
MOTION FILED

IN THE

OCT 15 1971

Supreme Court of the United States

OCTOBER TERM, 1971.

No. 70-18

JANE ROE, ET AL.,
vs.
Appellants,

HENRY WADE,
Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF TEXAS.

No. 70-40

MARY DOE, ET AL.,
vs.
Appellants,

ARTHUR K. BOLTON, ET AL.,
Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF GEORGIA.

**MOTION AND BRIEF AMICUS CURIAE OF CERTAIN
PHYSICIANS, PROFESSORS AND FELLOWS OF
THE AMERICAN COLLEGE OF OBSTETRICS
AND GYNECOLOGY IN SUPPORT OF
APPELLEES.**

DENNIS J. HORAN,
JEROME A. FRAZEL, JR.,
THOMAS M. CRISHAM,
DOLORES B. HORAN,
JOHN D. GORBY,
One North LaSalle St.,
Chicago, Illinois 60602,
312-346-5800.

IN THE
Supreme Court of the United States

OCTOBER TERM, 1971.

No. 70-18

JANE ROE, ET AL.,
Appellants,
vs.

HENRY WADE,
Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF TEXAS.

No. 70-40

MARY DOE, ET AL.,
Appellants,
vs.

ARTHUR K. BOLTON, ET AL.,
Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF GEORGIA.

**MOTION FOR LEAVE TO FILE BRIEF
AMICUS CURIAE.**

PURPOSE OF THE MOTION.

All parties in No. 70-18 (the Texas case) have given their written consent to Dr. Bart Heffernan, one of the *amici* herein, to file an *amicus curiae* brief.¹ The appellants in No. 70-40 (the Georgia case) have never responded to a request for consent. The appellees do not object to these *amici* filing in this cause.²

INTEREST OF THE AMICI.

1. Identification of the *amici*. Dr. Bart Heffernan has an appeal presently pending before this Court in the case of *Heffernan, et al. v. Doe, et al.*, docketed as No. 70-106, October 1971 term, which case involves the constitutionality of the Illinois criminal abortion statute, and is similar to both *Jane Roe, et al. v. Wade*, No. 70-18, and *Mary Doe, et al. v. Bolton*, No. 70-40. The Jurisdictional Statement in the *Heffernan* case was filed on March 29, 1971, but no action was taken thereon during the last term of Court.

Any ruling on the merits in the Georgia and Texas cases could profoundly and perhaps adversely affect the outcome of the Illinois case, in which case Dr. Heffernan was appointed *guardian ad litem* for the class of unborn children. He asks leave of this Court to file this *amicus curiae* brief on behalf of his wards.

The other *amici* are physicians, professors and certain Fellows of the American College of Obstetrics and Gynecology who seek to place before this Court the scientific evidence of the humanity of the unborn so that the Court may know and understand that the unborn are developing

-
1. Written consents have been filed with the clerk of this court.
 2. Response of appellees has been filed with the clerk of this court.

human persons who need the protection of law just as do adults.

These *amici* also desire to bring to the Court's attention the medical complications of induced abortion, both in terms of maternal morbidity and mortality (as well as the mortality to the child), and to show that these are questions of considerable debate in medicine.

2. The Legal Position of these *Amici* in these cases. The unborn child is a developing human being who is entitled to the law's protection just as is an adult.

3. Justification for Participation as *Amici*. As previously stated, the issues in these cases, as well as the pending case of *Heffernan v. Doe*, No. 70-106, October 1971 term, are of the most profound significance dealing with the most basic and fundamental of human rights: The Right to Life.

In reviewing the Briefs filed in both cases it appears that no attempt was made to advise the Court of the scientific facts of life from conception to birth, or of the medical complications of induced abortion, and it is urged that presentation of this information is a reasonable justification for participation by these *amici*.

CONCLUSION.

For the reasons stated and for additional reasons as contained in and expanded upon in the Brief itself, these *amici* respectfully request this Court to grant this Motion and grant leave for filing this Brief served herewith.

Respectfully submitted,

DENNIS J. HORAN,
JEROME A. FRAZEL, JR.,
THOMAS M. CRISHAM,
DOLORES B. HORAN,
JOHN D. GORBY.

LIST OF AMICI.

Leon L. Adecock, M.D. FACOG
Asst. Prof. Dept. OB Gyn
Univ. Minnesota Medical School

Raymond J. Albrecht, M.D. FACOG
Clin. Asst. Prof. OB Gyn
Univ. Minnesota Medical School

Leo Alexander, M.D.
Asst. Clin. Prof. Psychiatry
Tufts University Medical School—Boston

Paul H. Andreini, M.D.
Consultant in Internal Medicine & Rheumatology—Mayo
Clinic

Richard Applebaum, M.D. FAAP
Miami, Florida

Henry G. Armitage, Jr., M.D. FACS
Senior Surgeon
Lawrence General and Bon Secours Hospitals
Lawrence, Massachusetts

James L. Barnard, M.D.
Corpus Christi, Texas

Alex Barro, M.D. FACOG
Chief Field Investigator, Maternal Mortality Comm. of
State Health Dept.
Chm. Comm. OB Gyn & Mat. Welfare, Minn. State Med.
Assoc.
Clin. Assoc. Prof. OB Gyn
Univ. Minn. Med. Sch.

A. Sidney Barritt, Jr., M.D. FACOG
Gynecology Dept. of Brooklyn Hosp.
Brooklyn, New York

Peter J. Bartzen, M.D. FACOG
Duluth, Minnesota

Frederick C. Battaglia, M.D. FAAP
Dir. Div. of Perinatal Med.
Prof. OB Gyn and Prof. Pediatrics
Univ. Colorado Med. Center, Denver

Woodard Beacham, M.D. FACOG
Co-founder & First Pres. of Amer. College of OB Gyn
Clinical Prof. OB Gyn Tulane Univ. Medical School

Jacob E. Bearman, Ph.D.
Professor Department of Public Health—Biostatistics
Univ. Minnesota Medical School
Member U. S. National Committee on Vital and Health
Statistics U. S. Dept. H. E. W.

Christopher Bellone, M.D. FACS
Founder, New Orleans OB Gyn Society

Karl L. Bergener
Roswell, New Mexico 88201

William F. Bernhard, M.D. FACS
Prof. Surgery
Harvard Med. Sch.
Senior Assoc. Cardiovascular Surgery, Children's Hosp.,
Med. Ctr. Boston

Irving Bernstein, M.D. FACOG
Clinical Professor of Psychiatry and OB Gyn
Univ. Minnesota Medical School

Lester J. Bossert, M.D., FACOG
Clin. Prof. OB Gyn
Univ. Cincinnati College of Med.

John G. Boutsalis, M.D., FACOG
Prof. OB Gyn
Ohio State U. Med. Sch.

Watson A. Bowes, Jr., M.D.
Prof. OB Gyn
Univ. of Colorado Med. Center, Denver

Benjy Brooks, M.D. FAAP
Clin. Asst. Prof. Ped. Surgery
Baylor College of Medicine
Assoc. Prof. Ped. Surgery
Univ. Texas Grad. School Biological Science

Richard Bryant, M.D. FACOG
Founding Fellow Amer. College OB Gyn
Clin. Prof. OB Gyn
Univ. of Cincinnati

Ray H. Buzbee, M.D. FACOG FACS
Chief of Staff OB Gyn
Hendricks Hospital, Abilene, Texas

Jesse Caldwell, M.D. FACS
Gastonia, North Carolina

Dennis Cavanaugh, M.D. FACOG
Prof. OB Gyn
Univ. of Tasmania Med. School
Tasmania, Australia

John J. Cochran, M.D. FACOG
Albuquerque, New Mexico

Evis J. Coda, M.D.
Dir. Kennedy Child Study Center
Santa Monica, Calif.

William E. Cohenour, M.D.
Albuquerque, New Mexico

Jason H. Collins, M.D. FACOG
Prof. & Acting Chairman Dept. OB Gyn
Tulane School of Medicine, New Orleans

Vincent Collins, M.D.
Prof. Anesthesiology
Northwestern U. School of Medicine

William E. Colliton, Jr., M.D. FACOG FACS
Clinical Instructor
Georgetown University School of Medicine

R. Vernon Colpitts, M.D. FACOG
Clin. Instructor OB Gyn, Baylor College of Med.
Clin. Assoc. in OB Gyn, Univ. of Texas—Houston

John P. Connelly, M.D. FAAP
Assoc. Prof. Pediatrics
Harvard Medical School

John G. Cope, M.D.
Albuquerque, New Mexico

Robert A. Cosgrove, M.D. FACOG FACS
Clinical Prof. OB Gyn
New Jersey College of Medicine

Joseph T. Crapanzano, M.D. FACOG
Associate Professor of OB Gyn
Dir. of Med. Education, La. State U. Div.
Louisiana State Univ. School of Medicine
New Orleans, Louisiana

Donald H. Cummings, M.D.
Dept. of Psychiatry
Lovelace-Bataan Medical Center
New Mexico

Ever Louise Curtis, M.D.
New Orleans, Louisiana
Harry R. Dailey, M.D. FACOG
Pittsburgh, Pennsylvania

Jack Davies, M.D.
Professor & Chairman Dept. of Anatomy
Vanderbilt Univ. School of Medicine
Nashville, Tennessee

Van A. Davison, M.D. FACOG FACS
Member Bd. of Governors, Tulane Med. School, New Orleans
Assoc. Prof. OB Gyn, Southwestern Med. School

Daniel Degallier, M.D. FACOG
Winona, Minnesota

James J. Delaney, M.D. FACOG
Asst. Prof. OB Gyn
Univ. Colorado Med. Center, Denver

John P. Delaney, M.D.
Ph.D. Physiology & Surgery
Assoc. Prof. Surgery
Univ. of Minnesota School of Med., Minneapolis

v

Eugene F. Diamond, M.D. FAAP
Prof. Pediatrics
Stritch School of Medicine
Maywood, Ill.

William J. Dignam, M.D. FACOG
Prof. OB Gyn
UCLA Medical Center
Los Angeles, California

James R. Dillon, M.D. FACOG
Evanston, Illinois

Malcolm B. Dockerty, M.D.
Prof. of Pathology
Mayo Graduate School of Medicine
Univ. of Minnesota
Sr. Consultant Section of Surgical Pathology
Mayo Clinic

Robert Dolehide, M.D.
Chicago, Illinois

Jerome A. Dolan, M.D. FACOG FACS
Assoc. Clin. Prof. OB Gyn
New Jersey Medical College

Edward P. Donatelle, M.D.
Clin. Asst. Prof. in Family Practice
Univ. of Minnesota Med. School, Minneapolis

Michael M. Donovan, M.D. FACS
Cons. in Surgery, Univ. Texas
Chief Surgeon Houston Unit of Shriners Hosp.

John H. Doran, M.D. FACOG
Detroit, Michigan

Ronald V. Dorn, Jr., M.D.
Assoc. Staff & Preceptor Dept. of Internal Medicine, New
Mexico
Univ. School of Medicine

Bernard J. Dreiling, M.D.
Asst. Prof. of Med.
Univ. of Miss. Med. Center

J. Englebert Dunphy, M.D.
Chairman, Dept. of Surgery and Prof. of Surgery
Univ. of California Medical Center
San Francisco, California

Isadore Dyer, M.D. FACOG
Clinical Prof. OB Gyn
Tulane Sch. of Med.

Laura E. Edwards, M.D. FACOG
Assoc. Prof. Dept. OB Gyn
Univ. of Minnesota Med. School

Homer Smith Ellsworth, M.D. FACOG
Assistant Clinical Professor OB Gyn
Univ. of Utah

George J. Ellis, Sr., M.D. FACOG
Past Clinical Prof.
Georgetown Univ. School of Medicine

Joseph P. Evans, M.D. Ph.D.
Prof. Neurological Surgery Emeritus
Univ. of Chicago Medical School
Chicago, Illinois

John L. Falls M.D., FACOG
Chm. Public Policy Comm. Minn. State Med. Assoc.
Red Wing, Minn.

John A. Ferris, M.D.
Harlingen, Texas

Howard W. Fisher, M.D.
Clin. Asst. Prof. Depts. Psychiatry and OB Gyn
Univ. of Minnesota Med. School

John Flynn, M.D. FACOG
Med. School
State Univ. of N.Y., Buffalo

Thomas Flynn, M.D. FAAP
Clinical Instructor of Pediatrics
Yale Medical School

William E. Flynn, M.D.
Assoc. Prof. of Psychiatry
Georgetown Univ. School of Med.

Norman J. Foit, M.D. FACOG
Kenmore, New York

Thomas Foley, M.D. FACOG
Manchester, New Hampshire

Stephen A. Foote, Jr., M.D. FACP
Past Pres. (1969) Texas Academy Internal Med.
Assoc. Clin. Prof. of Med., Baylor College of Med.
Former Asst. Prof. Med., Univ. of Texas
Bio-Medical Div., Houston

Archibald F. Forster, M.D. FACOG
Asst. Clinical Prof. OB Gyn
UCLA Medical Center
Los Angeles, California

Francis A. Fote, M.D. FACOG
Lackawanna, New York

Donald J. Frank
Associate Professor of Pediatrics
University of Cincinnati, College of Medicine

Rupert H. Friday, M.D. FACOG
Clin. Asst. Inst. OB Gyn
Univ. Pittsburgh

Harold L. Gainey, M.D. FACOG
Emeritus Clin. Prof. OB Gyn
Univ. of Missouri, Kansas City

Eugene Gedgaudas, M.D.
Prof. and Chairman Dept. of Radiology
Univ. of Minnesota Med. Sch.

Hans E. Geisler, M.D. FACOG
Assist. Prof. OB Gyn
Indiana—Purdue Univ. School of Med., Indianapolis

John M. Gibbons Jr., M.D. FACOG
Assoc. Prof. OB Gyn
Univ. of Conn. Medical School

John Glenn, M.D. FACOG
Dir. Dept. OB Gyn
Provident Hospital
Cincinnati, Ohio

M. Benjamin Glover, M.D.
Dept. of Neurosurgery
Lovelace-Bataan Medical Center
New Mexico

Frederick C. Goetz, M.D.
Prof. of Medicine
Univ. of Minn. Med. Sch.

Severin T. Golojuch, M.D., FACOG
Pres. Middlesex County Med. Soc.
New Brunswick, New Jersey

William E. Goodwin, M.D.
Assoc. Clinical Prof. of Medicine
Univ. of Southern California Medical School
Los Angeles, California

Hymie Gordon, M.D.
Chief of Genetics Consulting Clinic
Mayo Clinic

John L. Grady, M.D.
Chm. Dept. OB Gyn Glades Gen. Hosp.
Belle Glade, Florida

William Graf, M.D. FACOG
Asst. Prof. OB Gyn
Univ. of Cincinnati

Robert E. Gross, M.D. FACS
Prof. Pediatric Surgery
Harvard Med. Sch.

Labib M. Habashy, M.D.
M.S., OB Gyn
Dickenson, Texas

Joseph I. Hamel, M.D. FACOG
Clinical Instructor OB Gyn
Univ. of Minnesota Med. School, Minneapolis

T. R. Hannon, M.D.
Assoc. Prof. OB Gyn, Baylor Med. School
Houston, Texas

D. G. Harrel, M.D. FACS FACOG
Clin. Prof. OB Gyn
Univ. of Texas Southwestern Med. Sch.
Dallas, Texas

Marjorie Hartig, M.D. FACOG
Dir. Family Planning Clinic
Member, Amer. Assoc. Planned Parenthood Physicians
St. Paul, Minnesota

Robert C. Hartmann, M.D. FACP
Prof. Med. Vanderbilt Univ.

Grant E. Hartnagel, M.D. FACOG FACS
Minneapolis, Minnesota

Barbara Hastings, M.D.
Research Fellow Dept. of Neurology
Univ. Minnesota Hospitals

Robert L. Hatton, M.D. FACOG
Pahokee, Florida

Allan L. Haynes, M.D
Clovis, New Mexico

Bart Heffernan M.D.
Asst. Clinical Prof. Med.
Stritch School of Medicine
Maywood, Ill.

Andre Hellegers, M.D. FACOG
Prof. OB Gyn
Georgetown Univ. School of Medicine

H. C. Henderson, Jr., M.D. FACS FACOG
Assoc. Clin. Prof. OB Gyn
University of Texas Southwestern Med. Sch.
Dallas, Texas

Leo T. Heywood, M.D. FACOG
Founding Fellow—Amer. College OB Gyn
Prof. OB Gyn
Creighton Med. Sch.

John F. Hillabrand, M.D. FACOG
Pres. Nat. Comm. Human Life & Repro.
Toledo, Ohio

Thomas Hilgers, M.D.
Resident OB Gyn Mayo Clinic

Milton Hoffman, M.D., FACOG
Clinical Associate Prof.
Tulane School of Medicine

William J. Hossley, M.D.
Deming, New Mex.

Richard V. Jaynes, M.D. FACOG
Garden City, Michigan

Mildred F. Jefferson, M.D.
Clin. Instr. Surgery
Boston University School of Medicine

Emmit M. Jennings, M.D.
Roswell, New Mex.

Marilyn Johnson, M.D. FACOG
Clin. Instructor OB Gyn
Baylor College of Med., Houston
Clin. Instructor OB Gyn Texas Post-Grad.
School of Med., Houston

Hugh F. Kabat, Ph.D.
Prof. and Chairman Dept. of Clin. Pharmacy
College of Pharmacy
Univ. of Minnesota

James E. Kelly, M.D. FACOG
Van Nuys, California

Robert F. Kelly, M.D. FACOG
Los Angeles, California

Robert T. Kelly, M.D.
Clin. Asst. Prof. Dept. of Family Practice
and Community Health
Univ. of Minnesota Med. School

Joseph Kiefer, M.D.
Prof. of Urology
Univ. of Ill. School of Medicine

Edward Kilroy, M.D.
Clin. Inst. Thoracic Surgery
Case Western Reserve School Med.
Cleveland, Ohio

Daniel Kozera, M.D. FACOG
Buffalo, New York

Charles Kramer, M.D. FACOG
Pres. Ill. OB Gyn Soc.

Gerard F. Lanchantin, Ph.D.
Prof. Biochemistry, Univ. of Southern Cal.
Sch. Med., Los Angeles

William Leen, M.D. FACOG
Dir. OB Gyn
St. Vincent's Medical Center
Staten Island, New York

George Leicht, M.D. FACOG
Director of Department OB Gyn
Fairview General Hospital
Cleveland, Ohio

Albert W. Liley, M.D.
Research Prof. in Perinatal Physiology
Post. Grad. School of Obstetrics & Gynaecology
National Women's Hosp.
Auckland, New Zealand

George Loehfelm, M.D.
Methodist Hospital
Brooklyn, New York

Francis Long, M.D.
Wyoming

Robert J. Lowden, M.D. FACOG
Assoc. Clin. Prof. U. of Washington Med. School
Seattle

- Robert J. Luby, M.D.
Prof. and Assoc. Dir. Dept. OB Gyn
Asst. Dean of Medical School
Creighton Univ.
- Joseph Lucci, Jr., M.D. FACOG
Clin. Assoc. Prof. OB Gyn
Univ. of Texas School of Bio-Medical Science, Houston
and Univ. of Texas Med. Branch, Galveston
- John H. McArdle, M.D. FACOG
Tonawanda, New York
- Charles McCarthy, M.D. FACOG
Clin. Inst. OB Gyn
Univ. Minnesota Med. School and
St. Paul Ramsey Hospital
- John J. McCarthy, M.D. FACOG
Pittsburgh, Pennsylvania
Lawrence F. McCarty, M.D.
Laramie, Wyoming
- Thomas E. McCarthy, M.D.
Vice-Pres., Magee Women's Hosp.
Pittsburgh, Pennsylvania
- James McCutchon, M.D.
Corpus Christi, Texas
- Robert McDonald, M.D.
Chm. Med. Div. March of Dimes
Chm. Sch. & Child. Comm.
Alleghany Cty. Med. Soc.
Pittsburgh, Pennsylvania
- Richard N. McGarvey, M.D. FACOG
Pres. Pittsburgh OB Gyn Soc.
John L. McKelvey, M.D.
Prof. & Chairman Emeritus Dept. OB Gyn
Univ. of Minnesota Med. School
- James V. McNulty, M.D. FACOG
Assoc. Clinical Prof. OB Gyn
U. S. C. School of Medicine

Edgar L. Makowski, M.D. FACOG
Prof. OB Gyn
U. Colorado Med. Center, Denver

John R. Marchese, M.D. FACOG
Boone, North Carolina

Richard A. Marshall, M.D.
Prof. Med. Okla. Univ. Sch. Med.

B. L. Martin, M.D. FACOG
Kingsville, Texas

Charles C. Mary, Jr., M.D.
Clinical Assoc. Prof. La. State and Tulane Universities
Schools of Medicine

Maurice Moss, M.D. FACOG
Clin. Inst. OB Gyn
Case Western Reserve Univ. School Med.
Cleveland, Ohio

Fred Mecklenburg, M.D. FACOG
Clinical Instructor, OB Gyn
Univ. of Minnesota Med. Sch.
Dir. Family Planning Programs, U. Minn.,
Member Amer. Assoc. Planned
Parenthood Physicians
Chr. Dept. OB Gyn, St. Louis Park Med. Ctr.,
Consultant in Family Planning Programs, OEO

Peter Meister, M.D. FACOG
Dunkirk, New York

Maurice J. Meynier, Jr., M.D. FACOG
Clin. Assoc. Prof. OB Gyn
Baylor College of Medicine, Houston
and Univ. of Texas Post-Grad. School, Houston
Past. Pres. Texas Assn. OB Gyn

Abe Mickal, M.D. FACOG FACS
Professor and Head Dept. OB Gyn
La. State University School of Medicine

John F. Miller, M.D. FAAP
Clin. Assoc. Prof. Dept. of Ped.
The Medical College of Ohio, Toledo

S. D. Mills, M.D.
Assoc. Prof. of Clinical Pediatrics
Mayo Graduate School of Medicine
Univ. of Minnesota
Sr. Consultant Pediatrics Mayo Clinic

William C. Moloney, M.D. FACP
Prof. of Medicine
Harvard Medical School

James P. Molloy, Jr., M.D.
Chief of Staff, Psychiatric Serv.
Bellaire General Hosp., Bellaire, Texas
Clin. Instructor, Baylor College of Med., Houston

James A. Moriarity, M.D.
Asst. Prof. of Neurology
Univ. of Minnesota Med. School, Minneapolis

Francis S. Morrison, M.D. FACP
Assoc. Prof. of Medicine
Chief, Div. of Hematology
Univ. of Miss. Medical Center
Jackson, Miss.

James G. Mulé, M.D. FACOG
Prof. OB Gyn Louisiana State
Univ. School of Medicine

Paul F. Muller, M.D.
Asst. Prof. OB Gyn
Indiana-Purdue Univ. School of Med., Indianapolis

A. J. Murrieta, Jr., M.D. FACOG
Los Angeles, California

G. C. Nabors, M.D. FACOG
Asst. Clin. Prof. OB Gyn
Univ. of Texas Southwestern Med. Sch.
Dallas, Texas

John Neufeld, M.D. FACOG
Dept. OB Gyn
Lovelace-Bataan Medical Center
Albuquerque, New Mex.

David Nichols, M.D. FACOG
Med. School
State Univ. of N. Y., Buffalo

Samuel A. Nigro, M.D.
Senior Instr. Child Psychiatry
Case Western Reserve Univ. Sch. Med. &
U. Hospitals

Fred Nobrega, M.D. FACP MPH
Dept. of Medical Statistics
Epidemiology and Population Genetics
Mayo Clinic

Robert K. Nixon, M.D.
Asst. Prof. of Med.
Univ. Mich. Med. Sch.

Franklin T. O'Connell, Jr., M.D. FACOG
Evanston, Illinois

William T. O'Connell, M.D. FACOG
Brighton, Mass.

Joseph O'Connor, M.D. FACOG
Clin. Instr. OB Gyn
Stritch School of Medicine
Maywood, Ill.

Henry J. Osekowski, M.D.
Clin. Asst. Prof. Psychiatry
Univ. Minnesota Med. School, Minneapolis

J. Cuthbert Owens, M.D. FACS
Prof. of Surgery
Univ. of Colorado Med. Center, Denver

Richard R. Parlour, M.D.
Assoc. Clin. Prof. of Psychiatry
Loma Linda Univ. Sch. Med.
Montclair, Calif.

Lucien Pascucci, M.D.
Pres. Okla. State Med. Soc.

Edward Perry, M.D. FACOG
Manchester, New Hampshire

Bernard Pisani, M.D. FACOG
New York

Matt K. Plasha, M.D.
Past Pres. Minnesota Academy of Gen. Pract.

Frank M. Posey, Sr., M.D. FACOG FACS
Clin. Prof. OB Gyn
Univ. of Texas Med. School, San Antonio

Konald A. Prem, M.D. FACOG
Prof. OB Gyn
University of Minnesota Medical School
Associate Editor Modern Medicine

James T. Priestley, M.D.
Emeritus Prof. of Surgery
Mayo Graduate School of Medicine
Univ. of Minnesota
Chairman of Board of Governors
1957-1963 Mayo Clinic

Venustiano Pulido, M.D.
Instr. Pediatrics
U. S. C. Medical School
Sherman Oaks, California

Herbert Ratner, M.D.
Public Health Dir., Oak Park, Ill.
Assoc. Clin. Prof. Family & Community Med.
Stritch Sch. of Med.
Maywood, Ill.

William Standish Reed, M.D. FACS
Tampa, Florida

R. J. Reitemeier, M.D.
Prof. of Internal Medicine
Mayo Graduate School of Medicine
Univ. of Minnesota
Chairman Dept. Internal Medicine
Mayo Clinic

- Joseph J. Ricotta, M.D. FACOG**
Med. School
State Univ. of N. Y., Buffalo
- Jules Rivkind, M.D. FACOG**
Chm. OB Gyn
Mercy Hosp. Pittsburgh
- Jonas Robitscher, J.D., M.D.**
Asst. Prof. Clin. Psychiatry
Univ. of Pennsylvania Sch. Med.
- Barbara A. P. Rockett, M.D.**
Student Health Services
Emanuel College
Boston, Massachusetts
- Richard R. Romanowski, M.D. FACOG**
Med. School
State Univ. of N. Y., Buffalo
- William W. Rueve, M.D. FACOG**
Assoc. Prof. Dept. OB Gyn
Creighton Univ. Med. School, Omaha
- Ben Allen Rutledge, M.D.**
Assistant Prof. Orthopedic Surgery
Emery Univ. Medical School
- Joseph P. Salerno, M.D. FACOG**
Assoc. Prof. OB Gyn
Baylor College of Med., Houston
- Carl Sarnacki, M.D. FACOG**
Warren, Michigan
- Lester R. Sauvage, Jr., M.D. FACS**
Dir. Cardio-Vascular Research Center, Seattle
Chief Children's Surgery, Children's Orthopedic Hosp.,
Seattle
Assoc. Clin. Prof. Univ. Washington for Cardio-Vascular
& Ped. Surgery
- Richard T. F. Schmidt, M.D. FACOG**
Assoc. Clin. Prof. OB Gyn
Univ. of Cincinnati College of Med.

- Leonard M. Schuman, M.D.
Prof. and Chairman Div. of Epidemiology
School of Public Health
Univ. of Minnesota
- Adolph Sellman, M.D. FACOG
Assoc. Prof. OB Gyn
Louisiana State Univ. Medical School
- Mildred Shelley, M.D.
Psychiatrist
Cleveland Heights, Ohio
- Philip Sheridan, M.D. FACS
Clinical Assoc. Surgery
Univ. Ill. Medical School
- Bernard Sicuranza, M.D., FACOG
Asst. Dir. Gynecology
St. Mary's Hospital
Brooklyn, New York
- Eugene J. Slowinski, M.D. FACOG
Prof. OB Gyn
New Jersey College of Medicine
Newark, New Jersey
- James Smiggen, M.D. FACOG
Southfield, Michigan
- Robert Spencer, M.D.
Assoc. Prof. of Proctology
Mayo Graduate School of Medicine
Univ. of Minn.
- Richard H. Stanton, M.D. FACS
Clin. Prof. Surgery
Tufts Medical School
- Joseph R. Stanton, M.D. FACP
Assoc. Clin. Prof. of Medicine
Tufts Medical School
- Bruce W. Steinhauer, M.D.
Asst. Prof. Medicine
University of Michigan

R. A. Stevenson, M.D.
Victoria, Texas

Allen T. Stewart, M.D. FACOG
Lubbock, Texas

John F. Sullivan, M.D.
Neurologist-in-Chief
New England Medical Center
Prof. of Neurology
Tufts University School of Medicine
Boston, Massachusetts

Bernard J. Sullivan, M.D.
Laramie, Wyoming

Charles L. Sullivan, M.D. FACS FACOG
Boston, Massachusetts

Matthew Talty, M.D. FACOG
Clin. Assoc. Prof. OB Gyn
Baylor College of Medicine, Houston

James Tate Thigpen, M.D.
Univ. of Miss. Med. Center
Jackson, Miss.

Leslie Tisdall, M.D. FACOG
Dir. of Gynecology
St. Mary's Hospital
Brooklyn, New York

Robert G. Tompkins, M.D. FACP
Tulsa, Okla.

Bane Travis, M.D. FACOG
Cheyenne, Wyo.

Jack L. Turner, M.D. FACOG FACS
Asst. Clin. Prof. OB Gyn, Univ. of Texas
Southwestern Med. School, Dallas

Gloria Marie Volini, M.D.
Wilmette, Ill.

Alphonse R. Vonderahe, M.D.
Prof. Neuro-Anatomy
Univ. of Cincinnati, College of Med.

xx

- Henry P. Wager, M.D. FACOG FACS
Clin. Assoc. Prof. OB Gyn
New Jersey Med. School
Med. Dir.—Margaret Hague Maternity Hosp.
Jersey City, N. J.
- John W. Walker, M.D. FACOG FACS
Decatur, Georgia
- John Ward, M.D.
Chief Pathologist, Mercy Hosp.
Pittsburgh, Pennsylvania
- Joseph Watts, M.D. FACOG
Southfield, Michigan
- Joseph P. Williams, M.D.
Neurosurgical Resident
Emery Univ.
- John C. Willke, M.D. ABFP
Author, Handbook on Abortion
Cincinnati, Ohio
- Leonard G. Wilson, Ph.D.
Prof. of History of Med.
Univ. Minn.
- Robert B. Wilson, M.D. FACOG
Prof. Clinical OB Gyn
Mayo Graduate School
Univ. of Minnesota
Head Section OB Gyn 1960-69 at Mayo
- Charles J. Woeppel, M.D. FACOG
Med. School
State Univ. of N. Y., Buffalo
- Charles E. Wood, M.D. FACOG
Casper, Wyo.
- Doris Wright, M.D.
Asst. Prof. Community & Family Health Med.
Matthew Walker Health Center
Nashville, Tennessee

Karl Ziesmann, M.D. FACOG
Clin. Instr. OB Gyn
Univ. of Cincinnati
Natl. Pres. American Assoc. of Maternal and Child Health
Edward A. Zimmermann, M.D.
Prof. OB Gyn
Univ. of New Mex. School of Medicine

BRIEF

TABLE OF CONTENTS.

	PAGE
Argument	
I. The Humanity of the Unborn Offspring of Human Parents Has Been the Critical Issue in Lower Federal Court Abortion Cases	2
II. The Unborn Offspring of Human Parents Is an Autonomous Human Being	6
A. The Unborn Person Is Also a Patient	8
B. The Doctor Treats the Unborn Just as He Does Any Patient	26
III. Medical Hazards of Legally Induced Abortion ..	32
A. Professional Organizations Speak on Medical Hazards	33
B. New York City Abortion Data Unreliable ..	35
C. Eastern European Abortion Mortality Rates Complex and Often Incomplete	37
D. Child Mortality	46
E. Other Complications	47
F. Early Physical Complications	47
G. The Late Physical Complications of Legally Induced Abortion	51
1. Premature Labor and Delivery	52
2. Ectopic Pregnancies	53
3. Complications with Subsequent Pregnancies (Pathologic Sequelae)	53
4. Sterility	54
5. Transplacental Hemorrhage	54
6. Other Late Physical Complications	55
H. Psychiatric Sequelae	55
I. Conclusion	58

IV. The Unborn Offspring of Human Parents Is a Person Within the Meaning of the 5th and 14th Amendments of the U. S. Constitution	58
A. The Standard for Decision	58
B. The Court Must Apply This Same Standard to Itself	60
C. Application of the Standard for Decision to the Case at Bar—the Rules of Constitution Applied	61
Medical Bibliography	65

CASES.

Babbitt v. McCann, 310 F. Supp. 293	30
Barrows v. Jackson, 346 U. S. 249, 97 L. Ed. 1586, 93 S. Ct. 1031 (1953)	61
Corkey v. Edwards, 322 F. Supp. 1248 (N. D. North Carolina 1971)	4
Deal v. Sexton, 144 N. C. 110, 56 S. E. 691 (1907)	63
Doe v. Bolton, 319 F. Supp. 1048 (N. D. Ga. 1970)	3
Griswold v. Connecticut, 381 U. S. 479, 85 S. Ct. 1628 (1965)	59
Harper v. Virginia State Board of Elections, 383 U. S. 663, 86 S. Ct. 1079 (1966)	59
Loving v. Commonwealth of Virginia, 388 U. S. 1, 87 S. Ct. 1817 (1967)	59
McLaughlin v. Florida, 379 U. S. 184, 85 S. Ct. 282 (1964)	59
Poe v. Ullman, 367 U. S. 497, 81 S. Ct. 1752, 6 L. Ed. 2d 989 (J. Harlan dissenting)	5
Prince v. Massachusetts, 321 U. S. 158, 64 S. Ct. 438, 88 L. Ed. 645	5

iii

Railway Express Agency v. New York, 336 U. S. 106, 93 L. Ed. 533, 69 S. Ct. 463 (1949)	59, 60
Raleigh Fitkin-Paul Memorial Hospital v. Anderson, 42 N. J. 421, 201 A. 2d 537 cert. denied 377 U. S. 985 (1964)	61
Reynolds v. Sims, 377 U. S. 533, 84 S. Ct. 1362, 12 L. Ed. 2d 506 (1964)	59
Roe v. Wade, 314 F. Supp. 1217 (1970) (N. D. Tex. 1970)	2
Rosen v. Louisiana State Board of Medical Examiners, 318 F. Supp. 1217 (E. D. Louisiana 1970) (J. Cassi- bry dissenting)	4
Shapiro v. Thompson, 394 U. S. 618, 89 S. Ct. 1322 (1969) (J. Harlan dissenting)	59
Shelley v. Kraemer, 334 U. S. 1, 92 L. Ed. 161, 68 S. Ct. 836 (1948)	61
Shelton v. Tucker, 364 U. S. 479, 485, 81 S. Ct. 247, 5 L. Ed. 2d 231 (1960)	5
Skinner v. Oklahoma, 316 U. S. 535, 86 L. Ed. 1655, 62 S. Ct. 1110 (1942)	59
Steinberg v. Brown, 321 F. Supp. 741 (N. D. Ohio 1970) (J. Green dissenting)	3
Tomlin v. Laws, 301 Ill. 616, 134 N. E. 24 (1922)	63
Virginia v. Rives, 100 U. S. 313, 25 L. Ed. 667	61

BOOKS AND ARTICLES.

Cohen, M. R., The Process of Judicial Legislation, in Law and the Social Order (1933); also collected in Cohen, Readings in Jurisprudence and Legal Philosophy	60
---	----

Fuller, The Morality of Law, Yale University Press, p. 81H	60
Grey, The Nature and Sources of the Law (2 ed. 1921) pp. 172-173	60
Lucas, Federal Constitutional Limitations of the En- forcement and Administration of State Abortion Statutes, 46 N. C. L. Rev. 730, 744 (1968)	5
Pound, An Introduction to the Philosophy of Law, Yale University Press, p. 53	60
Suffolk University Law Review, 3 S. L. R. 225, Abor- tion, the Law and Defective Children: A Legal- Medical Study (Vol. III, Spring 1969, pp. 225-276). .	62
Tussman & Tenbrock, 37 Calif. L. Rev. 341 (1949), Selected Essays on Constitutional Law, 789 (1969)..	59
FOR MEDICAL ARTICLES SEE MEDICAL BIB- LIOGRAPHY.	

IN THE
Supreme Court of the United States
OCTOBER TERM, 1971.

No. 70-18

JANE ROE, ET AL.,
Appellants,
vs.
HENRY WADE,
Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF GEORGIA.

No. 70-40

MARY DOE, ET AL.,
Appellants,
vs.
ARTHUR K. BOLTON, ET AL.,
Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF TEXAS.

BRIEF AMICUS CURIAE OF CERTAIN PHYSICIANS,
PROFESSORS AND FELLOWS OF THE AMERICAN
COLLEGE OF OBSTETRICS AND GYNECOLOGY
IN SUPPORT OF APPELLEES.

I.

THE HUMANITY OF THE UNBORN OFFSPRING OF HUMAN PARENTS HAS BEEN THE CRITICAL ISSUE IN LOWER FEDERAL COURT ABORTION CASES.

The immediate and intended consequence of an induced abortion is the destruction of life of the unborn. It is in the light of this reality that this Court must consider and decide the profound and far-reaching issues in these abortion cases.

The *amici* are concerned physicians, many of whom are fellows of the American College of Obstetrics and Gynecology (FACOG), who *urge* this Court to consider the current medical and scientific evidence of the humanity of the unborn which is contained in this Brief.

The *amici* also urge this Court to give careful consideration to the section of this Brief concerning the medical complications of legally induced abortions. Any consideration of the "safety" of legally induced abortions must consider the full range of medical complications including early and late physical and psychological complications, as well as maternal and *child* mortality.

The Courts below reached their conclusions without considering whether the victim, i.e. the unborn, of the abortion has constitutionally protected rights. In *Roe v. Wade*,¹ the U. S. District Court for the Northern District of Texas, without once mentioning, discussing or considering whether the unborn is a "person" under the Fifth and Fourteenth Amendments, or otherwise has legally protected interests involved, concluded that the "Texas Abortion Laws must be declared unconstitutional because they deprive single women and married couples of their right, secured by the Ninth Amendment, to choose whether to have children."

1. *Roe v. Wade*, 314 F. Supp. 1217 (1970) at 1221 (N. D. Tex. 1970).

In *Doe v. Bolton*,² the U. S. District Court for the Northern District of Georgia touched, but only in passing, upon the primary issue in this litigation, i.e. the legal "personality" of the unborn for constitutional purposes. At one point in the opinion, the Court wrote that it did not "... (posit) the existence of a new being with its own identity and federal constitutional rights, . . .".³ Elsewhere in the opinion the Court, in denying a reconsideration of the Court's previous order revoking another's appointment as *guardian ad litem* for the unborn person, wrote that "... the Court does not postulate the existence of a new being with federal constitutional rights at any time during gestation".

The *Bolton* Court was thus able to conclude that, while procedures for obtaining an abortion may be controlled, the "reasons for which an abortion may be obtained" may not be regulated "because such action unduly restricts a decision sheltered by the constitutional right to privacy".⁴

The *Bolton* Court did point out that once conception has occurred and the embryo has formed, "... the decision to abort its development cannot be considered a purely private one affecting only husband and wife, man and woman".⁵

Other three-judge federal courts presented with the same clash of "rights" between mother and the unborn have not ignored the developments of many areas of the law which have found legal rights in the unborn. For example, in *Steinberg v. Brown*⁶ the majority gave careful consideration to both the rights of the woman and the unborn, and concluded that "... the state has a legitimate interest to

2. *Doe v. Bolton*, 319 F. Supp. 1048 (N. D. Ga. 1970).

3., *Ibid.* p. 1055.

4. *Ibid.* p. 1076.

5. *Ibid.* p. 1055.

6. 321 F. Supp. 741 (N. D. Ohio 1970) (J. Green dissenting).

legislate for the purpose of affording an embryonic or fetal organism an opportunity to survive.”⁷ This Court concluded that the state did have that right “... and on balance it is superior to the claimed right of a pregnant woman or anyone else to destroy the fetus except when necessary to preserve her own life.”⁸

In *Rosen v. Louisiana State Board of Medical Examiners*⁹ the Court recognized that it was not dealing merely with the question whether a woman has a generalized right to choose whether to bear children “... but instead with the more complicated question whether a pregnant woman has the right to cause the abortion of the embryo or fetus she carries in her womb.”¹⁰ Without deciding whether the unborn per se is a person protected by the constitution since that was not the issue that Court faced, the *Rosen* Court concluded that the state of Louisiana had intended to and could legitimately protect fetal life against destruction.¹¹

In *Corkey v. Edwards*¹² the Court concluded also that the issue involved ultimately a consideration of more than just the issue of whether a woman has a right not to bear children:

“The basic distinction between a decision whether to bear children which is made before conception and one which is made after conception is that the first contemplates the creation of a new human organism, but the latter contemplates the destruction of such an organism already created.”¹³

7. *Ibid.* p. 746.

8. *Ibid.* p. 746.

9. 318 F. Supp. 1217 (E. D. Louisiana 1970) (J. Cassibry dissenting).

10. *Ibid.* p. 1223.

11. *Ibid.* p. 1225.

12. *Corkey v. Edwards*, 322 F. Supp. 1248 (N. D. North Carolina 1971).

13. *Ibid.* p. 1252.

Finding protection of fetal life an adequate state interest in invading the woman's claimed right of privacy, the *Corkey* Court concluded:

"To determine the state interest we shall not attempt to choose between extreme positions. Whether possessing a soul from the moment of conception or mere protoplasm, the fertilized egg is, we think, 'unique as a physical entity', Lucas, *Federal Constitutional Limitations of the Enforcement and Administration of State Abortion Statutes*, 46 N. C. L. Rev. 730, 744 (1968), with the potential to become a person. Whatever that entity is, the state has chosen to protect its very existence. The state's power to protect children is a well established constitutional maxim. See, *Shelton v. Tucker*, 364 U. S. 479, 485, 81 S. Ct. 247, 5 L. Ed. 2d 231 (1960); *Prince v. Massachusetts*, 321 U. S. 158, at 166-168, 64 S. Ct. 438, 88 L. Ed. 645. That this power should be used to protect a fertilized egg or embryo or fetus during the period of gestation embodies no logical infirmity, but would seemingly fall within the 'plenary power of government'. *Poe v. Ullman*, 367 U. S. 497, at 539, 81 S. Ct. 1752, 6 L. Ed. 2d 989 (Harlan, J., dissenting). That there is a state interest has until recently been taken for granted. History sides with the state."¹⁴

Even this brief review of five federal decisions involving the constitutionality of state abortion laws makes it clear that whether or not the Court considers the developing humanity of the unborn is critical in its resolution of the issues.¹⁵

The *amici* therefore ask this Court to consider the material in this Brief concerning the modern medical discoveries of the development of the unborn.

14. *Ibid.* p. 1253.

15. Even the *Bolton* Court preserved the Georgia statute after alluding in its decision to the creation of a new life after conception, thus making any decision involving abortion one affecting the state since it involved developing human life.

An expansion of the right to privacy to include the right of a woman to have an abortion without considering the interests of the unborn person decides this question against the unborn. The necessary consequence of that expansion would be a direct and unavoidable conflict between the unborn person's right to life and the woman's extended right of privacy. Assuming such a conflict, it is the position of the *amici* that the more fundamental and established of the conflicting rights must prevail where they clash. The right to life is most certainly the most fundamental and established of the rights involved in the cases facing the Court today.

II.

THE UNBORN OFFSPRING OF HUMAN PARENTS IS AN AUTONOMOUS HUMAN BEING.*

Even before implantation in the wall of the uterus the unborn child is responsible for the maintenance of the pregnant state in the maternal metabolism (1). The child whose tissue is antigenically different from the mother sets up protective mechanisms to prevent maternal immunologic responses from causing fetal distress (2). The newly formed child has a remarkable degree of metabolic autonomy (3). For example, the fetal endocrine system functions autonomously (4).

The recent recognition of this autonomy has led to the development of new medical specialties concerning the unborn child from the earliest stages of the pregnancy (56).

Modern obstetrics has discarded as unscientific the concept that the child in the womb is but tissue of the mother. As Dr. H. M. I. Liley, the New Zealand pediatrician, and

*In this section the citations are according to medical journal practices. The numbers in the parenthesis refer to the correspondingly numbered work in the medical bibliography.

research assistant to her famous husband, Dr. Albert Liley who perfected the intrauterine transfusion, has said:

“Another medical fallacy that modern obstetrics discards is the idea that the pregnant woman can be treated as a patient alone. No problem in fetal health or disease can any longer be considered in isolation. At the very least two people are involved, the mother and her child.” (5 at p. 207.)

The courts have also abandoned that concept (7):

“We ought to be safe in this respect in saying that legal separability should begin where there is biological separability. We know something more of the actual process of conception and foetal development now than when some of the common law cases were decided; and what we know makes it possible to demonstrate clearly that separability begins at conception.

The mother’s biological contribution from conception on is nourishment and protection; but the foetus has become a separate organism and remains so throughout its life. That it may not live if its protection and nourishment are cut off earlier than the viable stage of its development is not to destroy its separability; it is rather to describe the conditions under which life will not continue.”

Yet the attack on the statutes below assume this discredited scientific concept and argues that abortions should be considered no differently than any medical measure taken to protect maternal health (see Texas appellant’s brief, pp. 94-98), thus completely ignoring the developing human being in the mother’s womb.

It is our task in the next subsections to show how clearly and conclusively modern science—embryology, fetology, genetics, perinatology, all of biology—establishes the humanity of the unborn child. We submit that the data not only shows the constitutionality of the legislature’s effort to save the unborn from indiscriminate extermination, *but*

in fact suggests a duty to do so. We submit also that no physician who understands this will argue that the law is vague, uncertain or overbroad for he will understand that the law calls upon him to exercise his art for the benefit of his *two* patients: mother *and* child.

A. The Unborn Person Is Also a Patient.

From conception the child is a complex, dynamic, rapidly growing organism. By a natural and continuous process the single fertilized ovum will, over approximately nine months, develop into the trillions of cells of the newborn. The natural end of the sperm and ovum is death unless fertilization occurs. At fertilization a new and unique being is created which, although receiving one-half of its chromosomes from each parent, is really unlike either (8) (6) (9) (10 at p. 18).

About seven to nine days after conception, when there are already several hundred cells of the new individual formed, contact with the uterus is made and implantation begins. Blood cells begin at 17 days and a heart as early as 18 days. This embryonic heart which begins as a simple tube starts irregular pulsations at 24 days, which, in about one week, smooth into a rhythmic contraction and expansion (8) (9) (10) (6).

Straus, et al. have shown that the ECG on a 23 mm embryo (7.5 weeks) presents the existence of a functionally complete cardiac system and the possible existence of a Myoneural or humoral regulatory mechanism. All the classic elements of the adult ECG were seen (11). Marcel and Exchaquet observed occasional contractions of the heart in a 6 mm (2 week) embryo. They also obtained tracings exhibiting the classical elements of the ECG tracing of an adult in a 15 mm embryo (5 weeks) (12).

One commentator has indicated that about 4 days post-conception under a special microscope the prospective sex can already be determined (10 at p. 23).

Commencing at 18 days the developmental emphasis is on the nervous system even though other vital organs, such as the heart, are commencing development at the same time. Such early development is necessary since the nervous system integrates the action of all other systems. By the end of the 20th day the foundation of the child's brain, spinal cord and entire nervous system will have been established. By the 6th week after conception this system will have developed so well that it is controlling movements of the baby's muscles, even though the woman may not be aware that she is pregnant. By the 33rd day the cerebral cortex, that part of the central nervous system that governs motor activity as well as intellect may be seen (8) (13) (10).

The baby's eyes begin to form at 19 days. By the end of the first month the foundation of the brain, spinal cord, nerves and sense organs is completely formed. By 28 days the embryo has the building blocks for 40 pairs of muscles situated from the base of its skull to the lower end of its spinal column. By the end of the first month the child has completed the period of relatively greatest size increase and the greatest physical change of a lifetime. He or she is ten thousand times larger than the fertilized egg and will increase its weight six billion times by birth, having in only the first month gone from the one cell state to millions of cells (8) (9) (10) (6) (13). [See Fig. 1.]

Shettles and Rugh describe this first month of development as follows:

"This, then, is the great planning period, when out of apparently nothing comes evidence of a well integrated individual, who will form along certain well-tried patterns, but who will, in the end, be distinguishable from

10

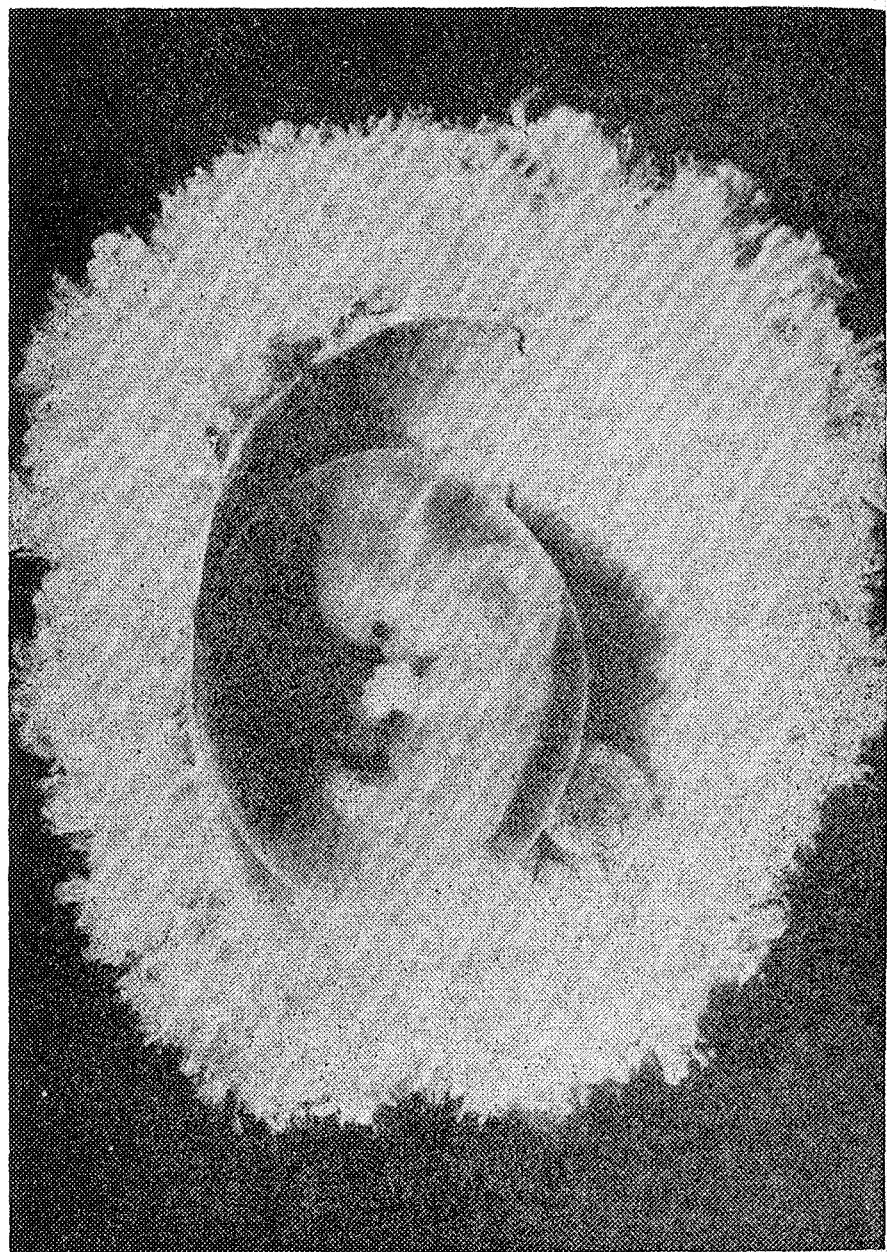


Fig. 1—40 days.

every other human being by virtue of ultra microscopic chromosomal differences." (10 at p. 35.)

By the beginning of the second month the unborn child, small as it is, looks distinctly human. (See Fig. 1.) Yet, by this time the child's mother is not even aware that she is pregnant (6).

As Shettles and Rugh state:

"And as for the question, 'when does the embryo become human?' the answer is that it *always* had human potential, and *no other*, from the instant the sperm and the egg came together because of its chromosomes." (Emphasis in original.) (10 at p. 40.)

At the end of the first month the child is about $\frac{1}{4}$ of an inch in length. At 30 days the primary brain is present and the eyes, ears and nasal organs have started to form. Although the heart is still incomplete, it is beating regularly and pumping blood cells through a closed vascular system (8). The child and mother do not exchange blood, the child having from a very early point in its development its own and complete vascular system (8) (9) (10) (12) (13).

Earliest reflexes begin as early as the 42nd day. The male penis begins to form. The child is almost $\frac{1}{2}$ inch long and cartilage has begun to develop (8) (9). [See Fig. 2.]

Even at $5\frac{1}{2}$ weeks the fetal heartbeat is essentially similar to that of an adult in general configuration (12) (13). The energy output is about 20% that of the adult, but the fetal heart is functionally complete and normal by 7 weeks (12) (13). Shettles and Rugh describe the child at this point of its development as a 1-inch miniature doll with a large head, but gracefully formed arms and legs and an unmistakably human face (10 at p. 54). [See Fig. 2]

By the end of the seventh week we see a well proportioned small scale baby. In its seventh week, it bears the

12

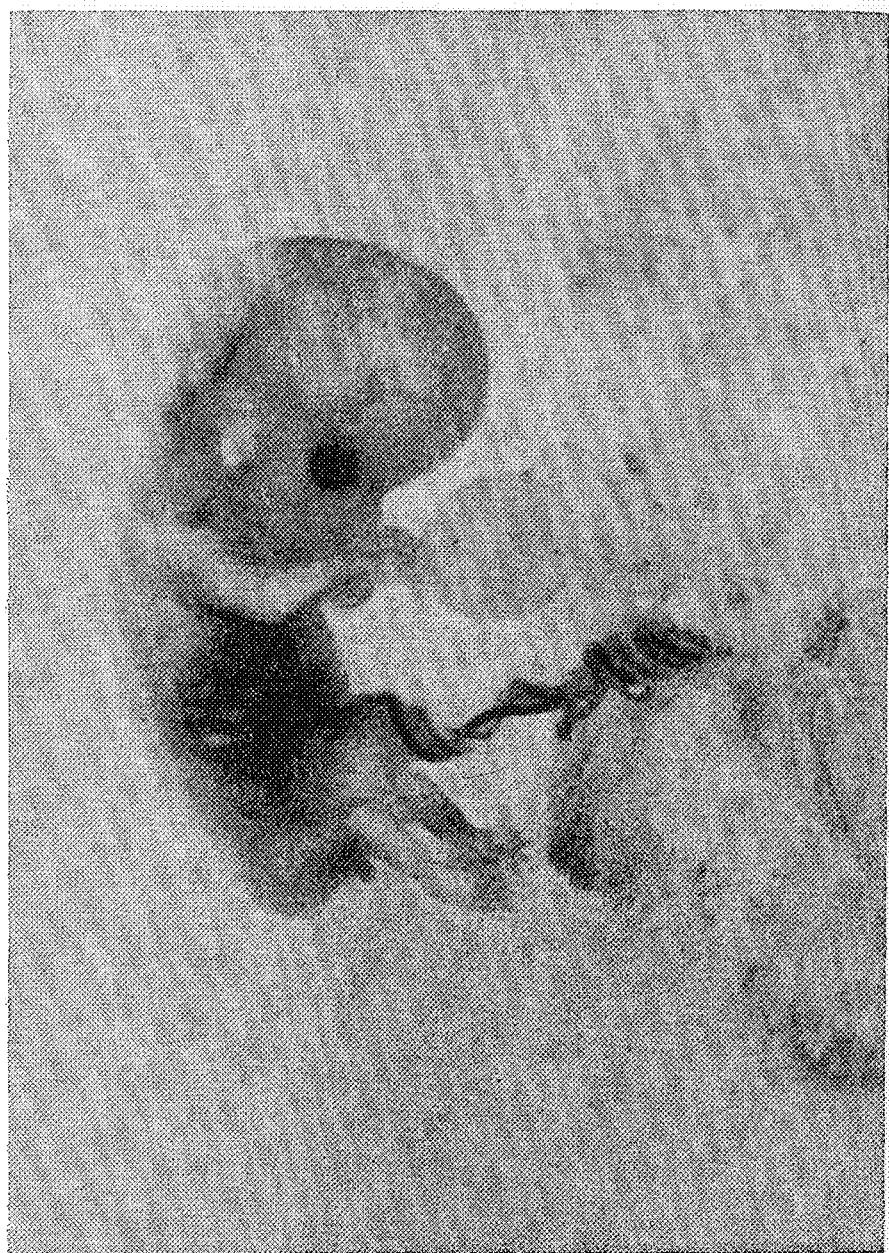


Fig. 2—6 weeks.

familiar external features and all the internal organs of the adult, even though it is less than an inch long and weighs only 1/30th of an ounce. The body has become nicely rounded, padded with muscles and covered by a thin skin. The arms are only as long as printed exclamation marks, and have hands with fingers and thumbs. The slower growing legs have recognizable knees, ankles and toes (8) (9) (10) (6). [See Figs. 3 and 4]

The new body not only exists, it also functions. The brain in configuration is already like the adult brain and sends out impulses that coordinate the function of the other organs. The brain waves have been noted at 43 days [14]. The heart beats sturdily. The stomach produces digestive juices. The liver manufactures blood cells and the kidneys begin to function by extracting uric acid from the child's blood (13) (49). The muscles of the arms and body can already be set in motion (15).

After the eighth week no further primordia will form; *everything* is already present that will be found in the full



Fig. 3—9 weeks.

7 weeks.

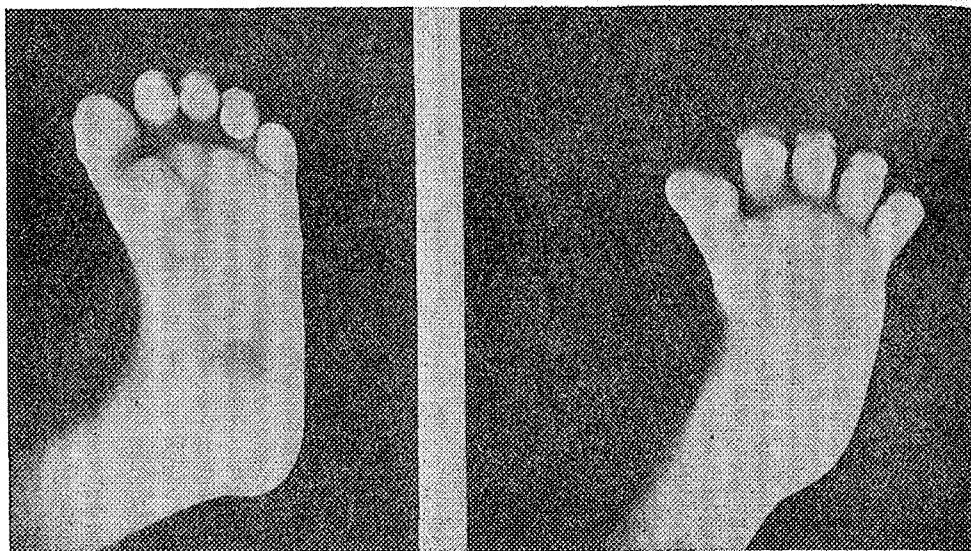


Fig. 4—10 weeks.

6 weeks.

term baby (10 at p. 71). As one author describes this period:

“A human face with eyelids half closed as they are in someone who is about to fall asleep. Hands that soon will begin to grip, feet trying their first gentle kicks.”
(10 at p. 71)

From this point until adulthood, when full growth is achieved somewhere between 25 and 27 years, the changes in the body will be mainly in dimension and in gradual refinement of the working parts (8) (46).

The development of the child, while very rapid, is also very specific. The genetic pattern set down in the first day of life instructs the development of a specific anatomy. The ears are formed by seven weeks and are specific, and may resemble a family pattern (16). The lines in the hands start to be engraved by eight weeks and remain a distinctive feature of the individual (45) (49). [See Fig. 3]

The primitive skeletal system has completely developed by the end of six weeks (8) (9). This marks the end of the child's embryonic (from Greek, to swell or teem within) period. From this point, the child will be called a fetus (Latin, young one or offspring) (9). [See Fig. 2]

In the third month, the child becomes very active. By the end of the month he can kick his legs, turn his feet, curl and fan his toes, make a fist, move his thumb, bend his wrist, turn his head, squint, frown, open his mouth, press his lips tightly together (15). He can swallow and drink the amniotic fluid that surrounds him. Thumb sucking is first noted at this age. The first respiratory motions move fluid in and out of his lungs with inhaling and exhaling respiratory movements (13) (15). [See Fig. 5]

The movement of the child has been recorded at this early stage by placing delicate shock recording devices on the mother's abdomen and direct observations have been made by the famous embryologist, Davenport Hooker, M.D. Over the last thirty years, Dr. Hooker has recorded the movement of the child on film, some as early as six weeks of age. His films show that prenatal behavior develops in an orderly progression (15) (17) (18).

The prerequisites for motion are muscles and nerves. In the sixth to seventh weeks, nerves and muscles work together for the first time (8). If the area of the lips, the first to become sensitive to touch, is gently stroked, the child responds by bending the upper body to one side and making a quick backward motion with his arms. This is called a total pattern response because it involves most of the body, rather than a local part. Localized and more appropriate reactions such as swallowing follow in the third month. By the beginning of the ninth week, the baby moves spontaneously without being touched. Sometimes his whole body swings back and forth for a few moments. By eight and a half weeks the eyelids and the palms of the

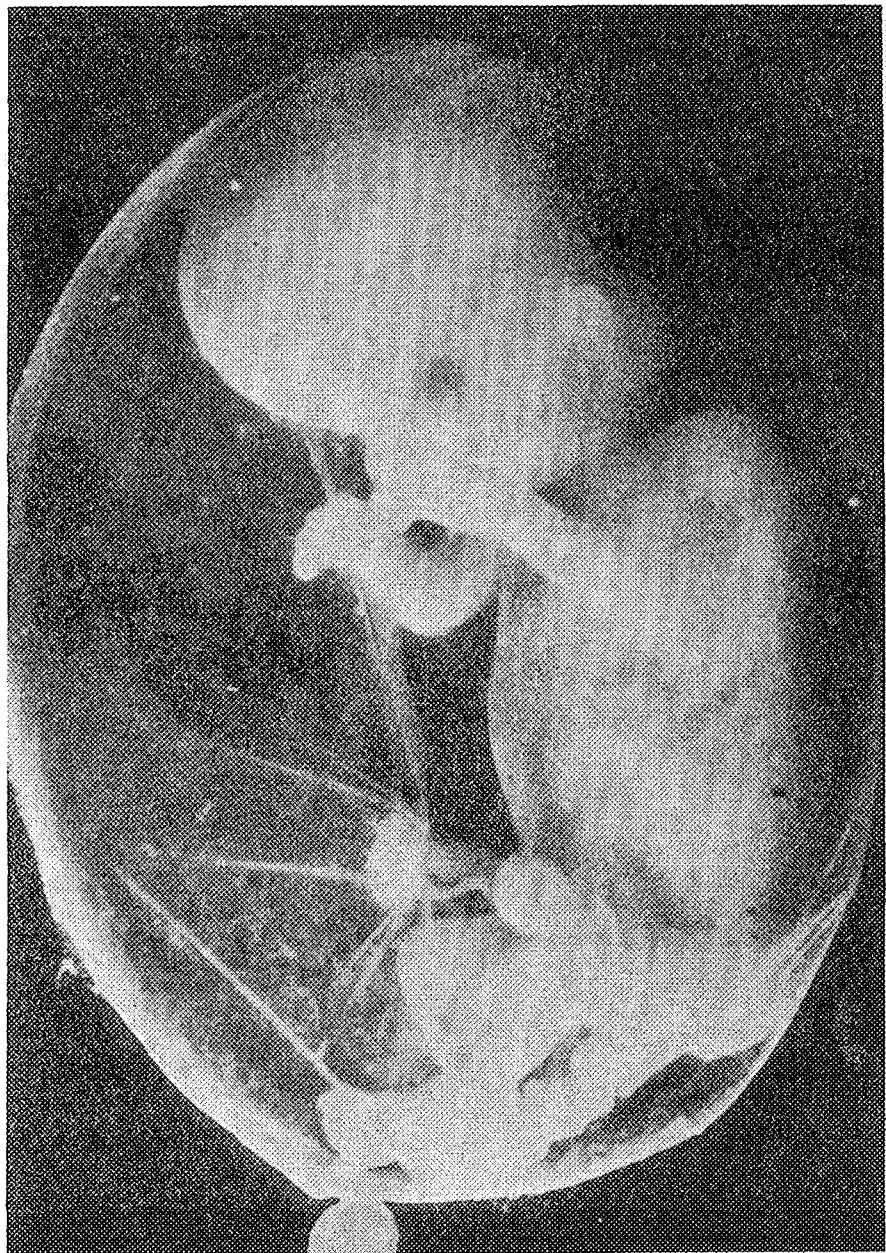


Fig. 5—12 weeks.

hands become sensitive to touch. If the eyelid is stroked, the child squints. On stroking the palm, the fingers close into a small fist (17) (15) (13) (64).

In the ninth and tenth weeks, the child's activity leaps ahead. Now if the forehead is touched, he may turn his head away and pucker up his brow and frown. He now has full use of his arms and can bend the elbow and wrist independently. In the same week, the entire body becomes sensitive to touch (7) (15). [See Fig. 6]

The twelfth week brings a whole new range of responses. The baby can now move his thumb in opposition to his fingers. He now swallows regularly. He can pull up his upper lip; the initial step in the development of the sucking reflex (5). By the end of the twelfth week, the quality of muscular response is altered. It is no longer marionette-like or mechanical—the movements are now graceful and fluid, as they are in the newborn. The child is active and the reflexes are becoming more vigorous. *All this is before the mother feels any movement* (5) (64). [See Figs. 5 and 7]

The phenomenon of "quickenings" reflects maternal sensitivity and not fetal competence.* Dr. Hooker states that fetal activity occurs at a very early age normally in utero and some women may feel it as early as thirteen weeks.

*If the Court is interested in the actual medical history of nineteenth century legislative opposition to abortion, it may consult the American Medical Association, *1846-1952 Digest of Official Actions* (edited F. J. L. Blasingame 1959), p. 66, where a list of the repeated American Medical Association attacks on abortion are compiled. It will be seen that the great medical battle of the nineteenth century was to persuade legislatures to eliminate the requirement of quickening and to condemn abortion from conception, see Isaac M. Quimby *Introduction to Medical Jurisprudence*, Journal of American Medical Association, August 6, 1887, Vol. 9, p. 164 and H. C. Markham *Foeticide and Its Prevention*, ibid, Dec. 8, 1888, Vol. 11, p. 805. It will be seen that the Association unanimously condemned abortion as the destruction of "human life" American Medical Association, *Minutes of the Annual Meeting 1859*, The American Medical Gazette 1859, Vol. 10, p. 409.

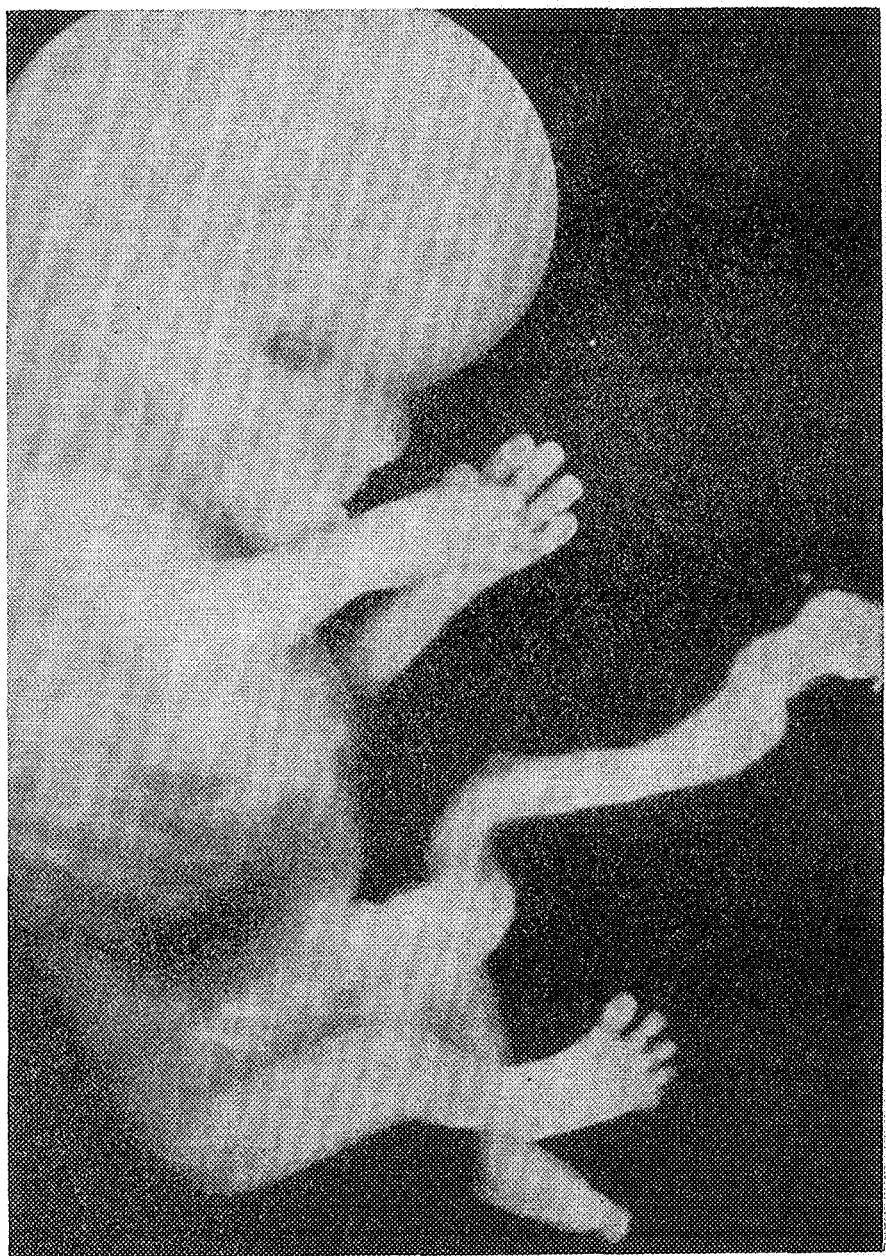


Fig. 6—10 weeks.

Others feel very little as late as twenty weeks and some are always anxious because they do not perceive movement (17).

Dr. Liley states:

"Historically 'quicken' was supposed to delineate the time when the fetus became an independent human being possessed of a soul. Now, however, we know that while he may have been too small to make his motions felt, the unborn baby is active and independent long before his mother feels him. Quicken is a maternal sensitivity and depends on the mother's own fat, the position of the placenta and the size and strength of the unborn child." (5 at pp. 37, 38)

Every child shows a distinct individuality in his behavior by the end of the third month. This is because the actual structure of the muscles varies from baby to baby. The alignment of the muscles of the face, for example, follow an inherited pattern. The facial expressions of the baby in his third month are already similar to the facial expression of his parents (13) (14) (49). [See Figs. 5 and 7]

Dr. Arnold Gesell states that: "By the end of the first trimester (12th week) the fetus is a sentient moving being. We need not pause to speculate as to the nature of his psychic attributes but we may assert that the organization of his psychosomatic self is now well under way." (49 at p. 65)

Further refinements are noted in the third month. The fingernails appear. The child's face becomes much prettier. His eyes, previously far apart, now move closer together. The eyelids close over the eyes. Sexual differentiation is apparent in both internal and external sex organs, and primitive eggs and sperm are formed. The vocal cords are completed. In the absence of air they cannot produce sound; the child cannot cry aloud until birth, although he is capable of crying long before (8) (13) (9) (5).

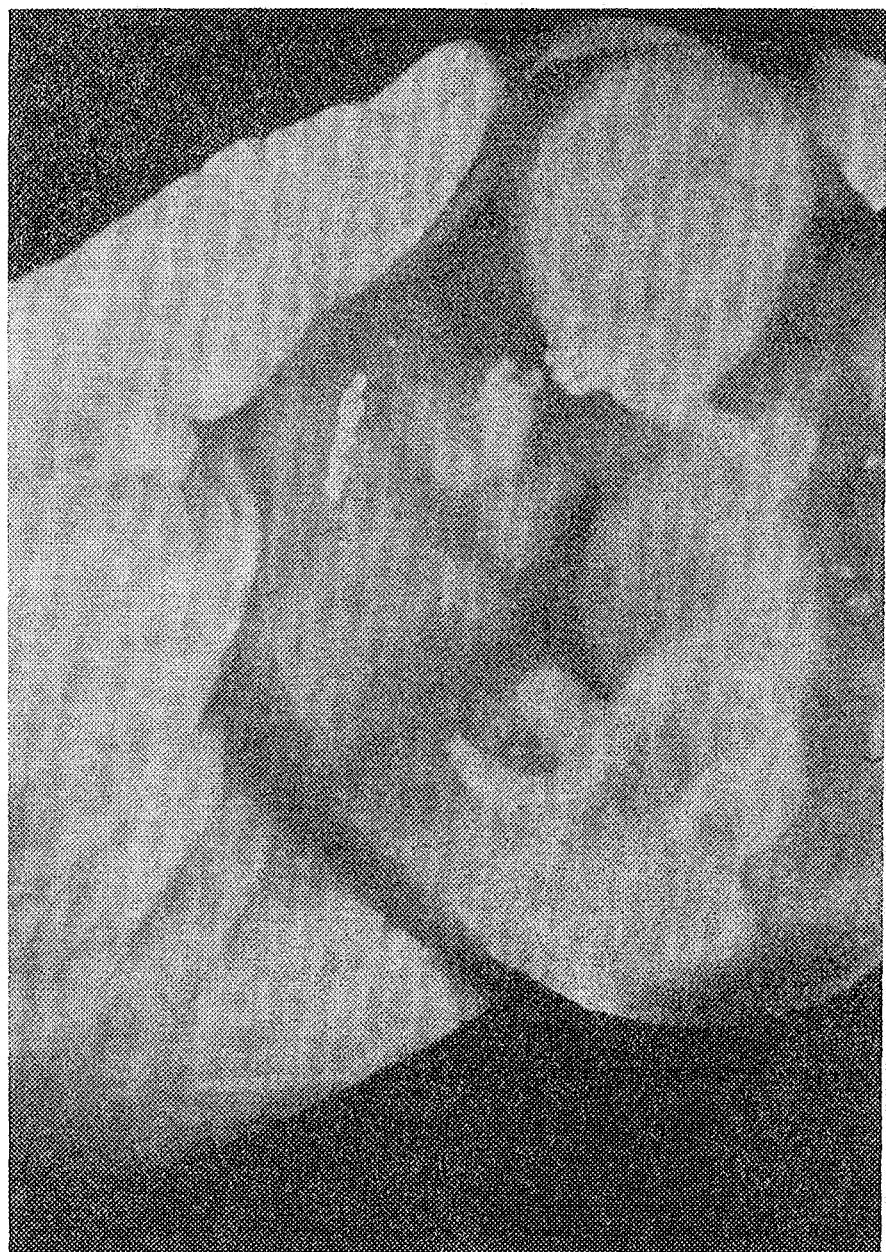


Fig. 7—12 weeks.

Dr. Liley relates the experience of a doctor who injected an air bubble into an unborn baby's (eight months) amniotic sac in an attempt to locate the placenta on x-ray. It so happened that the air bubble covered the unborn baby's face. The moment the unborn child had air to inhale, his vocal cords became operative and his crying became audible to all present, including the physician and technical help. The mother telephoned the doctor later to report that whenever she lay down to sleep, the air bubble got over the unborn baby's face and he was crying so loudly he was keeping both her and her husband awake (5 at p. 50) (15 at p. 75).

The taste buds and salivary glands develop in this month, as do the digestive glands in the stomach. When the baby swallows amniotic fluid, its contents are utilized by the child. The child starts to urinate (8) (13) (19).

From the twelfth to the sixteenth week, the child grows very rapidly (50). His weight increases six times, and he grows to eight to ten inches in height. For this incredible growth spurt the child needs oxygen and food. This he receives from his mother through the placental attachment —much like he receives food from her after he is born. His dependence does not end with expulsion into the external environment (8) (9) (13) (6) (10). We now know that the placenta belongs to the baby, not the mother, as was long thought (5). [See Fig. 8]

In the fifth month, the baby gains two inches in height and ten ounces in weight. By the end of the month he will be about one foot tall and will weigh one pound. Fine baby hair begins to grow on his eyebrows and on his head and a fringe of eyelashes appear. Most of the skeleton hardens. The baby's muscles become much stronger, and as the child becomes larger his mother finally perceives his many activities (8). The child's mother comes to recognize the movement and can feel the baby's head, arms and legs.

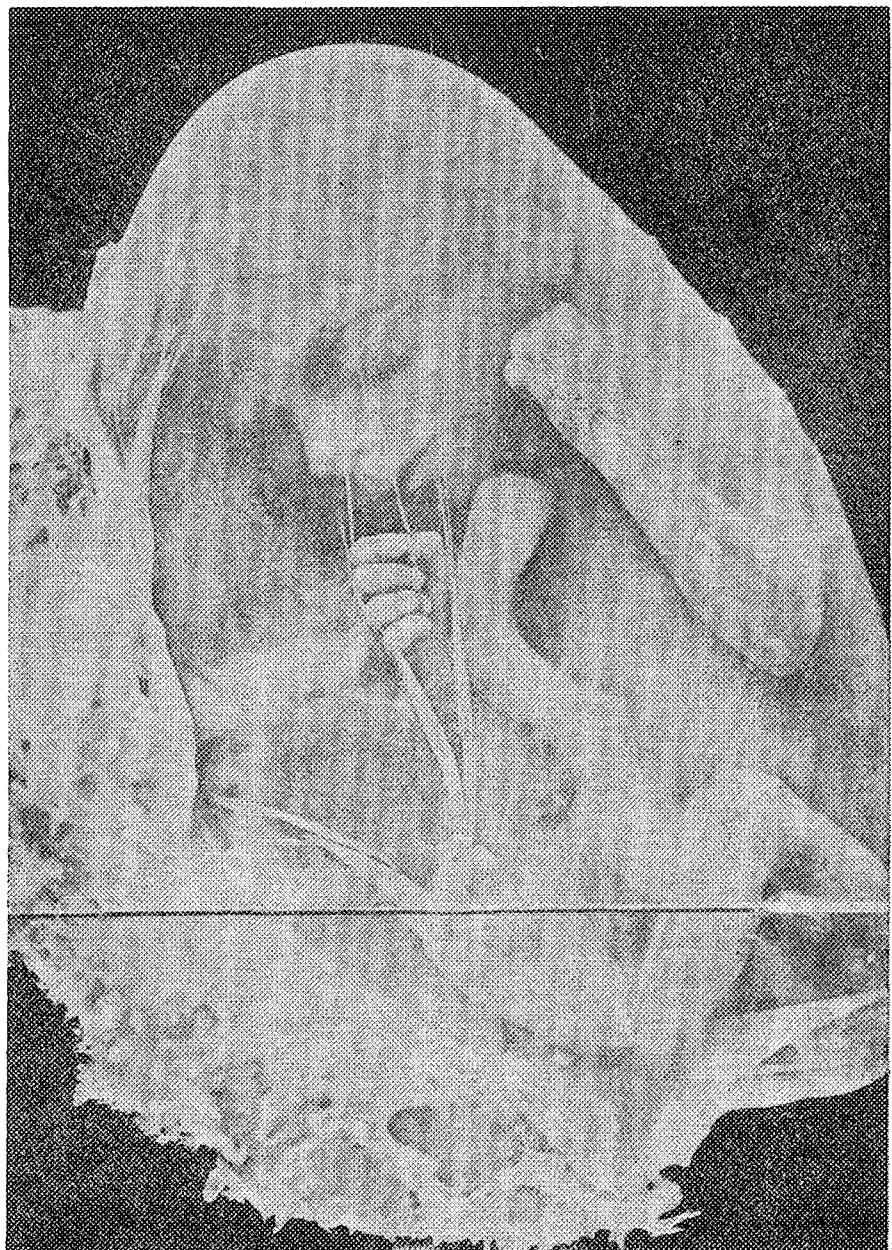


Fig. 8—16 weeks.

She may even perceive a rhythmic jolting movement—fifteen to thirty per minute. This is due to the child hiccoughing (13) (5) (6). The doctor can already hear the heartbeat with his stethoscope (8) (13) (6). [See Figs. 9 and 10]

The baby sleeps and wakes just as it will after birth (63) (5). When he sleeps he invariably settles into his favorite position called his "lie". Each baby has a characteristic lie (5). When he awakens he moves about freely in the buoyant fluid turning from side to side, and frequently head over heel. Sometimes his head will be up and sometimes it will be down. He may sometimes be aroused from sleep by external vibrations. He may wake up from a loud tap on the tub when his mother is taking a bath. A loud concert or the vibrations of a washing machine may also stir him into activity (13). The child hears and recognizes his mother's voice before birth (19) (20). Movements of the mother, whether locomotive, cardiac or respiratory, are communicated to the child (19).

In the sixth month, the baby will grow about two more inches, to become fourteen inches tall. He will also begin to accumulate a little fat under his skin and will increase his weight to a pound and three-quarters. This month the permanent teeth buds come in high in the gums behind the milk teeth. Now his closed eyelids will open and close, and his eyes look up, down and sideways. Dr. Liley feels that the child may perceive light through the abdominal wall (20). *Dr. Still has noted that electroencephalographic waves have been obtained in forty-three to forty-five day old fetuses, and so conscious experience is possible after this date (14).*

The electrophysiologic rhythm develops early. Detailed EEG tracings have been taken directly from the head end of the 16mm (crown rump) human embryo at 40-odd days of gestation in Japan (172).



Fig. 9—17 weeks.



Fig. 10—18 weeks.

As one writer said:

"Thus at an early prenatal stage of life the EEG reflects a distinctly individual pattern that soon becomes truly personalized." (173)

In the sixth month, the child develops a strong muscular grip with his hands. He also starts to breathe regularly and can maintain respiratory response for twenty-four hours if born prematurely. He may even have a slim chance of surviving in an incubator. The youngest children known to survive were between twenty to twenty-five weeks old (13). The concept of *viability* is not a static one. Dr. Andre Hellegers of Georgetown University states that 10% of children born between twenty weeks and twenty-four weeks gestation will survive (44A and 44B). Modern medical

intensive therapy has salvaged many children that would have been considered non-viable only a few years ago. The concept of an artificial placenta may be a reality in the near future and will push the date of viability back even further, and perhaps to the earliest stages of gestation (43) (48). After twenty-four to twenty-eight weeks the child's chances of survival are much greater.

Our review has covered the first six months of life. By this time the individuality of this human being is clear to all unbiased observers. Dr. Arnold Gesell has said:

"Our own repeated observation of a large group of fetal infants (an individual born and living at any time prior to forty weeks gestation) left us with no doubt that psychologically they were individuals. Just as no two looked alike, so no two behaved precisely alike. One was impassive when another was alert. Even among the youngest there were discernable differences in vividness, reactivity and responsiveness. These were genuine individual differences, already prophetic of the diversity which distinguishes the human family." (49 at p. 172)

B. The Doctor Treats the Unborn Just as He Does Any Patient.

When one views the present state of medical science, we find that the artificial distinction between born and unborn has vanished. As Dr. Liley says:

"In assessing fetal health, the doctor now watches changes in maternal function very carefully, for he has learned that it is actually the mother who is a passive carrier, while the fetus is very largely in charge of the pregnancy." (5 at p. 202) (65)

The new specialty of fetology is being replaced by a newer specialty called perinatology which cares for its patients from conception to about one year of extrauterine existence (56). The Cumulative Index Medicus for 1969 con-

tains over 1400 separate articles in fetology. For the physician, the life process is a continuous one, and observation of the patient must start at the earliest period of life. (See 42 U. S. C. 289(d).)

A large number of sophisticated tools have been developed that now allow the physician to observe and measure the child's reactions from as early as ten weeks. At ten weeks it is possible to obtain the electrocardiogram of the unborn child (22) (11) (12). At this stage also the heart sounds can be detected with new ultrasonic techniques (45). The heart has already been pumping large volumes of blood to the fast growing child for six weeks. With present day technology, the heart of the child is now monitored during critical periods of the pregnancy by special electronic devices, including radiotelemetry (23) (60). Computer analysis of the child's ECG has been devised and promises more accurate monitoring and evaluation of fetal distress (14). A number of abnormal electrocardiographic patterns have been found before birth. These patterns forewarn the physician of trouble after delivery (57) (58) (62). Analysis of heart sounds through phonocardiography is also being done (25) (53).

With the new optical equipment, a physician can now look at the amniotic fluid through the cervical canal and predict life-threatening problems that are reflected by a change in the fluid's color and turbidity (26) (27). In the future, the physician will undoubtedly be able to look directly at the growing child using new fiber optic devices (through a small puncture in the uterus) and thereby diagnose and prescribe specific treatment to heal or prevent illness or deformity (21) (55).

For the child with severe anemia, the physician now gives blood, using an unusual technique developed by Dr. A. Liley of New Zealand. This life saving measure is carried out by using new image intensifier x-ray equipment. A

needle is placed through the abdominal wall of the mother and into the abdominal cavity of the child. For this procedure the child must be sedated (via maternal circulation) and given pain relieving medication, since it experiences pain from the puncture and would move away from the needle if not premedicated. As Dr. H. M. I. Liley states:

“When doctors first began invading the sanctuary of the womb, they did not know that the unborn baby would react to pain in the same fashion as a child would. But they soon learned that he would. By no means a ‘vegetable’ as he has so often been pictured, the unborn knows perfectly well when he has been hurt, and he will protest it just as violently as would a baby lying in a crib.” (5 at p. 50)

The gastro-intestinal tract of the child is outlined by a contrast media that was previously placed in the amniotic fluid and then swallowed by the child (52). We know that the child starts to swallow as early as fourteen weeks (5).

Some children fail to get adequate nutrition when *in utero*. This problem can be predicted by measuring the amount of estradiol in the urine of the mother and the amount of PSP excreted after it is injected into the child (29). Recent work indicates that these nutritional problems may be solved by feeding the child more directly by introducing nutrients into the amniotic fluid which the child normally swallows (250 to 700 cc a day). In a sense, we well may be able to offer the child that is starving because of a placental defect a nipple to use before birth (30).

The amniotic fluid surrounding the unborn child offers the physician a convenient and assessable fluid that he can now test in order to diagnose a long list of diseases, just as he tests the urine and blood of his adult patients. The doctor observes the color and volume of amniotic fluid and tests it for cellular element enzymes and other chemicals. He can tell the sex of his patient and gets a more precise

idea of the exact age of the child from this fluid. He can diagnose conditions such as the adrenogenital syndrome, hemolytic anemia, adrenal insufficiency, congenital hyper-anemia and glycogen storage disease. Some of these, and hopefully in the future all of these, can be treated before birth (31) (32) (33) (34) (35) (36) (37).

At the time of labor, the child's blood can be obtained from scalp veins and the exact chemical balance determined before birth. These determinations have saved many children who would not have been considered in need of therapy had these tests not been done (38) (39). The fetal EEG has also been monitored during delivery (61).

A great deal of work has been done to elucidate the endocrinology of the unborn child. Growth hormone is elaborated by the child at seventy-one days, and ACTH has been isolated at eleven weeks gestation (40). The thyroid gland has been shown to function at ten and a half weeks (51), and the adrenal glands also at about this age (40). The sex hormones—estrogen and androgen—are also found as early as nine weeks (40).

Surgical procedures performed on the unborn child are few. However, surgical cannulation of the blood vessels in an extremity of the child has been carried out in order to administer blood. Techniques are now being developed on animals that will be applicable to human problems involving the unborn child. Fetal surgery is now a reality in the animal laboratory, and will soon offer help to unborn patients (28) (41) (42).

The whole thrust of medicine is in support of the notion that the child in its mother is a distinct individual in need of the most diligent study and care, and that he is also a patient whom science and medicine treats just as it does any other person (21) (5).

This review of the current medical status of the unborn serves us several purposes. Firstly, it shows conclusively

the humanity of the fetus by showing that human life is a continuum which commences in the womb. There is no magic in birth. The child is as much a child in those several days before birth as he is those several days after. The maturation process, commenced in the womb, continues through the post-natal period, infancy, adolescence, maturity and old age. Dr. Arnold Gesell points out in his famous book that no king ever had any other beginning than have had all of us in our mother's womb (49).

Secondly, we have shown that quickening is a relative concept which depends upon the sensitivity of the mother, the position of the placenta, and the size of the child. At the common law, the fetus was not considered alive before quickening*, and therefore we can understand why commentators like Bracton and Coke placed so much emphasis on quickening. But modern science has proven conclusively that any law based upon quickening is based upon shifting sands—a subjective standard even different among races. We now know that life precedes quickening; that quickening is nothing other than the mother's first subjective feeling of movement in the womb. Yet the fetus we know has moved before this. In spite of these advances in medicine, some courts and legislatures have continued to consider quickening as the point when life is magically infused into the unborn. (See *Babbitt v. McCann*, 310 F. Supp. 293) No concept could be further from the scientific truth.

Thirdly, we have seen that viability is also a flexible standard which changes with the advance of these new medical disciplines some of which are hardly a half dozen years old. New studies in artificial placentas indicates that

*See 4 Blackstone, *Commentaries on the Laws of England*, 394-95 (1769) where it is said:

"In case this plea is made in stay of execution, the judge must direct a jury of twelve matrons or discreet women to inquire the fact, and if they bring in their verdict 'quick with child' (for barely, 'with child', unless it be alive in the womb, is not sufficient, . . .)"

viability will become an even more relative concept and children will survive outside of the womb at even earlier ages than the 20-28 weeks in the past. Fetology and perinatology are only a few years old as specialties. Obstetrics is only sixty years old as a specialty.

Fourthly, we have seen that the unborn child is as much a patient as is the mother. In all the literature opting for permissive abortion, this simple truth is ignored. There are many doctors who know that the unborn is also their patient and that they must exercise their art for the benefit of both mother and child. When the physician accepts that he has two patients, he has no difficulty applying his skill for the benefit of child *and* mother. Every doctor practicing can tell this court when in his medical judgment an abortion is necessary to preserve life. There is no medical mystery on that point. A review of the relevant obstetrics texts will list the indications—psychiatric as well—for therapeutic abortion*. When the doctor makes the decision

*See Quay, *Justifiable Abortion*, 49 Georgetown Law Journal 173, 1960, pp. 180-241, where the medical reasons for therapeutic abortions as stated in the standard obstetric works from 1903 to 1960 are stated and analyzed. Dr. Guttmacher has stated:

“On the whole, the over-all frequency of therapeutic abortion is on the decline. This is due to two facts: first, cures have been discovered for a number of conditions which previously could be cured only by termination of pregnancy; and second, there has been a change in medical philosophy. Two decades ago, the accepted attitude of the physicians was that if a pregnant woman were ill, the thing to do would be to rid her of her pregnancy. Today it is felt that unless the pregnancy itself intensifies the illness, nothing is accomplished by the abortion.” (66 at p. 13) (See also 67).

Dr. Guttmacher has also said:

“Today it is possible for almost any patient to be brought through pregnancy alive, unless she suffers from a fatal illness such as cancer or leukemia and, if so, abortion would be unlikely to prolong, much less save, life.” (68 at p. 9).

Dr. Guttmacher has also said:

“There is little evidence that pregnancy in itself worsens a psychosis, either intensifying it or rendering prognosis for full recovery less likely.” (69 at p. 121).

he must not consider the unborn as "mere tissue of the mother" or he will certainly weigh it no more in the balance than any other replaceable tissue of the mother.

III.

MEDICAL HAZARDS OF LEGALLY INDUCED ABORTION.

The medical hazards of legally induced abortion are all too often compared to the safety of a tonsillectomy or the "proverbial tooth extraction". (See Texas Appellant's brief p. 33.) Data presented from Eastern European mortality statistics have often been used to produce such claims as "it is X-times safer to have an abortion than to carry the child to term". These claims have been widely published in newspapers and lay periodicals; when made by the non-professional, they are forgivable; when made by "medical experts", one can only assume that these "experts" have allowed a desire for "social change" to fog their ability to distinguish first-rate from second-rate medical care.

The world's medical literature does not support such claims. The medical hazards of legal abortion should be presented to the Court in their total perspective through an analysis of this literature. It is imperative to note that when one focuses only on the legal abortion mortality rates from selected countries around the world, one can only see the risks of legal abortion through tunnel vision. The total medical picture cannot be understood without a look at the early and late physical and psychological complications. Indeed, these are the complications which affect the greater number of people and result in what a World Health Organization scientific group said was "a great amount of human suffering" (70).

A. Professional Organizations Speak on Medical Hazards.

The Executive Board of the American College of Obstetrics and Gynecology (ACOG) and a majority of its fellows approved the following official statement in May, 1968:

“It is emphasized that the inherent risk of such an abortion is not fully appreciated both by many in the profession and certainly not by the public. . . . The public should realize that in countries or societies that permit abortion on demand, many, if not the majority, are performed in physicians’ offices. Under these circumstances it is reasonable to conclude that *the mortality from this operation may exceed the maternal mortality of the United States* (emphasis ours) and Canada while the incidence of serious complications is substantial.” (71)

The minority report was prepared by Sprague H. Gardiner, M.D., Bernard J. Pisani, M.D. and Richard Mattingly, M.D., and was issued in May, 1969. It stated:

“The inherent risks of a therapeutic abortion are serious and may be life-threatening; this fact should be fully appreciated by both the medical profession and the public. In nations where abortion may be obtained on demand, a considerable morbidity and mortality have reported.” (71)

On March 26, 1966, the Council of the Royal College of Obstetricians and Gynaecologists unanimously approved the following statement which supports the ACOG statement:

“Those without specialists’ knowledge and these include members of the medical profession, are influenced in adopting what they regard as a humanitarian attitude to the induction of abortion by a failure to appreciate what is involved. They tend to regard induction of abortion as a trivial operation, free from risk. In fact, even to the expert working in the best conditions, the removal of an early pregnancy after dilating the

cervix can be difficult, and is not infrequently accompanied by serious complications. This is particularly true in the case of the woman pregnant for the first time. For women who have a serious medical indication for termination of pregnancy, induction of abortion is extremely hazardous and its risks need to be weighed carefully against those involved in leaving the pregnancy undisturbed. Even for the relatively healthy woman, however, the dangers are considerable.” (72)

In 1970, the Royal College of Obstetricians and Gynaecologists re-emphasized:

“The risks of any of the currently available methods of terminating pregnancy, which involve general anaesthesia, have always been recognized by gynaecologists but have been dismissed by others as non-existent and imaginary. The long-term hazards to physical well-being require follow-up studies which so far have not been undertaken in this country. Nevertheless, reports from other countries where abortion on demand has been the rule for several years show that late physical ill-effects are not uncommon.” (73)

On March 26, 1970, the Medical Society of the State of New York issued a set of “abortion guidelines” in which they wrote:

“The Medical Society of the State of New York would like to caution all physicians that an abortion performed after the twelfth week of gestation is fraught with tremendous danger.” (74)

In the Consultants Report on Abortion from the survey done by the Royal College of Obstetricians and Gynaecologists in Great Britain, it was said:

“Eight maternal deaths occurred in relation to 27,331 terminations of pregnancy during the year 1968-69. This gives a mortality rate of 0.3 per thousand (30/100,000), which is higher than the maternal mortality rate (including abortion, criminal or otherwise)

for all the pregnancies in England and Wales at the comparable time. A statement issued by the Secretary of State to Parliament on 4 February, 1970 reveals a similar state of affairs in respect of about 54,000 induced abortions notified from all sources during 1969; among these there were 15 maternal deaths.” (75)

B. New York City Abortion Data Unreliable.

On June 29, 1971, Mr. Gordon Chase, the administrator of The Health Services Administration for the City of New York (and a strong advocate of abortion) announced that “we have a remarkable record of safety” when New York’s mortality rate is compared to other countries like Great Britain and Scandinavia (76). He announced this rate to be 5.3 deaths/100,000 abortions (77). This mortality rate, quite honestly, cannot be taken seriously.

It should first be pointed out that 55.5% of all the 150,629 abortions legally performed in New York City between July 1, 1970 and May 31, 1971 were performed on *out-of-state residents*, and another 3.3% were done on residents of New York State who were not residents of New York City (78). Thus, 58.8% of the legal abortions were inherently difficult to follow up. This is reflected in a report from the New York Hospital-Cornell Medical Center, which showed that 53.5% of their patients were lost to follow up (79). Many physicians are currently treating women who are suffering severe complications from New York abortions and these cases will never appear in Mr. Chase’s statistics. In fact, hair-raising anecdotes of “fall-out” from New York City abortions are related everywhere (80).

Robert E. Hall, M.D., a leading proponent of legal abortion, addressing the 27th Midwest Clinical Conference of the Chicago Medical Society, said that one abortion clinic in New York City has been performing 700 each

week, with no after-care (81). He also said that because the caseload is five times greater than hospitals can handle, unaffiliated clinics have mushroomed. Facilities are being bought or built, one of them close to Kennedy Airport, to accommodate out-of-state women who fly in, have the abortion, and fly out the same day (82).

Joseph J. Rovinsky, M.D. reported that "it is noteworthy that the medical services at all three New York City area airports have since July 1, 1970 experienced a vast increase in the number of women requiring assistance for sequelae of induced abortion or actually aborting at the airport!" (83) Dr. Hall concludes that this situation leads to the neglect of complications when they arise, the rate of which has been high (84).

The 5.3 rate in New York City was arrived at by disregarding 7 abortion deaths in New York City on the unsubstantiated theory that these 7 were not performed "... under legal auspices" (85). At an earlier time Rovinsky concluded that "... the estimated maternal mortality rate is 38 Per 100,000!" (86) He also says that we cannot be certain that even these figures are complete (87):

"There is at least one apocryphal story circulating about an abortion death in a physician's office from air embolisation when an aspiration pump acted as a pressure rather than a suction device; following which the woman's corpse was transported back to her home state and the true cause of death there was not recorded". (88)

Just how many women have died as the result of a New York City abortion will never be known. However, deaths resulting from legal abortion in New York City which do not appear in the Health Services Administration's statistics have been reported in Indiana (89), and Boston (91). How many others have followed a similar, but unregistered, course will forever be unknown.

C. Eastern European Abortion Mortality Rates Complex and Often Incomplete.

The proponents of abortion are, however, quick to point out the incredibly low abortion mortality rates from countries in Eastern Europe. While focusing *only* on data from Eastern Europe, they make the claim that “induced abortion is potentially X-times as safe as the process of going through ordinary childbirth”. Whether this claim is fabricated or based on facts needs further close scrutiny.

In Table One, a number of countries with vast experience in performing legal abortions are compared.

TABLE ONE: ABORTION MORTALITY vs. MATERNAL MORTALITY.

Country/State	Year	Legal Abortions	Deaths	Abortion Mortality/ 100,000 Abortions		Maternal Mortality/ 100,000 Live Births
				30	10-20	
Denmark (92)	1961-66	27,435	9			
England and Wales (93)	1968-69	27,331	8	30		Abortion mortality higher than maternal mortality 38
Sweden (94)	1960-66	30,600	12	39		
Yugoslavia (Skopje Univ.)					14.0 (95)	
(96) (106)	1965-68	18,758	2	10.6	96.5 (97)	
Hungary (98)	1964-68	939,800	11	1.2	49.7 (99)	
Oregon (100)	1970	7,196	1	13.9	8.4	
Maryland (101)	1968-70	7,664	3	40.5	23.1 (102)	

The first thing to note is that in Denmark, England, Wales, Sweden, Oregon and Maryland, the mortality resulting from legal abortion exceeds the mortality from childbirth. Secondly, it seems that *only* Eastern European countries have legal abortion mortality rates which are less than the corresponding maternal mortality rates. To see this in perspective, one must recognize that Denmark and Sweden have been legally inducing abortion 10-15 years longer than any Eastern European country, and thus have a much greater experience (103).

Finally, one cannot ignore the extraordinarily large maternal mortality rates which exist in Yugoslavia and Hungary—mortality rates which are 2-4 times higher than the maternal mortality in the United States (104). The maternal mortality rate is an excellent indication of the quality of medical care given to the whole population of women in each country. Indeed, in Eastern European countries that are considered “... not as sophisticated, medically developed or experienced” (105), one would expect the high maternal mortality rate, but hardly the declared expertise in performing legal abortions.

Indeed, some Eastern European investigators have admitted that complications are almost certainly under-reported because patients treated outside of hospitals are seldom included in hospital statistics (106). It has been said, however, that the mortality rates in Eastern Europe are so incredibly low largely because 95-100% of their abortions are done in the first trimester of pregnancy. It is certainly recognized that abortion in the later stages of pregnancy will result in a higher abortion mortality rate (107), and that this may account for some of the increased abortion mortality in Western and Northern Europe. However, one cannot make all of these claims until one examines the data more carefully.

Table Two examines the legal abortion mortality rates of various countries in which the deaths resulted from legal abortions performed *only in the first trimester of pregnancy.*

TABLE TWO: LEGAL ABORTION MORTALITY—FIRST TRIMESTER ONLY.*

Country/State	Year	Abortions		Maternal Mortality/100,000 Live Births	
		1st Trimester	Deaths	Abortions	10-20
Denmark (92)	1961-66	8,684	2	23.0	
Yugoslavia (Skopje Univ.)	1965-68	7,833	2	25.5	96.5 (97)
(96) (106)				1.2	49.7 (99)
Hungary (98)	1964-68	939,800	11		
Oregon (100)	1970	5,351	1	18.6	8.4

*Breakdown data for England and Wales and Sweden are not available. There were no early abortion deaths in Maryland 1968-70, but a relatively small number (3,900) were performed early (101).

Here it can again be adequately shown that while most countries find legal abortion safer in the first trimester, the mortality from abortion continues to exceed that of child-birth; Eastern European countries continue to be noteworthy exceptions. The Hungarian data, however, is not in line with what is seen in Denmark, Oregon, or even its Eastern European ally, Yugoslavia.

Finally, let us look at one other method of examining abortion mortality data—a method which has not been overlooked by the proponents of abortion (108), but, nonetheless, a method which is seldom openly discussed. In Table Three the total number of abortion deaths (from all causes—spontaneous, criminal and legally induced) are compared for Hungary and the United States.

TABLE THREE: ABORTION DEATHS (ALL CAUSES) PER UNIT POPULATION.*

Country	Abortion Deaths 1967 (All Causes)	Abortion Deaths 1,000,000 Population	
		Est. 1967 Population	2.06
Hungary	21 (98)	10,255,900	
United States	160 (109)	197,576,952	0.80

* All population figures are from Encyclopaedia Americana.

While 1967 has been selected for comparison, there is little differences in whatever year one would like to consider. There were 21 abortion deaths in Hungary, and 160 abortion deaths in the United States in 1967. The figure for the United States is larger, however, one must remember that the population of the United States is considerably larger so that in order to compare the risks of abortion in the two countries, one must compare the abortion deaths per unit population (obviously, the United States with a larger population would be expected to have a larger number of deaths due to any cause, including abortions). When this comparison is made, one can see that for *any individual woman*, the risk of dying from abortion (all causes) is 2.6 times as great in Hungary than it is in the United States.

In summary, the Eastern European abortion mortality statistics are noteworthy in the following areas:

- A) Their abortion mortality rates are incredibly low when compared to countries who have a greater experience.
- B) The maternal mortality in Eastern Europe is astoundingly high, and this is an excellent indication of the quality of medical care delivered to the total population of women.
- C) Hungarian women are 2.6 times more likely to die from abortion than American women.

Some very important observations can be made from this total perspective analysis:

1. Where the maternal mortality rate is so large (in Hungary) and where the loss from abortion of all causes is so great (also Hungary), one would not expect to see one area of such great perfection as the figures for their legal abortion mortality would claim. As a result, one can seriously question if all the induced abortion deaths are being reported, or

if, perhaps, some of them are hidden in the maternal mortality and abortion (all causes) mortality rates.

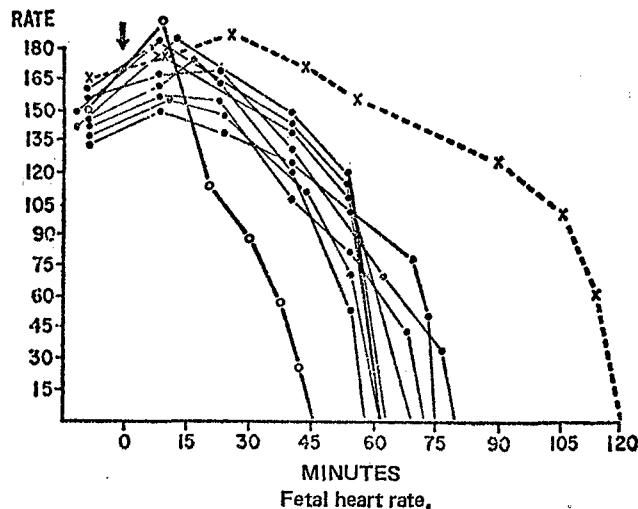
2. If, on the other hand, we assume that the number of legal abortion deaths is correct, then one of the following must be true:
 - a) Hungarian physicians are not as capable at treating spontaneous abortions as physicians in the United States. However, with their claimed expertise at performing legal abortions, one would not expect this to be true.
 - b) The number of criminal abortions in Hungary is still amazingly high, and this accounts for the large number of "other" abortion deaths—all of this in spite of a phenomenal number of legal abortions (126 legal abortions/100 live births in 1967). (98)
3. The individual Hungarian woman is 2.6 times more likely to die from abortion, and 2.0 times more likely to die from childbirth than the individual woman in the United States. This *very real* difference in health care to women in these two countries is an express manifestation of the total respect for human life which has been the challenging force through which the medical profession in the United States has built its fantastic progress.

It can readily be seen from this analysis that the interpretation of abortion mortality rates can be very complex. To make exorbitant claims regarding the safety of legal abortion from these statistics is simply not justified. The claim that abortion is X-times as safe as childbirth is a fabrication invented to sell abortion. Furthermore, when one focuses only on mortality rates and disregards all other complications which may arise from legal abortion, then advocacy has replaced medical scholarship.

D. Child Mortality.

The obstetrician has two patients: mother *and* child. It is deplorable to think that discussions of mortality can so easily exclude the child. The court should recognize that the mortality to the child is nearly 100%. Only an occasional child has the strength to survive. (81) (110). Let us not forget that abortion kills children of varying ages and stages in development. The unheard voices of these little ones are our concern, and we deplore this violent trend which is turning the healing art of medicine into a source of efficient swift and sure destruction of human life. A trend which will yield a "body count" unlike any we have seen in our nation's history. We deplore the condition of a society which calls physicians to exercise their art as a tool of death for those yet unborn, and which turns our learned journals into horrible examples of humans reporting the exact and scientific countdown and another human heart from 180 beats per minute to zero and death (110 at p. 37):

"In midtrimester 'salting out' cases, however, I am aware of only two such incidents. [Live born fetus] Both occurred between 24-26 weeks' gestation and otherwise were uncomplicated cases with 56 and 73 hour total instillation-abortion time. *The infants lived only for a few minutes.* Other known cases with fetal survival were admittedly early third trimester (26 weeks) cases. Fifteen consecutive cases monitored for fetal heart rate are illustrated in Fig. 3. The majority of the fetal hearts are undetectable one hour following the deposition of the hypertonic solution in the amniotic sac."



E. Other Complications.

"Abortion may impair a woman's health through a variety of complications. These may occur at the time of or soon after the abortion, or be discovered much later, perhaps in connection with another pregnancy or with efforts to become pregnant again. The complications may result in the death of the woman." (111)

F. Early Physical Complications.

The most common early complication of legally induced abortion are infection, hemorrhage, perforation of the uterus and laceration of the cervix. *Table Four* lists a representative sample of studies which have been done around the world and in the United States to define the incidence of early physical complications.

Olsen, et al. have stated:

"It is clearly apparent that all methods involve a risk of more or less serious complications, ranging in the present material from 3-10% with the various methods, the incidence of complications increasing with the stage of pregnancy". (92)

**TABLE FOUR: % EARLY PHYSICAL COMPLICATIONS IN
1st AND 2nd TRIMESTER ABORTION.**

Country/Investigator	1st Trimester	2nd Trimester
Denmark (92) (Olsen, Nielsen, Ostergaard)	5.4%	2.5 - 9.1%
California (112) (Banner, et al.)	11.0%	17.0%
New York City (113) (Kaye—NY Lying-In)	2.5%	12.7%
Elmhurst, N. Y. (80) (Rovinsky—City Hospital Center)	5.0%	15.6%
Rochester, N. Y. (114) (Choate—Strong Memorial Hosp.)	8.2%	12.6%
Poland (115) (Midak)	4.4%	—
Czechoslovakia (116) (Kotasek)	5.0%	—
Sweden (117) (Bengtsson)	—	9.4 -10.1%
Great Britain (118) (Menzies)	—	30.8%
Japan (119) (Wagatsuma)	—	14.0%

There is evidence to suggest that these complications are far more frequent in the young woman pregnant for the first time, presumably because the mouth of her womb is much more rigid and thus more difficult to dilate than in a woman who has had at least one child (116) (120). Note that 57.3% of abortions performed in New York City from July 1, 1970 to May 31, 1971 were performed on women pregnant for the first time (121).

Infection may be localized to the lining of the womb, the Fallopian tubes, or the structures immediately adjacent to the uterus (endometritis, salpingitis or parametritis). It may be more regionally located resulting in pelvic thrombophlebitis, pelvic cellulitis or pelvic peritonitis. It may be distant as infection in pneumonia, endocarditis, or septic emboli to the lungs or brain. Or, the infection may be generalized as in septicemia (122). The infection is usually the direct result of the instrumentation involved in the abortive techniques, and is the usual cause of any subsequent sterility because the infection scars the tubes to a point where they no longer function properly.

Hemorrhage is not uncommon following induced abortion even in early pregnancy. The uterus is a highly vascular organ during pregnancy because of its natural response to the life support of the child. Hemorrhage usually results when this vascular organ is lacerated, perforated, ruptured, fails to contract after the abortion (uterine atony), or there is a failure to remove all of the parts of the child and his placenta (122). In the first year of the Colorado abortion law, 8.0% of women undergoing the operation needed a blood transfusion (the majority of these abortions were done in the first trimester). (123) (For a discussion of the inherent dangers of blood transfusions—allergic reactions, serum hepatitis, etc., see Merritt, J. A., et al., MANAGEMENT OF EMERGENCIES: UNTOWARD REACTIONS TO BLOOD TRANSFUSION. N. E. J. M. 274: 1426, 1966.) In a series of 100

early suction abortions performed by Robert E. Hall, M.D., at least 5% had "excessive blood loss" (greater than 350 cc). (124) Of course, not all women will require blood transfusion, but Carlton, et al., noted that 30% of his series were anemic following abortion (hemoglobin less than 9.0 gms.) and of those done in the first trimester 9% were anemic (125).

Perforation of the uterus occurs in about 1.0% of legally induced abortions, and may occur with the traditional D&C or the newer method of suction curettage (92, 112, 113). Perforation occurs primarily because the surgeon operates by "touch" alone, and not under direct vision. Secondly, the pregnant uterus is much softer than the non-pregnant uterus, lending itself to easy perforation. If in the process of perforation the bowel or a blood vessel is torn, overwhelming infection and/or hemorrhage may occur necessitating exploratory abdominal surgery. (It has been reported that 30-65% with such a perforation will require this type of exploratory surgery.) (126, 127).

Early physical complications that are very significant when they occur, but are less frequent, include the following:

- a) Coma and/or convulsions because of the effects on the central nervous system and/or kidneys of hypertonic salt solution entering the bloodstream directly or via the peritoneal cavity (128).
- b) Embolisation of air, most commonly, or by particulate matter (fat, placental products, amniotic fluid) in the heart, pulmonary artery, brain and other organs (128).
- c) Anesthetic accidents resulting in cardiac arrest or aspiration pneumonia (128).
- d) Disturbances in the coagulability of the mother's blood (129, 130, 131, 132).
- e) The abortion of only one twin while the other survives and delivers normally several months later

(125, 133). The psychological effects on the mother and the surviving twin in such cases has not been investigated.

- f) It is now becoming apparent that, contrary to wishful thinking, abortion can be a relatively uncomfortable procedure. For early abortion many patients can be managed adequately with mild sedation and paracervical local anesthesia, but for a "considerable" number this is not sufficient to provide satisfactory analgesia, nor to prevent agitated and abrupt pelvic movements which can only contribute to increasing the complication rate (134).

G. The Late Physical Complications of Legally Induced Abortion.

The late physical complications of legally induced abortion have as yet been incompletely evaluated, and there is literally nothing from the American Medical literature which would be of help. Nonetheless, there is a copious amount of information available from the experience of other countries, and this is now presenting substantial evidence to suggest that it is in this category that the most significant medical and ultimate sociological sequelae exist.

Through increased knowledge and experience, we are now beginning to see and understand how our careless use of natural resources and destruction of, or interruption of, natural life cycles in land, water and air is having a disastrous impact on environment. Nobody really knows for certain what results we might see in a few years in women and those dependent upon them if the natural human life cycle within them is radically interferred with. However, some insight into the ultimate ecological disaster may be gathered by a close look at the late physical and psychological complications.

1. Premature Labor and Delivery.

The prematurity rate in Hungary in 1954 (before legalized abortion) was 7%. However, in 1968 (14 years after legalization) it had increased to 12% (135). The incidence of prematurity developing in any one individual has been shown to be well correlated with the number of abortions a woman has. Hungarian studies revealed that the likelihood of premature labor and delivery following one previous abortion increased to 14%; after two abortions, to 18%; and after three abortions, to 24% (135). In Czechoslovakia a comparison of women who have never had a previous legal abortion with women who had such a history revealed the prematurity rate in the former group to be 5%, while in the latter group it had increased to 14% (136). Similar experience has also been seen in Japan (137). The increase in prematurity is a direct result of the instrumentation required in early abortion; dilating the cervix (the mouth of the womb) may leave the cervix incompetent to retain the child for the full nine months (137).

The significance of this trend lies in the fact that premature birth is the leading cause of infant death, and one of the leading causes of mental and motor retardation (138). This is reflected in the extraordinarily high infant mortality rate in Hungary due to birth injury, post-natal asphyxia and atelectasis (the leading causes of death in the premature infant)—1,278.2 per 100,000 live births (95), compared to a similar death rate in the United States of 549.4 per 100,000 live births (95). Indeed, there “has been a doubling of the perinatal mortality rate in Hungary following the introduction of ‘abortion on request’ (106)”. Thus, Klinger concludes:

“Induced abortion plays an important role in the development of a subsequent child” and that “the im-

pact of premature birth on infant mortality and of the mental and physical development of the child is connected with the frequency of abortions" (135).

2. Ectopic Pregnancies.

A number of countries have reported a significant increase in the incidence of ectopic pregnancy (pregnancies which occur someplace other than in the womb, usually in the Fallopian tube). (139, 140) One Japanese study revealed that 3.9% of women with previous history of legal abortion had a subsequent ectopic pregnancy (141). This is eight times the incidence of ectopic pregnancy in the United States. (The incidence of ectopic pregnancy in the United States in 1967 was about 0.5%). (142) An ectopic pregnancy is not infrequently life-threatening because of rupture and hemorrhage. This, therefore, subjects an individual woman to a very substantial future risk. The risk of dying from an ectopic pregnancy in the United States is approximately 300 per 100,000 (142). Again, tubal malfunction, usually secondary to post-abortal infection, seems to be the prime cause.

3. Complications with Subsequent Pregnancies (Pathologic Sequelae).

The incidence of spontaneous abortion (miscarriage) in women with a history of legal abortion is reported to be 30-40% higher than in those without such a history (116, 137, 143), and the incidence of fetal death during pregnancy is twice as great (143). Complicated labors (prolonged labor, placenta, previa, adherent placenta) (106, 116, 136, 143, 144) and excessive bleeding at the time of delivery (136) have also been noted to occur more commonly in subsequent pregnancies to women with a previous history of legal abortion. These all result in increased obstetrical intervention.

4. Sterility.

Several studies "prove that repeated abortions can cause secondary sterility" (98). One report from Poland showed that 6.9% of women were sterile on a 4-5 year follow-up (115) and in Japan 9.7% were subsequently sterile on a 3 year follow-up (141). Other countries have had a similar experience (116, 145, 146). Sterility results primarily as an after-effect of post-abortal infections resulting in tubal obstruction and or malfunction. Eminent British gynecologist, T. N. A. Jeffcoate's comment is particularly pertinent here:

"If this happens when a first pregnancy is interrupted for a non-recurrent indication, such as rubella or a fleeting psychological upset, the situation is tragic." (147)

5. Transplacental Hemorrhage.

It has long been known that a woman who is Rh negative is very susceptible to a special kind of problem if her consort is Rh positive. Any given pregnancy may be a stimulus for the mother to develop antibodies against the baby's red blood cells (i.e. she becomes sensitized) so that in a subsequent pregnancy these antibodies may destroy the baby's red blood cells resulting in an anemia in the preborn child which may be life-threatening in utero, or subject him to the threat of mental and motor retardation after he is born. This sensitization occurs through the leakage of the baby's red blood cells into the mother's circulation (transplacental hemorrhage) usually at the time of delivery. Therefore, first-born children are rarely affected. However, with *all* methods of legally induced abortion, sensitization has been reported to occur in 3-10% of Rh-negative women (148, 149, 150, 151, 152, 153, 154). This can now be effectively treated with the recent development of anti-Rh-negative gammaglobulin (Rho Gam)

and its routine use in the abortion of Rh-negative women has been frequently recommended (154, 155). However, because certain tests on the fetus cannot be performed, many women will be needlessly exposed to therapy. And, in spite of the existence of this effective therapy, there is good evidence to suggest that it is being grossly neglected. In a study conducted by the New York State Department of Health on women having abortions in *all* of New York State, 48.7% of women known to be Rh-negative were left untreated, and thus unprotected from the possibility of sensitization and its inherent risks in subsequent pregnancies (156).

6. Other Late Physical Complications.

- a. A woman's sexual libido is reported to be decreased in 14-33% of women with a previous legal abortion. This is theoretically related to the psychotraumatic experience of the interruption and the emotional weakness that follows (115, 157).
- b. Endometriosis is a common sequel to hysterotomy (158).
- c. Many pregnancies which are subsequent to an abortion performed by hysterotomy will need delivery by Caesarian section to eliminate the possibility of rupture of the hysterotomy scar (133).
- d. Gross irregularity in the appearance of the menstrual period, heavy bleeding with the menses or complete absence of menstruation has been reported in 1-12% of patients who have had legal abortions (115, 143, 159).

H. Psychiatric Sequelae.

A World Health Organization scientific group concluded that "There is no doubt that the termination of pregnancy may precipitate a serious psychoneurotic or even psychotic reaction in a susceptible individual" (160). Some in-

vestigators have indeed noted lasting psychiatric reactions (161). However, there has been much variation in the medical literature regarding the incidence of psychological sequelae to induced abortion.

The Swedish experience with therapeutic abortion has been well documented with several well planned studies. The best of these studies is Dr. Martin Ekblad's. He studied 479 women at the time of the abortion and again 2-3½ years later. At follow-up he found that 10% continued to feel the operation unpleasant; 14% had mild self-reproach; 11% had serious self-reproach and self-regret; and 1% had gross psychiatric breakdowns (162).

Siegfried, in 1951, reported on 61 women followed for 2 years after abortion, and found 13% to have serious self-reproach (163). Niswander and Patterson, in 1967, studied 90 women aborted for psychogenic reasons, and found that 21 had an immediate negative effect, and 11 had a negative long-term effect (at least 8 months). Eleven of 17 aborted for rubella had an immediate negative reaction, and 8 of those 17 continued to have a long-term negative reaction (164).

Recent studies have shown "that serious mental disorders arise more often in women with previous emotional problems; thus the very women for whom legal abortion is considered to be justified on psychiatric grounds are the ones who have the highest risk of post-abortal psychiatric disorders" (165).

The interpretation of the results of psychiatric studies is always made difficult by the lack of uniform standards for the assessment of psychological impairment and of suitable control groups (165). Unfortunately, over the last few years several unscientific papers have appeared in the medical literature, written by advocates of abortion, blindly stating that psychiatric sequelae of abortion are a

myth (166, 167). For this reason, the court is invited to read Simon and Senturia's excellent review and critical analysis of the available psychological literature in this area (168), and Heath's excellent review (169).

Most abortion proponents not involved in public efforts to promote their cause, admit that elective removal of the fetus is without psychiatric or medical justification. The fetus has not been shown to be a direct cause of any emotional disorder, and present medical capabilities make pregnancies safe. Almost always, other means than abortion are available to handle any medical or psychiatric complications of pregnancy. Indeed, if a woman wants her child, there are no medical or psychiatric indications that ever make an abortion necessary.

Sloane has candidly clarified the question of "indications" for abortion: (170)

"There are no clear-cut psychiatric indications for therapeutic abortion. The risk of precipitation or exacerbation of an existing psychosis is small and unpredictable, and suicide is rare."

He goes further, relying on experiences in Sweden:

"There is no medical indication for a termination of a new pregnancy, for they are not ill, or it is, at all events, not possible to point to any illness that might constitute a serious threat to life or health and thus indicate an induced abortion."

Since Sloane is a proponent of abortion, his forthrightness about the lack of genuine indications is laudable. Recognizing that there is no scientific basis for abortion on psychiatric or medical grounds, he, like many others, would justify abortion on the basis of what he calls "a key issue" of "unwillingness" to continue the pregnancy, which is scientifically neither a diagnosis nor an easily measured variable.

Barno (171) has found that the fear of suicide in pregnant women has been greatly exaggerated. In fact, his study reveals that the chances of a suicide in pregnancy, even amongst women who threaten suicide, is substantially less than the chances of suicide amongst women as a whole.

I. Conclusion.

The medical hazards of legally induced abortion are significant and must be recognized. When one focuses only on selected abortion mortality rates from Eastern Europe to make claims regarding the safety of legally induced abortion, one is looking for a motive to sell abortion. While the mortality rates alone do not present a total perspective analysis, they should not, on the other hand, be isolated from the 100% mortality, numbering already in the hundreds of thousands, of innocent unborn children. Indeed, one must recognize that the performance of legally induced abortion upon healthy women is not the practice of medicine at all, but rather another example of the violence of our times; the use of one more technological skill to destroy human life.

IV.

THE UNBORN OFFSPRING OF HUMAN PARENTS IS A PERSON WITHIN THE MEANING OF THE 5TH AND 14TH AMENDMENTS OF THE U. S. CONSTITUTION.

A. The Standard for Decision.

This Court has considered the constitutionality of legal classifications numerous times. Under the due process clause of the 5th Amendment, and the "equal protection" clause of the 14th Amendment, the strictness of the standard for decision in cases involving classifications made by legislative bodies varies according to the nature of the right

placed in jeopardy; the more fundamental the right involved, the greater the judicial requirement to "carefully and meticulously scrutinize"¹ the classification in light of the following principles.

- a. As the right in jeopardy becomes more fundamental, the more perfect must be the relationship between the classification excluding a human group from the enjoyment of the right and the purpose for which the classification is made.²
- b. As the right involved becomes more fundamental, the more "compelling" the state or governmental interest must be in making a classification excluding certain human groups from the enjoyment of the right.³

In addition, classifications affecting fundamental rights are said to be "especially suspect"⁴ or, to use Mr. Justice White's expression, such classifications are "constitutionally suspect".⁵

1. *Reynolds v. Sims*, 377 U. S. 533, 84 S. Ct. 1362, 12 L. Ed. 2d 506 (1964) at 1303; See also *Harper v. Virginia State Board of Elections*, 383 U. S. 663, 86 S. Ct. 1079 (1966).

2. See *Railway Express Agency v. New York*, 336 U. S. 106, 93 L. Ed. 533, 96 S. Ct. 463 (1949); *Skinner v. Oklahoma*, 316 U. S. 535, 86 L. Ed. 1655, 62 S. Ct. 1110 (1942); *Loving v. Commonwealth of Virginia*, 388 U. S. 1, 87 S. Ct. 1817 (1967); *Shapiro v. Thompson*, 394 U. S. 618, 89 S. Ct. 1322 (1969); see also *Tussman & Tenbrock*, 37 Calif. L. Rev. 341 (1949), Selected Essays on Constitutional Law 789 (1969).

3. The "compelling governmental interest" doctrine has developed in several recent cases. See *Shapiro v. Thompson*, 394 U. S. 618, 89 S. Ct. 1322 (1969), particularly Mr. Justice Harlan's dissent; see also Mr. Justice White's concurring opinion in *Griswold v. Connecticut*, 381 U. S. 479, 85 S. Ct. 1628 (1965).

4. *Loving v. Virginia*, 388 U. S. 1, 87 S. Ct. 1817 (1967).

5. *McLaughlin v. Florida*, 379 U. S. 184, 85 S. Ct. 282 (1964).

B. The Court Must Apply This Same Standard to Itself.

The Court, in interpreting laws, performs a quasi-legislative or a subordinate legislative function.⁶ It performs this interstitial legislative function by supplementing the written law by supplying definitions.⁷

In these cases the Court must construe, interpret and define the expression "person" in the 5th and 14th Amendments. In fixing the limits of the word "person" in the 5th and 14th Amendments, the Court will, in essence, perform a classificatory function; in other words, the Court must decide, on the basis of some established criteria whether, for the cases at bar, the unborn person belongs to the class of persons encompassed, and therefore protected, by the term "person" as used in the "due process" clause of the 5th Amendment and "equal protection" and "due process" clauses of the 14th Amendment.

The "due process" clause of the 5th Amendment and the "equal protection" clause of the 14th Amendment to the U. S. Constitution require that "Cities, States and the Federal Government . . . exercise their powers so as not to discriminate between their inhabitants except upon some reasonable differentiation fairly related to the object of the regulation".⁸ Expressed differently, the Constitution prohibits "invidious discrimination" by the State.

The concepts of "State" and "Federal Government", as used above, refer to the different agencies through which

6. See Cohen, M. R., "The Process of Judicial Legislation", in Law and the Social Order (1933); also collected in Cohen, Readings in Jurisprudence and Legal Philosophy; Pound, An Introduction to the Philosophy of Law, Yale University Press, page 53; Grey, The Nature and Sources of the Law (2 ed. 1921) pp. 172-173; Fuller, The Morality of Law, Yale University Press, p. 81H.

7. See Cohen, *supra*.

8. *Railway Express Agency v. New York*, 336 U. S. 106, 93 L. Ed. 533, 69 S. Ct. 463 (1949), con. opinion by Mr. Justice Jackson.

the "State or Federal Government" may act. And this includes judicial authorities⁹ as well as legislative and executive authorities. The Courts have, therefore, a constitutional duty equal to that of Congress and the various State legislatures to avoid "invidious discriminations" in the course of making classifications in the exercise of their interpretive and quasi-legislative functions.

C. Application of the Standard for Decision to the Case at Bar—The Rules of Construction Applied.

By attempting to strike down the criminal abortion statutes of Texas and Georgia, the Court is implicitly deciding whether unborn offspring of human parents are "persons" within the meaning of the 5th and 14th Amendments, and thereby classifying such offspring as to whether they may be "deprived of life". Since this is the most fundamental of all rights¹⁰ the Court is bound by its own teachings to apply the most strict of standards.

Likewise because of the fundamental nature of life, the most compelling of all interests would have to be shown on the part of the Court in order to carve out such a classification, which would exclude the lives of unborn humans from the protection of the law.

Appellants argue that a "compelling state interest" must be shown to justify the restrictions imposed by these

9. See, e.g., *Virginia v. Rives*, 100 U. S. 313, 25 L. Ed. 667, where the Court said: "It is doubtless true that a State may act through different agencies, either by its legislative, its executive, or its judicial authorities; and prohibitions of the amendments extend to *all action* of the State denying equal protection of the laws, whether it be action *by one of those agencies or by another*", 100 U. S. at 318. (emphasis added) see, more recently, *Shelley v. Kraemer*, 334 U. S. 1, 92 L. Ed. 161, 68 S. Ct. 836 (1948), and *Barrows v. Jackson*, 346 U. S. 249, 97 L. Ed. 1586, 93 S. Ct. 1031 (1953).

10. *Raleigh Fitkin—Paul Memorial Hospital v. Anderson*, 42 N. J. 421, 201 A. 2d 537 cert. denied 377 U. S. 985, (1964).

criminal abortion statutes on their freedom to have the unborn killed, or their freedom as physicians to perform the abortions. We argue that the "compelling" state interest doctrine instead limits the right of either State or Federal government to classify the unborn as "non-person" and thereby permit the deprivation of their lives.

Consequently, in interpreting and construing the word "person" as used in the 5th and 14th Amendments, the Court must be constantly aware (1) that the right in jeopardy is the most fundamental of all legal rights, being necessary and basic to the enjoyment of all other legal rights; (2) that no compelling governmental interest in excluding the unborn from constitutional protection under the 5th and 14th Amendments has ever been shown, and that classifications affecting fundamental human rights are "especially" or "constitutionally suspect". Based on these rules of construction, the unborn offspring of human parents are to be given every benefit of doubt, to be afforded every advantage.

These standards for decision considered in light of the *scientific fact* that the unborn offspring of human parents is an autonomous human being,¹¹ and in light of the *legal fact* that the unborn is a legal person in numerous other areas of the laws,¹² compel the conclusion that the word "person" as used in the 5th and 14th Amendments includes unborn persons.

The 5th Amendment protects all persons against arbitrary action by the State. "No person shall be deprived of life, liberty or property without due process of law". If the word "person" in the 5th Amendment is construed to mean

11. See this Brief, *supra*.

12. For a survey of the rights which have been granted the unborn by the Courts, see 3 S. L. R. 225, "Abortion, the Law and Defective Children: A Legal-Medical Study", Suffolk University Law Review (Vol. III, Spring 1969, pp. 225-276).

only born "persons", then all unborn persons who have vested property rights (subject to divestiture if they are not born alive)¹³ would have no protection against an arbitrary taking of such property rights by the Federal Government. This would leave an absurd gap in the scope of constitutional protection of individual rights. The unborn person would have legal protection against everyone except the State.

If the unborn offspring of human parents is a "person" within the meaning of the 5th Amendment for the purpose of protecting its property interests against arbitrary action by the government, it must follow that the life of that "person" is also protected against arbitrary interference by the State.

13. In many states the unborn's intestate rights of succession to property *vest* immediately upon the death of the decedent subject to divestment if the child is not born alive. e.g., See *Tomlin v. Laws*, 301 Ill. 616, 134 N. E. 24 (1922); *Deal v. Septon*, 144 N. C. 110, 56 S. E. 691 (1907).

CONCLUSION.

It is respectfully submitted that the unborn is a "person" within the meaning of the 5th and 14th Amendments. Consequently, the unborn's life can be taken only with due process of law, and its life is entitled, like all other persons' lives, to equal protection under the law.

The voidance of state abortion statutes by court or legislature is governmental action which deprives the innocent unborn of the right to life, and therefore deprives them of equal protection and due process. This Court should therefore protect the unborn's constitutional rights in any decision it renders.

Respectfully submitted,

DENNIS J. HORAN,
JEROME A. FRAZEL, JR.,
THOMAS M. CRISHAM,
DOLORES B. HORAN,
JOHN D. GORBY,

One North LaSalle St.,
Chicago, Illinois 60602
312-346-5800.

October 15, 1971.

MEDICAL BIBLIOGRAPHY.

1. Short, R. V.: **IMPLANTATION AND THE MATERNAL RECOGNITION OF PREGNANCY, IN FOETAL AUTONOMY: A CIBA FOUNDATION SYMPOSIUM**, ed. by G. E. W. Wolstenholme and Maeve O'Connor, J. & A. Churchill Ltd., 104 Gloucester Place, London, England, 1969.
2. Currie, G. A.: **THE FOETUS AS AN ALLOGRAFT: THE ROLE OF MATERNAL "UNRESPONSIVENESS" TO PATERNALLY DERIVED FOETAL ANTIGENS**, Op. cit. supra note 1.
3. Rutter, W. J.: **INDEPENDENTLY REGULATED SYNTHETIC TRANSITIONS IN FOETAL TISSUES**, Op. Cit. supra note 1.
4. Jost, A.: **THE EXTENT OF FOETAL ENDOCRINE AUTONOMY**, Op. cit. supra note 1.
5. Liley, H. M. I.: **MODERN MOTHERHOOD**, Random House, Rev. Ed. 1969.
6. Ingelman-Sundberg, Axel, and Wirsen, Cloes: **A CHILD IS BORN: THE DRAMA OF LIFE BEFORE BIRTH**, photos by Lennart Nilsson, Dell Publishing Co., New York, 1965.
7. 282 App. Div. 542, 125 N. Y. S. 2d 696 (.....).
8. Arey, Leslie B.: **DEVELOPMENTAL ANATOMY**, 6th Ed. Philadelphia W. B. Saunders Co. 1954 Chap. II VI.
9. Patten, Bradley M.: **HUMAN EMBRYOLOGY**, 3rd Ed. McGraw-Hill Book Co. New York, 1968 Chap. VII.
10. Rugh, Robert and Shettles, Landrum B., with Richard N. Einhorn: **FROM CONCEPTION TO BIRTH: THE DRAMA OF LIFE'S BEGINNINGS**, Harper and Row, New York 1971.
11. Straus, Reuben, et al.: **DIRECT ELECTROCARDIOGRAPHIC RECORDING OF A TWENTY-THREE MILLIMETER HUMAN EMBRYO**, The American Journal of Cardiology, September 1961, pp. 443-447.

12. Marcel, M. P., and Exchaquet, J. P.: L'ELECTROCARDIOGRAMME DU FOETUS HUMAN AVEC UN CAS DE DOUBLE RYTHME AURICULAIRE VERIFIE, Arch. Mal. Couer, Paris 31: 504, 1938.
13. Flannagan, G. L.: THE FIRST NINE MONTHS OF LIFE, Simon and Schuster, 1962.
14. Still, J. W.: J. Washington Acad. Sci. 59:46, 1969.
15. Hooker, Davenport: THE PRENATAL ORIGIN OF BEHAVIOR, Univ. of Kansas Press, 1952.
16. Streeter, Geo. L.: DEVELOPMENT OF THE AURICLE IN THE HUMAN EMBRYO, Contributions to Embryology, Vol. XIII No. 61, 1921.
17. Hooker, Davenport: EARLY HUMAN FETAL BEHAVIOR WITH A PRELIMINARY NOTE ON DOUBLE SIMULTANEOUS FETAL STIMULATION, Proceedings of the Association for Research in Nervous and Mental Disease, Baltimore, The Williams & Wilkins Co., 1954.
18. Gesell, Arnold, M.D., Amatruda, C. S., M.D.: DEVELOPMENTAL DIAGNOSIS, P. S. Hoeber, 1958 pp. 8-9.
19. Wood, Carl: WEIGHTLESSNESS: ITS IMPLICATIONS FOR THE HUMAN FETUS, J. Obstetrics & Gynecology of the British Commonwealth, 1970 Vol. 77, pp. 333-336.
20. Liley, Albert W.: AUCKLAND MD TO MEASURE LIGHT AND SOUND INSIDE UTERUS, Medical Tribune Report, May 26, 1969.
21. FETOLOGY: THE SMALLEST PATIENTS. THE SCIENCES, published by The New York Academy of Sciences, Vol. 8 No. 10, Oct. 1968, pp. 11-15.
22. de Smolder, Dr. Paulina Eisenberg: FETAL HEART ACTIVITY IS RECORDED ROUTINELY BY 10TH WEEK OF LIFE, Medical Tribune, Feb. 2, 1970.
23. Neuman, M. R.: AN INTRAVAGINAL FETAL EGG TELEMETRY SYSTEM, Obstetrics and Gynecology, Vol. 35, No. 1, Jan. 1970, pp. 96-103.
24. Curran, J. T.: A PRACTICAL SYSTEM OF FETAL EGG ANALYSIS BY COMPUTER, J. Physiology, 303, July 1969.

25. Massorrio, M.: PHONOCARDIOGRAPHY IN THE DIAGNOSIS OF FETAL DISTRESS, Archivio Per Le Scienze Mediche U 125, Dec. 1968, pp. 860-865.
26. Henry, G. R.: THE ROLE OF AMNIOSCOPY IN THE PREVENTION OF ANTE PARTUM HYPOXIA OF THE FETUS, J. Obstet. Gynec. British Commonwealth, 76:790-794, Sept. 1969.
27. Rieppi, G., Cargnello, U.: AMNIOSCOPY IN THE DIAGNOSIS OF FETAL DISTRESS, Friuli Medico (Udine) V 23, Nov.-Dec. 1968.
28. INTRAUTERINE TRANSFUSION AND ERYTHRO BLASTOSIS FETALIS, Report of 53rd Ross Conference on Pediatric Research, Sept. 1966.
29. Kimura, C., Yamaguchi, R.: CLINICAL SIGNIFICANCE OF THE FETAL DSP TEST, Tohoku J. Exp. Med. 1969, 99: 165-170.
30. Sevilla, Rafael M.: ORAL FEEDING OF HUMAN FETUS: A POSSIBILITY, JAMA, May 4, 1970, pp. 713-717.
31. Horger, E. O. III, Hutchinson, D. L. M.D.: DIAGNOSTIC USE OF AMNIOTIC FLUID, J. of Pediatrics Vol. 75, No. 3, pp. 503-508, Sept. 1969.
32. Floyd, Wm. S., M.D., Goodman, Paul A., Wilson, A. CT: AMNIOTIC FLUID FILTRATION AND CYTOLOGY, Obstetrics and Gynecology, Vol. 34, No. 4, Oct. 1969.
33. Szijarto, di Antonino: MODERN DIAGNOSTIC CRITERIA OF FETAL SUFFERING, Fracestoro Vol. 61, pp. 914-930, Nov.-Dec. 1968.
34. Parmley, Tim, Miller, Eugenia: FETAL MATURITY AND AMNIOTIC FLUID ANALYSIS, Am. J. Obstet. and Gynec. Vol. 105, No. 3, pp. 354-362.
35. Berman, Peter, M.D., Balis, M. E. Ph. D., Dancis, J., M.D.: A METHOD FOR THE PRENATAL DIAGNOSIS OF CONGENITAL HYPERURICEMIA, J. of Pediatrics Vol. 75, No. 3, Sept. 1969.
36. O'Doherty, N.: THE PRENATAL TREATMENT OF ADRENAL INSUFFICIENCY, the Lancet, No. 29, 1969, 2:1194-1195.

37. Nadler, H. L., M.D.: PRENATAL DETECTION OF GENETIC DEFECTS, J. of Pediatrics, Jan. 1969, Vol. 74, No. 1, pp. 132-143.
38. Wood, Carl; Newman, Warwick; Lumley, Judith; Hammond, Judith: CLASSIFICATION OF FETAL HEART RATE IN RELATION TO THE FETAL SCALP BLOOD MEASUREMENTS AND APGAR SCORE, Am. J. Obstet. and Gynec. Vol. 105, No. 6, Nov. 1969, pp. 942-948.
39. Kibli, F. W., et al.: OBSERVATIONS ON HEART RATE AND PH IN THE HUMAN FETUS DURING LABOR, Am. J. Obstet. and Gynec. Vol. 104, No. 8, Aug. 15, 1969, pp. 1190-1206.
40. Abramovich, D. R.: THE IMPORTANCE OF FETAL PHYSIOLOGY AND ENDOCRINOLOGY IN OBSTETRICS, The Med. Journal of Australia, 2:408-411, 23 Aug. 1969.
41. Jackson, Ben J.: APPROACH TO FETAL RESEARCH—PRESENT AND FUTURE, Am. J. Diseases of Children, Vol. 118, Dec. 1969, pp. 812-816.
42. Hodari, A. A., Thomas Lorna: EXPERIMENTAL SURGICAL PROCEDURES UPON THE FETUS IN OBSTETRIC RESEARCH, Obstet. and Gynec. Vol. 34, No. 2, Aug. 1969, pp. 204-211.
43. Zapol, Warren, and Kolobow, Theodore: MEDICAL WORLD News, May 30, 1969.
44. (a) Monroe, CANADIAN MEDICAL ASSOCIATION'S JOURNAL, 1939.
(b) Hellegers, Andre, M.D.: NATIONAL SYMPOSIUM ON ABORTION, May 15, 1970, Prudential Plaza, Chicago, Illinois.
45. Miller, James R.: DERMAL RIDGE PATTERNS: TECHNIQUE FOR THEIR STUDY IN HUMAN FETUSES, J. Pediatric, Vol. 73, No. 4, Oct. 1969, pp. 614-616.
46. Potter, Edith: PATHOLOGY OF THE FETUS AND INFANT, Year Book Publishers Inc., Chicago, 1961.
47. Ian, Donald: SONAR AS A METHOD OF STUDYING PRENATAL DEVELOPMENT, J. of Pediatrics, Vol. 75, No. 2, Aug. 1969, pp. 326-333.

48. Alexander, D. P.; Britton, H. G.; Nixon, D. A.: MAINTENANCE OF SHEEP FETUSES BY AN EXTRA COROREAL CIRCUIT FOR PERIODS UP TO 24 HOURS, Am. J. Obstet. and Gynec. Vol. 102, No. 7, Dec. 1968, pp. 969-975.
49. Gesell, Arnold, THE EMBRYOLOGY OF BEHAVIOR, Harper & Bros. Publishers, 1945, Chap. IV, V, VI, X.
50. Hellman, L. M., et al.: GROWTH AND DEVELOPMENT OF THE HUMAN FETUS PRIOR TO THE 20TH WEEK OF GESTATION, Am. J. Obstet. and Gynec. Vol. 103, No. 6, March 15, 1969, pp. 789-800.
51. Shepard, Thomas: ONSET OF FUNCTION IN THE FETAL THYROID: BIOCHEMICAL AND AUTORADIOGRAPHIC STUDIES FROM ORGAN CULTURE, J. Clin. Endocrinology, 27: 945-958, July 1967.
52. Pritchard, Jack A.: FETAL SWALLOWING AND AMNIOTIC FLUID VOLUME, Obstet. and Gynec. Vol. 28, No. 5, Nov. 1966.
53. Huntingford, P. J., and Pendleton, H. J.: THE CLINICAL APPLICATION OF CARDIOTOCOGRAPHY, J. Obstet. and Gynec. Brit. Commonwealth, Vol. 76, pp. 586-595, July, 1969.
54. Barton, John J.: EVALUATION OF THE DOPPLER SHIFT PRINCIPLE AS A DIAGNOSTIC AID IN OBSTETRICS, Am. J. Obstet. and Gynec. Vol. 102, No. 4, pp. 563-570, Oct. 1968.
55. Mori, et al.: THE ORIGINAL PRODUCTION OF THE GLASS FIBER HYTEROSCOPE AND A STUDY OF INTRAUTERINE OBSERVATION OF THE HUMAN FETUS AND THE INNER THINGS ATTACHED TO THE FETUS AND INNER SIDE OF THE UTERUS WALL IN LATE PREGNANCY AND THE BEGINNING OF DELIVERY BY MEANS OF HYSTEROSCOPY AND ITS RECORDING ON FILM, J. Jap. Obstet. and Gynec. Society (Eng.) 15:87-95, Apr. 1968.
56. Gairdner, Douglas: FETAL MEDICINE: WHO IS TO PRACTICE IT, J. Obstet. and Gynec. Brit. Commonwealth, 75:1123-1124, Dec. 1968.

57. Silber, David L., Durnin, Robert E.: INTRAUTERINE ATRIAL TACHYCARDIS, Am. J. Diseases of Children, Vol. 117, pp. 722-726, June 1969.
58. Blumenthal, S., et al.: CONGENITAL ATRIAL FLUTTER: A REPORT OF A CASE DOCUMENTED BY INTRAUTERINE ELECTROCARDIOGRAM, Pediatrics, 41: 659-661, Mar. 1968.
59. Nielsen, J. S., et al.: FOETAL ELECTROCARDIOGRAPHIC STUDIES OF CARDIAC ARRHYTHMIAS AND THE HEART RATE, Acta. Obstet. and Gynec. Scan 47: 246-256, 1968.
60. INSERTED INTRAUTERINE TRANSMITTER FOR MEASUREMENT OF FETAL HEART RATE, Med. Brol. Engr. 6:549-551, Sept. 1968.
61. Rosen, Mortimer G.,: FETAL ELECTROENCEPHALOGRAPHIC STUDIES OF THE PLACENTAL TRANSFER OF THIOPENTAL AND ETHER, Obstet. and Gynec. Vol. 30, No. 4, Oct. 1967.
62. Cameron: FETAL ELECTROCARDIOGRAPHY: A STUDY OF THE LITERATURE, Developmental Medicine and Child Neurology, 9:329-337, June 1967, (61 references).
63. Petre-Quadens, O., et al.: SLEEP IN PREGNANCY: EVIDENCE OF FETAL SLEEP CHARACTERISTICS, J. Neurologic Science, 4:600-605, May, June, 1967.
64. Hooker, Davenport: THE ORIGIN OF OVERT BEHAVIOR, Ann Arbor, Univ. of Michigan Press, 1944.
65. Turnbull, A. C., Anderson, Anne B.: POSTGRADUATE MEDICAL JOURNAL, Jan. 1969, Vol. 45, pp. 65-67.
66. Guttmacher, Alan F.: THE SHRINKING INDICATIONS FOR THERAPEUTIC ABORTION, Harold Rosen (ed) Therapeutic Abortion New York, The Julian Press, 1954.
67. Moore, J. G., and Randall, J. H.: TRENDS IN THERAPEUTIC ABORTIONS: A REVIEW OF 137 CASES, Am. J. Obstet. and Gynec. 63, Jan. 1952, pp. 28-40.
68. Guttmacher, Alan F.: ABORTION—YESTERDAY, TODAY AND TOMORROW, Alan F. Guttmacher (ed) The Cases for Legalized Abortion Now, Berkeley: Diablo Press, 1967.

69. Guttmacher, Alan F.: THERAPEUTIC ABORTIONS: THE DOCTOR'S DILEMMA, J. of the Mt. Sinai Hospital, 21, 1954-1955.
70. SPONTANEOUS AND INDUCED ABORTION, report of a World Health Organization scientific group, World Health Organization Technical Report Series, No. 461, p. 40, 1970.
71. COLLEGE STATEMENT AND MINORITY REPORT ON THERAPEUTIC ABORTION, issued by the American College of Obstetricians and Gynecologists, Chicago, Illinois, May 1, 1969.
72. LEGALIZED ABORTION, Report by the Council of the Royal College of Obstetricians and Gynecologists, British Medical Journal, 1:850-854, April 12, 1966.
73. THE ABORTION ACT (1967), Findings of an inquiry into the first year's working of the *Act* conducted by the Royal College of Obstet. and Gynec., Br. Med. J., 2:529-535, May 30, 1970.
74. Klemfuss, R.: STATE M. D. S. CLARIFY ABORTION STAND, news release, Med. Soc. of the State of N. Y., March 26, 1970
75. Id., No. 73 at p. 533.
76. Chase, Gordon: GORDON CHASE CITES SUCCESS OF FIRST YEAR OF NEW YORK'S ABORTION LAW IN TWELVE MONTH REPORT ON 165,000 ABORTIONS, news release, Health Services Admin., The City of N. Y., June 29, 1971, p. 1.
77. Ibid.
78. Id., Appendix C—Place of Residence (%).
79. Seiner, C. H., Mahoney, E.: COORDINATION OF OUTPATIENT SERVICES FROM PATIENTS SEEKING ELECTIVE ABORTION, Clin. Obstet. and Gynec. 14:48-59, March, 1971.
80. Rovinsky, J. J.: ABORTION IN NEW YORK CITY, Preliminary Experience with a Permissive Abortion Statute, Obstet. and Gynec., 38:333-342, Sept. 1971.

81. GAPS IN N. Y. LAW BLAMED FOR "GROSS" ABORTION ABUSES, Ob. Gyn. News, Physicians International Press, p. 1, April 1, 1971.
82. Ibid.
83. Id., No. 80 at p. 337.
84. Id., No. 81.
85. Id., No. 76.
86. Id., No. 80 at p. 336.
87. Id.
88. Rovinsky, J. J.: ABORTION IN NEW YORK CITY, a paper presented to the meeting of the Am. Assn. of Planned Parenthood Physicians, President Hotel, KC, Mo., April 5-6, 1971.
89. MORBIDITY AND MORTALITY, U. S. Dept. of H. E. W., Center for Disease Control. Weekly Report for week ending June 12, 1971, Abortion Mortality, N. Y. C., 20:208-209.
91. BOSTON WOMAN, 23, DIES AFTER ABORTION PERFORMED IN OFFICE OF PHYSICIAN HERE, The N. Y. Times, Sat., Oct. 17, 1970.
92. OLSEN, C. E.; Nielsen, H. B.; and Ostergaard, E.: COMPLICATIONS TO THERAPEUTIC ABORTION, Int. J. Gyn. Obstet. 8:823-829, Nov. 1970.
93. Id. No. 73.
94. Tietze, C.: ABORTION LAWS AND ABORTION PRACTICES IN EUROPE, from Excerpta Medica International Congress Series, No. 207. Advances in Planned Parenthood—V. Proceedings of the Seventh Annual Meeting of the A. A. P. P. P. San Francisco, 1969, p. 198.
95. WORLD HEALTH STATISTICS REPORT, Vol. 23, No. 7, pp. 546-549, published by the W. H. O. 1967 is the latest year for which world statistics on maternal mortality are available. Denmark's maternal mortality rate was 19.2 and 20.9/100,000 live births for 1966 and

1967 respectively. Sweden's maternal mortality in 1966 was 11.3/100,000. Yugoslavia's 1966 rate was 105.3/100,000, and Hungary's was 48.4/100,000. In comparison, the U. S. maternal mortality in 1966 was 21.9/100,000 and 28.0/100,000 in 1967.

96. Jurukovski, J.: COMPLICATIONS FOLLOWING LEGAL ABORTION, Proc. Roy. Soc. Med., 62:830-831, Aug. 1969.
97. Id., No. 95.
98. Klinger, A.: DEMOGRAPHIC CONSEQUENCES OF THE LEGALIZATION OF INDUCED ABORTION IN EASTERN EUROPE, Int. J. Gynec. and Obst. 8:680-691, Sept. 1970.
99. Id., No. 95.
100. THERAPEUTIC ABORTIONS IN OREGON—JANUARY-DECEMBER, 1970, a report issued by the Oregon St. Bd. of Health. Oregon was selected because abortion is limited to state residents, a high volume of abortions are being performed (200.8/1,000 live births) and it is recognized that their reporting system is "complete or nearly complete". (See ABORTION SURVEILLANCE REPORT—HOSPITAL ABORTIONS, Jan.-June, 1970. Distributed by the U. S. Dept. of H. E. W., Center for Disease Control, Atlanta, Georgia, 30333.)
101. Cushner, I. M.: PREGNANCY TERMINATION: THE IMPACT OF NEW LAWS, an Invitational Symposium, J. Reprod. Med. 6:62-63, June, 1971.
102. VITAL STATISTICS OF THE U. S., Vol. 1—Nativity and Vol. II, Part B—Mortality. U. S. Dept. of H. E. W., U. S. Public Health Serv., 1967.
103. Id., No. 94.
104. Id., No. 95.
105. Tovell, H.: SYMPOSIUM ON LEGAL ABORTION, panel discussion, Am. Col. Obstet. and Gynec. Annual Meeting Dist. II, Oct. 28-Nov. 1, 1970. Paradise Island, Nassau, Bahamas. In Clin. Obstet. and Gynec. 14:303, March, 1971.

106. Jurokovski, J.; Sukarov, L.: A CRITICAL REVIEW OF LEGAL ABORTION, *Int. J. Gynec. and Obstet.* 9:111-117, May, 1971.
107. Id., No. 70 at pp. 38-39.
108. Id., No. 94 at pp. 205-206.
109. VITAL STATISTICS OF THE UNITED STATES, Part II—Mortality, pub. by the U. S. Public Health Serv. of H. E. W. The Official Vital Statistics list 160 maternal deaths from abortions of all causes. This is a figure hotly disputed by pro-abortionists who at times have placed the number of annual maternal deaths from illegal abortions at anywhere from 500 to 10,000 depending upon their audience. It is this kind of exaggeration that has helped the pro-abortionists create an hysteria for change in the abortion debate. However, it is interesting to note that one of the proponents of induced abortion, when discussing the same statistics at a recent pro-abortion conference, had this to say:

“I might say we have a fairly high rate of discovery in New York City. The opportunity of obscuring an abortion death is very unlikely. We have a very effective Health Department, which screens all the death certificates, and anything unusual would be referred to us, particularly in a woman of childbearing age.” *ABORTION IN A CHANGING WORLD*, Vol. II, Columbia U. Press, at p. 52, 1970.

110. Kerenyi, T. D.: OUTPATIENT INTRA-AMNIOTIC INJECTION OF HYPERTONIC SALINE, *Clin. Obstet. and Gynec.* 14:137, March, 1971.
111. Id., No. 70, at p. 37.
112. Banner, P. H.; Kirshen, E. J.; Didio, J. M.: THERAPEUTIC ABORTION: A REVIEW OF 567 CASES, *Cal. Med.*, 115:20-28, July, 1971.
113. Kaye, R. E.: PROCEDURES FOR ABORTIONS AT THE N. Y. LYING-IN HOSPITAL, *Clin. Obstet. and Gynec.*, 14:153-165, March, 1971.

114. Choate, J. W.: PREGNANCY TERMINATION: THE IMPACT OF NEW LAWS, an Invitational Symposium, *J. Reprod. Med.*, 6:45-72 at p. 62, June, 1971.
115. Midak, E.: EARLY AND LATE SEQUELAE OF ABORTION, *Pol. Tyg. Lek.*, 21:1063, 1966.
116. Kotasek, A.: ARTIFICIAL TERMINATION OF PREGNANCY IN CZECHOSLOVAKIA, *Int. J. Gynaec. and Obstet.*, 9:118-119, May, 1971.
117. Bengtsson, L. P.: LEGAL ABORTION INDUCED BY INTRA-AMNIOTIC INJECTION, (1): TECHNIQUE, EFFECT, RISKS AND MODE OF ACTION. *Lakartidningar*, 64:5037, 1967.
118. Menzies, D. N., et al.: THERAPEUTIC ABORTION USING INTRA-AMNIOTIC HYPERTONIC SOLUTIONS, *J. Obstet. and Gynaec. Brit. Comm.*, 75:215, 1968.
119. Wagatsuma, T., INTRA-AMNIOTIC INJECTION OF SALINE FOR THERAPEUTIC ABORTION, *Am. J. Obstet. and Gynec.*, 93: 743-745, 1965.
120. Trca, S., et al.: RELATIONSHIP BETWEEN DEVELOPMENT OF INFLAMMATION AFTER INDUCED ABORTION AND THE DURATION OF PREGNANCY, *Cesk. Gynaek.* 29:613, 1964.
121. Id., No. 7, Appendix D. Pregnancy Order (%).
122. Sandberg, E. C.: SURGICAL COMPLICATIONS OF THERAPEUTIC ABORTION (Highlights from 1971 A. M. A. Meeting), *Audio-Digest Obstet. Gynec.*, Vol. 18, No. 15, Aug. 3, 1971.
123. Droegemueller, W., et al.: THE FIRST YEAR OF EXPERIENCE IN COLORADO WITH THE NEW ABORTION LAW, *Am. J. Obstet. and Gynec.*, 103:694-698, 1969.
124. Hall, R. E.: INDUCED ABORTION IN NEW YORK CITY, a report of six separate studies, *Am. J. Obstet. and Gynec.*, 110: 601-611, July 1, 1971.
125. Carlton, M. A.; Hegarty, R.: THE IMMEDIATE MORBIDITY OF THERAPEUTIC ABORTION, *Med. J. Aust.*, pp. 1071-1074, Dec. 5, 1970.

126. Poradorsky, K.: LACERATIONS OF CERVIX AND PERFORATION OF UTERUS IN ARTIFICIAL INTERRUPTION OF PREGNANCY, Cesk. Gynek., 25:682, 1960.
127. Vasiliad, M., et al.: ON UTERINE PERFORATION, Obstet. and Gynec., 10:247, 1965.
128. Id., No. 70, p. 38.
129. Skipetrov, V. P.: CHANGES IN THE BLOOD COAGULATION IN ARTIFICIAL ABORTION, Vop. Okhr. Materin. Det., 11:69, 1966.
130. Wroblewski, M., et al.: EVALUATION OF BLOOD CLOTTING AND FIBRINOLYSIS IN EARLY PREGNANCY AND AFTER ITS INTERRUPTION, Ginek. Pol., 36:141, 1965.
131. Zwarik, E.: AFIBRINOGENEMIA AFTER ARTIFICIAL INTERRUPTION OF PREGNANCY, Zbl. Gynaek., 86:1097, 1964.
132. Zwarik, E., STUDY OF BLOOD COAGULATION AND FIBRINOLYSIS IN CONNECTION WITH ARTIFICIAL INTERRUPTION OF PREGNANCY, Gynaec., 162:197, 1966.
133. Sood, S. V., COMPLICATIONS OF HYSTEROTOMY, Br. Med. J., 4:495-496, Nov. 21, 1970.
134. Id., No. 80, p. 338.
135. Id., No. 98, p. 691. The prematurity rate in the United States is about 7%.
136. Slumsky, R.: COURSE OF DELIVERY OF WOMEN FOLLOWING INTERRUPTION OF PREGNANCY, Cesk. Gynek., 29:97, 1964.
137. HARMFUL EFFECTS OF INDUCED ABORTION, n.p. Family Planning Federation of Japan, 1966.
138. Schaeffer, A. J.: DISEASES OF THE NEWBORN, Sec. Ed., Philadelphia, W. B. Saunders Co., 1966.
139. Ozsvath, I.; Rado, S.: EXPERIENCE WITH INTERRUPTION OF PREGNANCY, Nepegeszsegugy, 42:121, 1961.
140. Sawazaki, C.; Tanaka, S.: HARMFUL EFFECTS OF INDUCED ABORTION (Reports of Studies Conducted by the Subcommittee on the Study of Induced Abortion),

p. 49, Family Planning Federation of Japan, Tokyo, 1966.

141. Hayasaka, Y., et al.: JAPAN'S 22-YEAR EXPERIENCE WITH A LIBERAL ABORTION LAW, XIIth International Congress of FIAMC, Washington, D. C., October 11-14, 1970.
142. Id., No. 70, pp. 27-28.
143. Kuck, M.: ABORTION IN CZECHOSLOVAKIA, Pro. Roy. Soc. Med., 62:831-832, 1969.
144. Hofman, D.: STATISTICAL STUDIES ON SOME OBSTETRIC RELATIONS, ESPECIALLY THE RELATION OF ABORTION TO LATE POST PARTUM COMPLICATIONS, Zbl. Gynaek, 87: 1537, 1964.
145. Mehlan, K.-H.: THE EFFECTS OF LEGALIZATION OF ABORTION ON THE HEALTH OF THE MOTHERS IN EASTERN EUROPE, Proceedings of the 7th Conference of the IPPE, Singapore, 1963; New York, Excerpta Medica Foundation, 1964.
146. Milosevic, B., et al.: STERILITY WITH SPECIAL REFERENCE TO INDUCED ABORTION, Srpski. Arh. Celukupno. Ledarstvo., 94:1, 1966.
147. Jeffcoate, T. N. A.: INDICATIONS FOR THERAPEUTIC ABORTION, Brit. Med. J., 1:581, 1960.
148. Gellen, J., et al.: MATERNAL-FETAL MICROHEMOTRANSFUSION AS A RESULT OF INDUCED ABORTION, Orr. Hetil., 107:732, 1966.
149. Gellen, J., et al.: SURGICAL TERMINATION OF PREGNANCY AS A CAUSE OF RHESUS SENSITIZATION, Brit. Med. J., 2:1471, 1965.
150. Jorgensen, J.: RHESUS ANTIBODY DEVELOPMENT AFTER ABORTION, Lancet, 2:1253-1254, 1969.
151. Mathews, C. D.; Mathews, A. E. B.: TRANSPLACENTAL HEMORRHAGE IN SPONTANEOUS AND INDUCED ABORTION, Lancet, 1:694-695, 1969.

152. Parmley, T. H., et al.: TRANSPLACENTAL HEMORRHAGE IN PATIENTS SUBJECTED TO THERAPEUTIC ABORTION, Am. J. Obstet. and Gynec., 106:540-542, 1970.
153. Voight, J. C., et al.: FETO-MATERNAL HEMORRHAGE IN THERAPEUTIC ABORTION, Brit. Med. J., 4:395-396, 1969.
154. Lakoff, K. M.; Klein, J.; Bologese, R. J.; and Corson, S. L.: TRANSPLACENTAL HEMORRHAGE DURING VOLUNTARY INTERRUPTION OF PREGNANCY, J. Reprod. Med. 6:19-20, June, 1971.
155. Sprague, C.: THE ROLE OF RHOGAM IN THERAPEUTIC AND SPONTANEOUS ABORTION, Hawaii Med. J., 29:450-451, July-August, 1970.
156. Ingraham, H. S.; Longwood, R. J.: ABORTION IN NEW YORK STATE SINCE JULY, 1970, Clin. Obstet. and Gynec., 14:5-24, March, 1971.
157. Cepelak, J., et al.: INFLUENCE OF INTERRUPTION OF PREGNANCY ON THE SEXUAL LIFE OF THE WOMAN, Cesk. Gynek., 25:609, 1960.
158. Potts, D.: TERMINATION OF PREGNANCY, Brit. Med. Bull., 26:65-71, 1970.
159. Osadchaia, O. V.: IMMEDIATE AND REMOTE RESULTS IN INDUCED ABORTION, Zdravoorkhr Belorussii, 9:59, 1963.
160. Id., No. 70, p. 41.
161. Ebaugh, F.; Heuser, K.: PSYCHIATRIC ASPECTS OF THERAPEUTIC ABORTION, Post Graduate Medicine, 2:325, 1947.
162. Ekblad, M.: INDUCED ABORTION ON PSYCHIATRIC GROUNDS, A FOLLOW-UP STUDY OF 479 WOMEN, Acta. Psychiat. Neurol. Scand. Suppl., 99:238, 1955.
163. Seigfried, S.: PSYCHIATRIC INVESTIGATION OF THE SEQUELAE OF INTERRUPTION OF PREGNANCY, Schweiz. Arch. Neurol. Psychiat., 67:365, 1951.
164. Niswander, K. R.; Patterson, R. J.: PSYCHOLOGIC REACTION TO THERAPEUTIC ABORTION, Obstet. Gynec. 29:702-706, May, 1967.

165. Id., No. 70, p. 42.
166. Fleck, S.: SOME PSYCHIATRIC ASPECTS OF ABORTION, J. Nerve. Ment. Dis., 151:42-50, 1970.
167. Kummer, J. M.: POST-ABORTION PSYCHIATRIC ILLNESS —A MYTH?, Am. J. Psychiat., 119:980-983, 1963.
168. Simon, N. M.; Senturia, A. G.: PSYCHIATRIC SEQUELAE OF ABORTION, Arch. Gen. Psychiat., 15:378-389, Oct. 1966.
169. Heath, D. S.: PSYCHIATRY AND ABORTION, Canad. Psychiat. Ass. J., 16:55-63, Feb. 1971.
170. Sloane, R. B., NEW ENGLAND JOURNAL OF MEDICINE, 280, 1206 (1969).
171. Barino, Alex. Criminal Abortion Deaths, Illegitimate Pregnancy Deaths, and Suicides in Pregnancy, in Minnesota, 1950-1965. AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY, 1969, pp. 356-367.
172. Okomoto, Y. and Kirikae, T.: ELECTROENCEPHALOGRAPHIC STUDIES ON BRAINS OF FOETUS, OF CHILDREN OF PREMATURE BIRTHS AND NEWBORNS TOGETHER WITH NOTES ON FOETAL BRAINWAVES, Folia Psychiatrica Neurol. Jap. 5:135 (1951).
173. Hamlin, Hannibal: LIFE OR DEATH BY EEG, J. Am. Med. Assn., 190:112-114 (1964).