAPHY OF THIS COUNTRY...THAT WE'LL SEE HOW TO RESPOND TO IT FROM A BROADER AND RICHER ARMAMENTARIUM OF CURATIVE, REPARATIVE, AND PREVENTIVE MEDICINE...AND, IN SO DOING, WE WILL BRING INTO CLOSER TOUCH THE WORLDS OF RESEARCH AND PRACTICE.

DIFFICULT? MAYBE. BUT I AM REMINDED OF AN OBSERVATION MADE BY T.H. HUXLEY NEARLY A CENTURY AGO. HE WROTE...

"PERHAPS THE MOST VALUABLE RESULT OF ALL EDUCATION IS THE ABILITY TO MAKE YOURSELF DO THE THINGS YOU HAVE TO DO, WHEN IT OUGHT TO BE DONE, AND WHETHER YOU LIKE IT OR NOT."

AGAIN, THANK YOU FOR THE HONOR OF DELIVERING THIS ANNUAL LECTURE DEVOTED TO THE MEMORY OF A GREAT PHYSICIAN, DR. JOSEPH B. BILDERBACK.

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