ANESTHESIOLOGY

PRESENT POSITION AND FUTURE DEVELOPMENT

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I AM DEEPLY HONORED TO BE GIVING THE 4TH ELIASBERG LECTURE. THE SUBJECT SUGGESTED BY DR. RENDELL-BAKER IS OF CONSIDERABLE CONCERN TO ALL OF US IN ANESTHESIOLOGY, TO THE ENTIRE MEDICAL COMMUNITY AND OUR PATIENTS. I TRUST THAT MY OPPORTUNITY TO SERVE THE CAUSE OF MANPOWER DEVELOPMENT IN WASHINGTON THIS YEAR WILL PROVIDE BASIS FOR A USEFUL ANALYSIS TO YOU.

BEFORE DISCUSSING SOME OF THE PERTINENT DATA AND THEIR MEANING THIS EVENING, I SHOULD LIKE TO TAKE A MOMENT TO PAY TRIBUTE TO DOCTOR BERNARD H. ELIASBERG, AN OUTSTANDING ANESTHESIOLOGIST AND A PIONEER IN OUR FIELD, THE MAN TO WHOM THIS LECTURE IS DEDICATED.

I HAD THE PRIVILEGE OF KNOWING HIM FOR THE FIRST TIME SOME 25 YEARS AGO JUST PRIOR TO MY ENTRANCE INTO THE ARMY IN THE EARLY DAYS OF WORLD WAR II AND WHILE STILL A RESIDENT AT BELLEVUE HOSPITAL IN DOCTOR E.A. ROVENSTINE'S DEPARTMENT. DOCTOR ELIASBERG WAS MOST GENEROUS AND FRIENDLY AND SUGGESTED THAT I SHOULD JOIN THE DEPARTMENT OF ANESTHESIOLOGY AT MOUNT SINAI ON THE COMPLETION OF MY RESIDENCY. HE ALSO STATED THAT HE WOULD BE HAPPY TO HAVE ME EVEN AT THE END OF MY MILITARY ASSIGNMENT. SOME OF YOU MAY REMEMBER THAT AT THAT PARTICULAR TIME, THE BEGINNING OF WORLD WAR II, A YEAR OF MILITARY SERVICE WAS THOUGHT TO BE ALL THAT ONE WOULD HAVE TO GIVE. HIS WIT AND

JOVIALITY IN HIS HOME WERE WARM AND FRIENDLY.

AT LEAST TWO THINGS INTERFERED WITH THIS POSSIBLE PLAN: ONE WAS THE WAR AND THE OTHER WAS THE CHANGING CIRCUMSTANCES 4 YEARS WERE TO BRING IN WHICH ATTITUDES, ASPIRATIONS, AND ANTICIPATIONS WERE NO LONGER THE SAME.

IN VIEW OF DOCTOR ELIASBERG'S CONSIDERABLE KINDNESS AND GENEROSITY TO ME, IT MUST BE APPARENT THAT THIS OPPORTUNITY TO DO TRIBUTE TO HIM IS A JOYOUS ASSIGNMENT.

DOCTOR BERNARD H. ELIASBERG DIED ON SEPTEMBER 12, 1962 AT THE AGE OF 76. HE HAD COME TO THE MOUNT SINAI HOSPITAL ON HIS GRADUATION FROM CORNELL IN 1906, AND REMAINED AT THAT INSTITUTION IN THE CAPACITY OF INTERN, ANESTHESIOLOGIST, CONSULTANT AND DIRECTOR EMERITUS UNTIL THE TIME OF HIS DEATH.

HE WAS HONORED BY THE MOUNT SINAI HOSPITAL IN MANY WAYS AND HE WAS ONE OF THE PIONEERING GROUP OF ANESTHESIOLOGISTS WHO HELPED FOUND THE NEW YORK STATE SOCIETY OF ANESTHESIOLOGISTS. HE WAS A FOUNDER DIPLOMATE OF THE AMERICAN BOARD OF ANESTHESIOLOGY. HE ALSO CONSULTED AT THE BETH ISRAEL HOSPITAL, THE HOSPITAL FOR JOINT DISEASES, THE JEWISH MEMORIAL HOSPITAL, THE SYDENHAM HOSPITAL AND THE MONTEFIORE HOSPITAL IN NEW YORK.

HE WAS A SKILLFUL CLINICIAN, HIGHLY RESPECTED AND REGARDED BY HIS PATIENTS, HIS COLLEAGUES AND ALL HIS FRIENDS.

DOCTOR ELIASBERG WAS NOTED FOR HIS GOOD HUMOR, FOR HIS ABILITY TO TELL WITTY STORIES AND FOR HIS SINGULAR ABILITY TO GET ON WITH PEOPLE.

IT IS A PRIVILEGE, ON THIS OCCASION, TO PAY TRIBUTE TO HIS MEMORY AND HIS ACCOMPLISHMENTS.

THERE ARE MANY SHADES OF OPINION CONCERNING THE PRESENT STATUS OF ANESTHESIOLOGY AND ITS FUTURE DIRECTIONS. THESE DIFFERING VIEWS HAVE COLORED THE SENSE OF URGENCY FOR THE SOLUTION OF OUR PROBLEMS. THERE ARE THOSE WHO FEEL AT ONE END OF THE SPECTRUM, AS DID DOCTOR J. G. CONVERSE IN HIS PRESIDENTIAL ADDRESS BEFORE THE FLORIDA SOCIETY OF ANESTHESIOLOGISTS THIS YEAR, THAT THERE IS NO MANPOWER PROBLEM IN THE PROVIDING OF ANESTHESIA SERVICE BY PHYSICIANS, ESPECIALLY IN THE STATE OF FLORIDA. ACCORDING TO DOCTOR CONVERSE, THE PRINCIPLES THAT HAVE BEEN WORKED OUT IN FLORIDA WOULD ASSURE NOT ONLY THE SURVIVAL OF THE PRIVATE PRACTICE OF ANESTHESIOLOGY, BUT WILL ENABLE IT TO GROW AND BE POWERFUL. IT IS HIS BELIEF THAT THE CHANGING OF OPERATING SCHEDULES SO THAT CONSECUTIVE PROCEDURES ARE DONE, RATHER THAN MANY AT ONE TIME, WOULD HELP THE MANPOWER PROBLEM. HE ALSO BELIEVES THAT AT LEAST 50% OF THE RESIDENTS IN ANESTHESIOLOGY COME FROM SOURCES OTHER THAN THE INTERNSHIP AND THE SHORT SUPPLY FROM THAT SOURCE REPRESENTS ONLY A MINOR PART OF OUR DIFFICULTIES. THERE ARE OTHER POINTS IN THIS VIEW THAT DOCTOR CONVERSE MAKES, ALL OF THEM WORTH PONDERING.

IT SEEMS TO ME THAT THE MAJOR QUESTION ONE HAS TO ASK IS: WHAT RESPONSIBILITY DO ANESTHESIOLOGISTS AS A GROUP OR IN THEIR ORGANIZATION, I.E., THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS, WISH TO EXERCISE FOR THE ANESTHETIC CARE OF THE NATION? ONE COULD VERY LEGITIMATELY TAKE THE POSITION

THAT WE DO NOT WISH ANY RESPONSIBILITY OTHER THAN THE PROVISION OF FIRST RATE ANESTHETIC CARE OURSELVES AND TO THE BEST OF OUR COLLECTIVE ABILITIES.

A USEFUL POINT OF DEPARTURE, THEREFORE, IS TO CONSIDER THE TWO VIEWS; ONE IS THAT WE ARE NOT OUR BROTHER'S KEEPERS IN THIS CONNECTION, AND THE OTHER IS THAT WE HAVE THE RESPONSIBILITY OF SUPPLYING THE NATION WITH THE BEST ANESTHETIC CARE ANYWHERE IN THE WORLD.

THOSE WHO FEEL THAT ANESTHETIC CARE IS THE RESPONSIBILITY OF ORGANIZED ANESTHESIOLOGY HAVE USED WORDS AS STRONG AS “THE CRISIS FACING OUR FIELD” BECAUSE OF THE DIFFICULTIES THAT THEY SEE. IT WILL BE USEFUL FOR US TO CONSIDER WHAT A CRISIS IS. A DEFINITION IN THE WEBSTER’S SEVENTH NEW COLLEGIATE DICTIONARY CALLS A CRISIS “THE DECISIVE MOMENT”. ANOTHER DEFINITION IS "UNSTABLE OR CRUCIAL TIME OR STATE OF AFFAIRS.” WE HAVE TO DECIDE WHETHER WE ARE FACING A TIME FOR DECISION OR WHETHER WE ARE GOING TO DEAL WITH A CRUCIAL AND UNSTABLE STATE OF AFFAIRS. IN ORDER TO CAST SOME LIGHT AND PERHAPS A LITTLE LESS HEAT ON THE PROBLEM, I THOUGHT IT WOULD BE USEFUL TO SUMMARIZE THE FACTUAL MATERIAL AVAILABLE TO US AS SOMETHING WE MUST KNOW NO MATTER HOW WE CHOOSE TO INTERPRET IT.

IF ONE REVIEWS THE PUBLISHED MATERIAL IN THIS FIELD, THERE ARE TWO MAIN STREAMS. THERE ARE SHARP CRITICISMS OF ANESTHESIOLOGY DEPICTING A REAL SERIOUS CRISIS IN THE MANPOWER AREA, AND THERE ARE ALSO OPTIMISTIC EVALUATIONS OF THE PROGRESS OF THIS SPECIALTY AND ITS PLACE IN THE MEDICAL FAMILY. THE HIGHLIGHTS OF SEVERAL OF THESE STUDIES AND OPINIONS WILL BE SHOWN

IN TURN.

1. DATE FROM THE AMERICAN BOARD OF ANESTHESIOLOGY. THERE HAS BEEN A TENDENCY TO AN INCREASE IN NUMBERS OF DIPLOMATES OF THE BOARD WHICH IS CLEAR, UNBROKEN AND STEADILY RISING – NUMBERING ABOUT 3700 AT THE PRESENT TIME.

2. THE AMERICAN SOCIETY OF ANESTHESIOLOGIST. THE MEMBERSHIP GROWTH HAS BEEN ESSENTIALLY STEADY FOR APPROXIMATELY A DECADE. THIS RATE OF INCREASE IS UNFAVORABLE AND SUGGESTS THAT THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS' GROWTH IS DUE TO RELATIVELY FEW DEATHS AND RETIREMENTS BECAUSE OF THE YOUTH OF THE SPECIALTY AND TO THE UNCHANGING NUMBER OF ENTRIES OR INPUT INTO THE SPECIALTY FROM THE RESIDENCY PROGRAMS.

3. RESIDENCY STATUS IN ANESTHESIOLOGY. THE DATA FOR 1965 ARE NOT AVAILABLE, BUT UP TO 1964 THE ESSENTIAL FACTS ARE THAT THERE WERE 296 APPROVED RESIDENCIES, 1,858 POSITIONS OFFERED, TOTAL POSITIONS FILLED, 1,145.

PERCENT OF POSITIONS FILLED – 68%

PERCENT OF FOREIGN GRADUATES IN FILLED POSITIONS -- 38%.

THIS CONTRAST WITH A 79% OF RESIDENCIES FILLED IN ALL FIELDS FOR THE SAME PERIOD OF TIME.

4. A MUCH MORE OPTIMISTIC NOTE WAS STRUCK BY DOCTOR D. VERNON THOMAS IN WRITING ABOUT THE SPECIALTY OF ANESTHESIOLOGY IN 1964. I SHOULD LIKE TO SHOW SOME OF DOCTOR THOMAS' DATA TO SHOW HIS VIEW OF THE PATTERN OF CHANGE OVER THE YEARS.

(a) THE GROWTH OF ANESTHESIOLOGISTS IN RELATION TO THE POPULATION — ASA MEMBERSHIP INCREASED MUCH MORE RAPIDLY THAN THE POPULATION AND SOMEWHAT MORE RAPIDLY THAN THE NUMBER OF NURSE ANESTHETISTS.

` (b) THE RATIO OF ANESTHESIOLOGISTS AND NURSE ANESTHETISTS HAS BEEN CONSTANT AND STEADY SINCE 1950, IMPLYING THAT BOTH GREW AT APPROXIMATELY THE SAME RATE.

(c) THE RATIO OF ANESTHESIOLOGISTS TO THE POPULATION HAS SHARPLY IMPROVED SINCE 1940 BUT HAS REMAINED ESSENTIALLY STABLE SINCE 1960.

IT WOULD BE OF INTEREST TO KNOW HOW ANESTHESIOLOGISTS ARE DISTRIBUTED. THE LATEST DATA AVAILABLE IS 1962, IN WHICH IT CAN BE SEEN 61% OF ALL ANESTHESIOLOGISTS ARE FULL TIME SPECIALISTS, APPROXIMATELY 11% ARE PART TIME SPECIALISTS AND SOME 12% ARE RESIDENTS. THE COMBINATION OF GOVERNMENT OBLIGATEES AND GOVERNMENT SERVICE PEOPLE AND FULL TIME RESEARCHES IS 16%.

FROM ALL THESE DATA DOCTOR THOMAS CONCLUDES THAT ANESTHESIOLOGISTS WILL GRADUALLY COME TO CARE FOR MORE OF THE ANESTHETIC NEEDS OF THE NATION – A SOMEWHAT OVERLY OPTIMISTIC VIEW IF WE REALIZE THAT THE POPULATION/ANESTHESIOLOGIST RATIO IS UNCHANGED SINCE 1960 – AND THAT THE SPECIALTY RANKS APPROXIMATELY 7TH IN NUMERICAL ORDER. .

5. IN ATTEMPTING TO DEFINE A LITTLE MORE PRECISELY WHAT THE NUMBER OF SURGICAL PROCEDURES WILL BE AND THEREFORE THE NEED FOR ANESTHESIOLOGY, ASSISTANCE WAS SOUGHT OF DR. WILLIAM H. KINCAID, ASSISTANT DIRECTOR OF THE COMMISSION ON PROFESSIONAL AND HOSPITAL ACTIVITIES WHICH IS SPURNED BY THE

COLLEGE OF SURGEONS, THE AMA AND THE AHA. DR. KINCAID STATES THAT IT IS IMPOSSIBLE TO MAKE AN ACCURATE GUESS, BUT HE BELIEVED EARLY IN 1965 THAT THERE WOULD BE SOME 25 MILLION SURGICAL PROCEDURES PERFORMED ON HOSPITALIZED PATIENTS IN THE UNITED STATES DURING THAT YEAR, AND THAT SOME 20 MILLION OF THESE WOULD REQUIRE ANESTHESIA. IF ONE ASSUMES THAT EACH ANESTHESIOLOGIST OR ANESTHETIST CAN TAKE CARE OF 1,000 OF THESE PATIENTS, THERE WILL BE NEED FOR 20,000 ANESTHETISTS FOR THIS PURPOSE ALONE.

6. THE ANESTHESIA SURVEY OF THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS. IT IS IMPORTANT AT THIS POINT TO HIGHLIGHT SOME OF THE FINDINGS OF THE SURVEY INITIATED BY THE THEN PRESIDENT-ELECT, DOCTOR ALBERT M. BETCHER, AND CONDUCTED BY A COMMITTEE UNDER THE CHAIRMANSHIP OF DOCTOR ROBERT DRIPPS. THE SURVEY WAS AN ATTEMPT TO FIND OUT WHAT AREAS OF TROUBLE THERE WERE IN ANESTHESIOLOGY. THE FOLLOWING MAJOR AREAS OF CONCERN APPEARED.

A. MEDICAL STUDENT RECRUITMENT WAS POOR BECAUSE THE STUDENT DID NOT LOOK UPON ANESTHESIOLOGY AS DOCTORS' WORK. HE WAS ALSO RELATIVELY INADEQUATELY EXPOSED TO THE WORK IN THIS FIELD.

THE INTERN HAD THE SAME REASONS FOR NOT WISHING TO ENTER THE FIELD.

B. GRADUATES OF AMERICAN MEDICAL SCHOOLS ENTER THIS SPECIALTY TO THE TUNE OF SOME 2% OF THOSE WHO RECEIVE INTERNSHIPS IN THE NATIONAL MATCHING PLAN.

C. THE RESIDENCY PROGRAM: MANY ANESTHESIOLOGISTS WHO WERE INTERVIEWED BELIEVE THAT THE RESIDENCY PROGRAMS IN MANY INSTANCES WERE OF POOR QUALITY AND THAT THIS WAS A DETERRENT BOTH TO THE ATTRACTION OF QUALITY AND EVEN QUANTITY OF DOCTORS INTO THIS SPECIALTY. PARTICULAR BLAME FOR THIS INADEQUACY WAS DIRECTED AGAINST THE RESIDENCY REVIEW COMMITTEE FOR ANESTHESIOLOGY AND THE AMERICAN BOARD OF ANESTHESIOLOGY.

D. THERE WAS CONSIDERABLE FEELING ALSO IN FAVOR OF INCREASED FINANCIAL SUPPORT FOR RESIDENTS AND A COMPARISON WAS MADE WITH THE PROGRAM THAT RECRUITED MANY PSYCHIATRISTS.

E. SURGEONS AND OBSTETRICIANS WERE CRITICAL OF ANESTHESIOLOGISTS ON THE GROUNDS THAT THEY CONDUCTED MONOPOLISTIC PRACTICES AND WERE UNWILLING TO ACCEPT RESPONSIBILITY FOR LONG AND HARD HOURS AND DID NOT IN EFFECT CONDUCT THEMSELVES AS PHYSICIANS.

F. SIMILARLY, MANY ANESTHESIOLOGISTS FELT THAT THERE WAS INSUFFICIENT SUPPORT BY SURGEONS OF THEIR ACTIVITIES. THEY CITED THEIR DEROGATION OF THE ROLE OF ANESTHESIOLOGY IN AND OUT OF THE OPERATING ROOMS. THERE WAS ALSO SOME COMMENTARY ON THE WIDE PUBLICITY GIVEN TO SURGERY AND THE IGNORING OF ANESTHESIOLOGY IN THIS TYPE OF ACTIVITY, e.g., THE TIME COVER STORIES WHICH FEATURED DOCTORS FRANCIS D. MOORE AND MICHAEL E. DEBAKEY, IN NEITHER OF WHICH INSTANCE THE ANESTHESIOLOGIST WAS EVEN MENTIONED AS A SAFEGUARD TO THE LIVES OF SURGICAL PATIENTS. THERE WAS A STRONG SUGGESTION THAT SURGEONS SHOULD DO MORE TO SUPPORT ANESTHESIOLOGY BOTH IN AND OUT OF

THE OPERATING ROOMS.

G. THE SURVEY ALSO FOUND THAT RELATIONS OF ANESTHESIOLOGISTS WITH PATIENTS WAS POOR AND OFTEN THE PATIENT DID NOT KNOW WHO THE ANESTHESIOLOGIST WAS OR WHAT HE DID.

H. THE SURVEY MADE THE FOLLOWING ADDITIONAL POINTS:

1. THE DISTINCTIVE COMPENSATIONS OF MEDICINE, MAINLY THE SATISFACTION OF HELPING PATIENTS IN THE STATUS OF A PROFESSIONAL PHYSICIAN WERE NOT OBVIOUS IN ANESTHESIOLOGY, THEREBY DETERRING PEOPLE FROM ENTERING THIS FIELD.

2. IMPROVED ANESTHETIC CARE AND ATTRACTION OF STUDENTS INTO THE SPECIALTY MUST BE RELATED TO THE PROCESS OF CARING FOR PATIENTS.

3. THE ANESTHESIOLOGIST MUST VASTLY IMPROVE HIS ACTIVITIES, NOT HIS IMAGE, AS A PHYSICIAN, AND TO THAT END ANESTHESIOLOGY WAS REDEFINED BY DOCTOR DRIPPS' COMMITTEE AS A PRACTICE OF MEDICINE, FIRST, IN DEALING WITH THE MANAGEMENT OF PROCEDURES FOR RENDERING A PATIENT INSENSIBLE TO PAIN DURING SURGICAL OPERATIONS; SECONDLY, THE SUPPORT OF LIFE FUNCTIONS UNDER THE STRESS OF ANESTHETIC AND SURGICAL MANIPULATIONS; AND THIRDLY, THE MANAGEMENT OF THE PATIENT UNCONSCIOUS FROM WHATEVER CAUSE; FOURTHLY, THE MANAGEMENT OF PROBLEMS OF PAIN RELIEF; FIFTH, THE MANAGEMENT OF PROBLEMS OF CARDIAC RESPIRATORY RESUSCITATION; SIXTH, THE APPLICATION OF SPECIFIC METHODS OF INHALATIONAL THERAPY, AND SEVENTH, THE CLINICAL MANAGEMENT OF VARIOUS FLUID, ELECTROLYTE AND METABOLIC DISTURBANCES.

THE COMMITTEE MADE RECOMMENDATIONS ALSO FOR THE IMPLEMENTATION OF THE FINDINGS AND IN MANY INSTANCES THESE ACTIVITIES HAVE BEEN UNDERTAKEN.

THE SUMMATION STATES "THIS THEN IS ANESTHESIOLOGY'S SITUATION: SORELY PRESSED FOR NUMBERS, IT IS AT LEAST AS MUCH CHALLENGED ON ITS RIGHT TO HAVE THEM -- TO COMMAND THE RESPECT FOR IT OF THE YOUNG DOCTORS IT SEEKS TO ATTRACT."

7. THE ATTITUDE OF INFLUENTIAL SURGEONS IN OUR PRESENT POSITION HAS BEEN SUMMARIZED BY A STATEMENT MADE PUBLICLY IN 1965 BY DOCTOR MICHAEL E. DEBAKEY, A VERY GOOD FRIEND OF ANESTHESIOLOGY. THE MAIN POINTS ARE THESE:

1. DESPITE THE GROWTH RATE OF ANESTHESIOLOGY, ONLY 40% OF THE ESTIMATED NEEDS FOR ANESTHESIOLOGISTS WERE SATISFIED IN 1962.

2. THE HOPE THAT INCREASED NUMBERS OF GRADUATES FROM MEDICAL SCHOOLS WOULD BE ATTRACTED TO ANESTHESIA HAS NOT MATERIALIZED WHILE THE NEED FOR ANESTHESIOLOGISTS TO CARE FOR SERIOUSLY ILL PATIENTS, ESPECIALLY OUTSIDE THE OPERATING ROOM, HAS INCREASED REMARKABLY.

3. SINCE 1959 THE NUMBERS OF PHYSICIANS IN RESIDENCY TRAINING IN ANESTHESIOLOGY HAS REMAINED STATIC AND PERHAPS EVEN DECLINED.

4. MAJOR TEACHING PROGRAMS FILLED ONLY HALF OF THEIR RESIDENCY PROGRAMS FOR JULY 1965. (THIS HAS NOT BEEN CONFIRMED OR DENIED)

5. THE INFUSION OF FOREIGN GRADUATES IS EVIDENCE OF THE FAILURE OF THE RECRUITMENT PROCESS INTO ANESTHESIOLOGY.

6. THERE HAS BEEN VERY GREAT SUCCESS IN RESEARCH IN

ANESTHESIOLOGY DUE TO NIH SUPPORT.

7. THERE IS AN OMINOUS CONCLUSION THAT WE ARE APPROACHING A CRISIS IN ANESTHESIA MANPOWER.

8. THE ANESTHESIA SURVEY OF THE ASA JUST QUOTED RECOGNIZED THE PROBLEM, IDENTIFIED THE CAUSES, AND PRESENTED NO EFFECTIVE SOLUTION.

9. THERE WILL BE A VERY GREATLY INCREASED DEMAND FOR ANESTHETIC CARE DUE TO THE INCREASED AGE OF THE POPULATION, INCREASED FINANCIAL SUPPORT FOR PATIENTS UNDER THE NEW FEDERAL PROGRAMS AND THE UNFULFILLED NEED FOR OBSTETRIC ANESTHESIA.

IT IS CLEAR, I HOPE, THAT THERE IS DIFFERENCE OF OPINION ON THE NATURE OF OUR PRESENT MANPOWER SITUATION IN ANESTHESIOLOGY. THESE ARE MANY WHO BELIEVE WE ARE IN A DESPERATE CRISIS WHICH REQUIRES SHORT TERM ACTION OF AN URGENT NATURE AND LONG TERM MEASURES OF SIGNIFICANCE.

THERE ARE THOSE WHO BELIEVE THAT THE SITUATION IS WELL IN HAND AND IS EVOLVING SATISFACTORILY BUT NEEDS HELP AND ATTENTION CONTINUOUSLY – AND THERE ARE THOSE WHOSE VIEWS ARE SOMEWHERE IN THE MIDDLE .

ONE IS CLEARLY IMPRESSED BY THE FACT THAT THE ESSENTIAL FACTS AS DESCRIBED TO YOU ARE, IN GENERAL, AGREED UPON BUT THAT THEIR INTERPRETATION IS ENORMOUSLY VARIED.

MY OWN VIEWS OF THIS SITUATION ARE THAT THERE IS PRESENTLY A SERIOUS SHORTAGE OF ANESTHESIOLOGISTS AND THE SHORTAGE MAY GET WORSE BEFORE IT GETS BETTER, AS IT WILL. THERE IS COLLATERAL EVIDENCE IN ADDITION TO

THE DATA SHOWN YOU WHICH DOES NOT APPEAR IN ANY OF THESE STUDIES.

1. ANY GRADUATE OF ANY AMERICAN MEDICAL SCHOOL IN ANY POSITION OF THE CLASS CAN ACHIEVE ANY RESIDENCY IN ANESTHESIOLOGY HE WANTS WITH SOME SMALL EXCEPTIONS. IN FACT, COMPETITION FOR RESIDENTS HAS EVEN VERGED ON FORMS OF BRIBERY.

MUCH NEEDS TO BE DONE TO ENHANCE THE ATTRACTIVENESS OF ANESTHESIOLOGY TO STUDENTS, INTERNS AND PHYSICIANS. MUCH REFORM ON THE PART OF THE ANESTHESIOLOGIST IS REQUIRED IN HIS PRACTICE AND CONSIDERABLE REFORM IS ALSO REQUIRED IN THE RELATIONSHIP OF SURGEON AND INTERNIST AND THEIR ATTITUDE TOWARD THE ANESTHESIOLOGIST.

THERE IS A SERIOUS PROBLEM AT THIS POINT WHICH MUST BE MENTIONED. IN THE EFFORT TO IMPROVE THE ATTRACTIVENESS OF ANESTHESIOLOGY, ANESTHESIOLOGISTS HAVE GONE OUT OF THE OPERATING ROOM TO APPLY THEIR KNOWLEDGE TO THE CLINICAL CARE OF PATIENTS WHO REQUIRE RESUSCITATION, THE SUPPORT OF RESPIRATION, AND THE RELIEF OF PAIN. ALL OF THESE ARE VERY WORTHY ACTIVITIES AND SHOULD BE ENCOURAGED. HOWEVER, THERE HAS BEEN SOME CONSIDERABLE ABUSE AND THERE IS GREAT DANGER IN THE WAY SOME OF THESE PRACTICES ARE DONE BOTH IN EUROPE AND IN THE UNITED STATES. MANY ANESTHESIOLOGISTS ENJOY THIS TYPE OF WORK TO SUCH AN EXTENT THAT THEY ARE INCREASINGLY LEAVING THE CLINICAL CARE OF THE SURGICAL PATIENT DURING ANESTHESIA TO NURSES WHILE THEY ARE PRACTICING THIS FORM OF TRUNCATED ACUTE MEDICINE. AS SOON AS THE ANESTHESIOLOGIST LEAVES HIS FUNDAMENTAL BASE OF

OPERATIONS – THE ANESTHETIC CARE OF SURGICAL PATIENTS – HE RUNS A SERIOUS RISK OF EVENTUALLY DEFEATING THE PURPOSE IN ATTRACTING NEW PEOPLE INTO THE SPECIALTY.

WHAT ARE THE REMEDIES AND WILL THEY HELP. THE REMEDIES ARE MULTIPLE AND THEY HAVE HELPED IN SOLVING THE PROBLEM.

1. THERE NEEDS TO BE A FEDERALLY SUPPORTED PROGRAM IN CLINICAL ANESTHESIOLOGY FOR RESIDENTS. THE CONGRESS HAS ALREADY APPROPRIATED MONEY FOR THIS PURPOSE AND HOPEFULLY, AS SOON AS THE EXECUTIVE BRANCH PERMITS, THE PROGRAM WILL BE LAUNCHED.

2. GOVERNMENT SUPPORT FOR UNDERGRADUATE MEDICAL STUDENT ACTIVITIES IS ALSO NEEDED AND IS NOW AVAILABLE FOR RESEARCH ACTIVITIES ONLY.

3. A NATIONAL FACILITY OR FACILITIES FOR INVESTIGATION AND EDUCATION IN ANESTHESIOLOGY NEEDS TO BE DEVELOPED. FUNDS FOR THIS PURPOSE HAVE ALSO BEEN APPROPRIATED BY THE CONGRESS.

4. UNIVERSITY DEPARTMENTS NEED TO HAVE FUNDS FOR RENOVATION OF EXISTING SPACE AND FACILITIES FOR RESEARCH AND TEACHING SINCE THEY ARE ALWAYS THE MOST RECENT MEMBERS OF THE MEDICAL FACULTY. THIS PROGRAM HAS ALSO BEEN WELL ESTABLISHED AND IS NOW ON ITS WAY.

5. RESEARCH AND RESEARCH TRAINING MUST BE SUPPPORTED. THIS YEAR THE FUNDING BY NIH OF THESE ACTICITIES HAS NEARLY DOUBLED AND SUCCESS WILL

COME.

THERE CAN, IN SHORT, BE NO MASTER STROKE, BUT MANY ACTIVITIES ARE NEEDED TO ATTRACT AND DEVELOP BOTH QUALITY AND QUANTITY AMONG PHYSICIANS IN THIS FIELD. EVEN THOUGH ONE MUST BELIEVE THE PROBLEM IS SERIOUS, THERE ARE ALREADY CLEAR AND UNMISTAKABLE SIGNS OF OPTIMISM THAT WILL ULTIMATELY PRODUCE MORE ANESTHESIOLOGISTS. THERE ARE MORE GOOD PEOPLE APPLYING FOR RESIDENCIES IN THOSE KEY INSTITUTIONS SAMPLED, BOTH UNIVERSITY AND COMMUNITY. THERE ARE MORE INQUIRIES FROM RESIDENTS IN OTHER FIELDS AND GENERAL PRACTITIONERS ABOUT ENTERING THE FIELD. THE YIELD OF THE ASA PRECEPTOR PROGRAM IS 4 YEARS IN THE FUTURE – AND ALL OF THESE PROGRAMS WILL HELP IN THE LONG TERM VIEW. BUT WHAT OF THE PRESENT AND THE IMMEDIATE FUTURE? THE PROBLEM OF MANPOWER MUST FACE SQUARELY THE PROBLEM IN NON-MEDICAL PERSONNEL AND THE ROLE OF THE NURSE ANESTHETIST. SUCH PROGRAMS MUST BE PLANNED WITH CERTAIN PRINCIPLES AS ESTABLISHED GUIDELINES.

1. THERE IS A REAL NEED TO CARRY ON RESEARCH WITH THE AID OF SOCIOLOGICAL AND EDUCATIONAL GUIDANCE INTO WHAT ASPECTS OF ANESTHESIOLOGY ARE BEST DONE BY PHYSICIANS AND WHAT ASPECTS MAY BE DONE BY OTHER PEOPLE INCLUDING NURSES, TECHNOLOGISTS, COLLEGE GRADUATES, AND EVEN AUTOMATED EQUIPMENT.

IT IS ALMOST FANTASTIC TO HAVE EXPERIENCED THE QUARRELS AND CRITICISM RESULTING FROM EFFORTS TO STUDY THE PROPER ROLE OF ALL THESE GROUPS UNDER WELL CONTROLLED CONDITIONS – STUDIES WHICH HAVE NEVER BEEN

CARRIED OUT BEFORE. I HARDLY NEED TELL YOU OF THE HORROR PRODUCED BY THE SUGGESTION THAT THE POSSIBILITY OF AUTOMATION BE EXAMINED. THE HISTORY OF THESE EFFORTS IN OTHER FIELDS IS THE ENHANCEMENT OF THE CAPABILITIES OF THE OTHER PERSON. PERHAPS THIS IS WHY FEARS DEVELOPED.

AT A MEETING IN SEPTEMBER OF 1965 SPONSORED BY THE NATIONAL INSTITUTES OF HEALTH, EXAMINATION OF THE QUESTION OF THE RECRUITMENT AND TRAINING OF NURSING AND OTHER AUXILIARY PERSONNEL, AMONG OTHER ITEMS, WAS CARRIED OUT. THIS GROUP OF ANESTHESIOLOGISTS, SURGEONS AND PUBLIC HEALTH OFFICERS MADE THE POINT THAT THE IDEAL SITUATION WOULD BE TO PROVIDE PHYSICIAN ADMINISTERED ANESTHESIA FOR ALL PATIENTS. THEY FURTHER AGREED THAT THIS GOAL WAS UNREALISTIC IN THE NEAR FUTURE AND MAY BE UNREALISTIC FOR THE LONG TERM. THEY POINTED OUT THAT THERE ARE APPROXIMATELY 8,000 ANESTHESIOLOGISTS AND 12,000 CERTIFIED REGISTERED NURSE ANESTHETISTS. TOGETHER THESE TWO GROUPS CARE FOR 85% OF ALL THE ANESTHESIA IN ACCREDITED HOSPITALS WITH THE ANESTHESIOLOGISTS CONTRIBUTING 39% AND THE NURSE ANESTHETISTS WHO ARE CERTIFICATE REGISTERED, 46%.

IT WAS RECOMMENDED THAT STEPS SHOULD BE TAKEN TOWARD PROGRAMS OF GUIDANCE OF THE NURSE ANESTHETISTS AND OTHER GROUPS BY ANESTHESIOLOGISTS. THEY RECOMMENDED AS A PRIMARY GOAL INTENSIFICATION OF THE NEED FOR DEVELOPING CLINICAL ANESTHESIOLOGISTS. THE ACTIVITIES OF THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS IN THE PRECEPTOR PROGAM ARE STRONG STEPS IN THIS DIRECTION. THE CURRENT BUDGET OF THIS ORGANIZATION IS $100,000

WHICH WILL PRODUCE CONTRIBUTIONS FROM OTHER SOURCES OF ABOUT $100,000.

IT WAS ALSO RECOMMENDED THAT ANESTHESIOLOGISTS IN MEDICAL CENTERS WITH ACTIVE TRAINING PROGRAMS CONTRIBUTE TO THE EDUCATION AND GUIDANCE OF NURSE ANESTHETISTS AND THAT A MORE HARMONIOUS RELATIONSHIP BETWEEN PHYSICIANS AND NURSES BE DEVELOPED. THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS AND THE ASSOCIATION OF NURSE ANESTHETISTS ARE TAKING STEPS IN THE DIRECTION OF IMPROVING UNDERSTANDING AND RELATIONSHIPS – A LONG AND PROBABLY DIFFICULT PROCESS.

THE DEVELOPMENT OF RESEARCH PERSONNEL IS MORE ADVANCED THAN MANY OF THESE OTHER PROGRAMS. RESEARCH PROVIDES SEVERAL IMPORTANT CONTRIBUTIONS TO THE MANPOWER PROBLEM IN ADDITION TO ITS INTRINSIC AND MAJOR VALUE OF PROVIDING NEW KNOWLEDGE IN A FIELD THAT SORELY NEEDS IT.

IT PROVIDES AN INTELLECTUAL OPPORTUNITY FOR INDIVIDUALS INTERESTED IN A SCIENTIFIC ENVIRONMENT WHO WILL ULTIMATELY BECOME EDUCATORS AND SCIENTISTS THEMSELVES.

THIS AUDIENCE IS ENTITLED TO MY SUGGESTIONS AND PROJECTIONS FOR THE FUTURE DEVELOPMENT OF ANESTHESIOLOGY.

1. AN INTENSIFICATION OF THE EFFORTS TO INCREASE THE MEDICAL ANESTHESIOLOGISTS IN NUMBERS AND QUALITY.

A. INCREASE THE TOTAL NUMBER OF PHYSICIANS. THERE ARE OBJECTIONS TO THIS APPROACH, E.G., THERE NEEDS TO BE MORE EFFICIENCY BY DOCTORS – MANY ARE DOING THINGS THAT BETTER TRAINED PEOPLE CAN

DO AND THERE ARE NEW OBJECTIVES.

B. THE ASA PRECEPTOR PROGRAM.

C. THE NIH CLINICAL TRAINING SUPPORT PROGRAM

2. DEVELOP A RELATIONSHIP WITH NURSE ANESTHETISTS WHICH RESTORES THE TRADITIONAL POSITION OF THE PHYSICIAN AND THE NURSE. THERE IS A VERY GREAT NEED TO HAVE THE NURSE ANESTHETIST BECOME THE ASSISTANT OF THE ANESTHESIOLOGIST AS PART OF THE ANESTHESIOLOGICAL TEAM IN THE SAME WAY THAT THE NURSE FUNCTIONS AS THE ASSISTANT TO PHYSICIANS IN OTHER AREAS. THIS IS A HIGHLY CHARGED, CONTROVERSIAL MATTER AT THE PRESENT TIME BECAUSE OF THE SINS AND ERRORS ON BOTH SIDES, I.E., THE NURSES ORIENTATION TOWARD HOSPITAL EXECUTIVES AND SURGEONS, AND THE PAST HISTORY OF THE HOSTILITY TO NURSE ANESTHETISTS BY ANESTHESIOLOGISTS.

3. THE DEVELOPMENT OF TECHNOLOGISTS AND ASSISTANTS OF ALL SORTS TO EXPEDITE THE WORK OF THE ANESTHESIOLOGIST.

4. AUTOMATION. THIS TOO IS A HIGHLY CHARGED CONTROVERSIAL MATTER AND IS GENERALLY LOOKED UPON WITH GREAT FEAR AND UNHAPPINESS ON THE PART OF ALL PEOPLE WHO THINK THAT THEY MIGHT BE “AUTOMATED OUT OF BUSINESS.” THIS FEAR IS GROUNDLESS. AUTOMATION TO A SAFE AND SENSIBLE LEVEL WOULD SIMPLY MAKE IT EASIER TO TAKE CARE OF SICK PEOPLE MORE EFFECTIVELY.

<u>SUMMARY</u>