

# THE IMPACT OF ABORTION ON WOMEN

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## HEARING

BEFORE THE

SUBCOMMITTEE ON SCIENCE, TECHNOLOGY  
AND SPACE

OF THE

COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

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MARCH 3, 2004

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

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WEDNESDAY, MARCH 3, 2004

U.S. SENATE,  
SUBCOMMITTEE ON SCIENCE, TECHNOLOGY, AND SPACE,  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,  
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:30 p.m. in room SR-253, Russell Senate Office Building, Hon. Sam Brownback, Chairman of the Subcommittee, presiding.

## OPENING STATEMENT OF HON. SAM BROWNBACK, U.S. SENATOR FROM KANSAS

Senator BROWNBACK. The hearing will come to order. We welcome everybody here today.

Every human life is both important and sacred, particularly that of a woman contemplating abortion. She must have the best information possible on the impact of the abortion on her and on her child.

I've convened this subcommittee hearing today in order to better understand the science on the physical and psychological health consequences on women of induced abortion, as well as getting a better picture of the quantity and quality of medical data that's available.

This hearing is about the mom. What impact does an abortion have on her? Whether one is pro-life or pro-choice, we should know the health consequences of abortion on women.

Since the *Roe v. Wade* decision 31 years ago this past January, it's estimated that at least 40 million abortions have been performed in the United States, yet there are few reporting requirements for this particular procedure. The lack of information on the medical impact of abortion on women is quite puzzling when compared to other medical procedures, such as hysterectomies, heart and kidney transplant surgeries, and even plastic surgery. We know, in great detail, the positive and negative long-term effects of procedures, from heart surgery to plastic surgery, and yet know so little about the long-term effects of abortion.

In 1973, when the court ruled on *Roe v. Wade*, we had no way of knowing the long-term physical and psychological health consequences of abortion. Common sense and health sense should have dictated that the long-term impact of abortion on women would have been chronicled from the very outset in the beginning of the post-Roe era. It's not. It has not. There is a lack of research data on this subject.

Whether we agree or disagree on the sanctity of the child's life growing in a mother's womb, we all agree on the sanctity of the mother's life, so we all should want to know how abortion impacts the mother. Surely we'd want to know the therapeutic or negative consequences of an abortion.

Today, we'll hear from two panels. Our first panel of witnesses will discuss their personal experience with abortion and with counseling other women who have had abortions. And I'd like our second panel of medical professionals to share what they have found regarding induced abortions; specifically, what do we know, from observable fact, about the long-term health impact of abortion on women? And also, how is the quantity and quality of information that is available on the long-term health impact of abortion on women? In other words, do we need more information?

This will be an interesting hearing on a tough topic. It's one that's had a lot of interest around the country in state legislatures addressing it, but I want to try to get to the facts today of: What do we know, what don't we know, what do we need to know in this arena? So I'm hopeful we can start that journey, start that understanding here today.

I'll turn to my colleague from New Jersey, Senator Lautenberg, for an opening statement.

**STATEMENT OF HON. FRANK R. LAUTENBERG,  
U.S. SENATOR FROM NEW JERSEY**

Senator LAUTENBERG. Thank you, Mr. Chairman.

I'd like to start with just a review of this Committee's jurisdiction. And I have this as a design, and it says that this Committee's jurisdiction is National Aeronautic and Space Administration, National Oceanic and Atmospheric Administration, National Science Foundation, National Institute of Standards and Technology, Office of Science and Technology Policy, U.S. Fire Administration, Federal R&D funding, Internet, earthquake research programs, encryption, technology, international science and technology.

So I have a problem, Mr. Chairman. And I have high regard for you. We don't agree often on subjects, but here I can't understand where this subcommittee gets jurisdiction over the subject matter of this hearing. Now, are we—if it's outer space, are we concerned about abortions being performed in outer space? It doesn't seem appropriate to create a forum within this subcommittee for espousing anti-abortion views within our jurisdiction.

And having said that, I'd perhaps be more understanding about the subject matter of today's hearing, the impact of abortion on women's health, if we scheduled a hearing for tomorrow on the impact of making abortion illegal, again, on a woman's health. And I think it's fair to predict that no such hearing has been, or will be, scheduled in this Subcommittee.

I brought a picture with me here today, and it's said that a picture is worth a thousand words. And this is a picture of the signing when the partial-birth—the so-called partial-birth abortion ban went into law. You don't see a woman in there. Not one. What we see is a group of smiling men watching the President sign away a woman's rights and jeopardize their health. Notice, not a woman in the picture. It's all men. They're in charge. And I call this a

“male-igarchy”—it’s an expression that I invented—a group of men making decisions that have enormous repercussions for the physical, mental, and economic well-being of women and their families.

And one of the reasons why we were so anxious to wipe out terrorism in Afghanistan is the kind of repression that women had to go through in that society. And I remember when women didn’t have a right to choose, and I remember the horrific impact of the crudely done abortion on women’s health.

So I think that it’s fair to say, Mr. Chairman, that I don’t agree that this Subcommittee—I’m a Member of it—ought to be a forum for retrogressive reviews of what ought to happen. This could be an appropriate subject for the Health and Human Services Committee. But I don’t think, under the title of Subcommittee on Science, Technology, and Space, that we ought to distort the parameters of jurisdiction in this Committee for a review of principally anti-legal-abortion matters of privacy that have been established by the Supreme Court to establish private points of view that have little or no relationship to this Committee’s jurisdiction.

So I hope that we’ll reconsider some of the agenda that this Subcommittee seems to be having. And I would be more than willing to ask for a review—or likely to ask for a review of what this Committee’s jurisdiction is and whether we ought to be spending time on this particular subject in this Subcommittee.

Thank you, Mr. Chairman.

Senator BROWNBACK. Thank you very much, Senator Lautenberg. And I have great respect and admiration for you and your abilities.

And we do have jurisdiction, as you listed in the items there, over research and development budgets for the Federal Government. And what we’re finding here, and what I’ve read in the written testimony that’s been submitted, particularly by the panelists that are going to be submitting it here, is that we have a lack of information here on a very basic scientific issue: What is the long-term impact of abortion on women? And everybody agrees the woman’s life is sacred. And what we’re looking at with this is, Do we need more information? Should we be funding more research at the Federal level to try to understand this?

This is a widespread practice in the United States, it is legal, it continues to be legal. But we have a number of medical practices in this country that we do in-depth study to try understand what’s its impact on people. And the question here is whether or not we should be funding more research and development, and that’s why this is under the jurisdiction of this Committee.

Senator LAUTENBERG. Well, Mr. Chairman, with all due respect, I think that we ought to study things like: What’s the impact of helmets on motorcycle riders? What’s the impact of poor nutrition on a child’s development? What’s the impact of lack of sensible advice on family planning? What’s the impact of foul air on children’s health? What do we do about juvenile diabetes? If you want to do research on things, then let’s open this up to all the subjects, and let’s find out what happens when women are forced to seek relief from a bad pregnancy, and a decision made by the woman and her doctor and her family, to be overridden by our male-igarchy that says, “Well, no, we’re going to make decisions.” I think that if we’re going to get into, truly, a balanced program here, you want to do

research on health issues, then you've got to start at a much different place than espousing a relatively limited view on one subject so that it slants the outcome in a way that otherwise I don't think is appropriate for this Subcommittee.

Senator BROWNBACK. We'll go to our first panel, and I think you'll see the balance here with this panel.

The first one is Georgette Forney. She's Executive Director of the National Organization for Episcopalians for Life, and the Co-Founder for the Silent No More Awareness Campaign. She, herself, underwent an abortion when she was 16 years of age; and, as such, brings this Committee an important perspective on the impact of abortion on women. To raise awareness of the impact that abortion has on women, Ms. Forney co-founded the National Silent No More Campaign. She is the mother of a teenage daughter.

Second will be Michaelene Jenkins. She's Executive Director for the Life Resource Network Women's Task Force. Ms. Jenkins underwent an abortion when she was 18 years of age and, likewise, brings this Committee an intensely personal perspective on this issue. She's written and spoken extensively on the physical and emotional harms of abortion on women. Ms. Jenkins is the mother of two boys.

And we also have on the panel Reverend Dr. Roselyn Smith-Withers. She is Co-Convenor of the Clergy Advisory Committee of the Religious Coalition for Reproductive Choice, and Founder and Pastor of The Pavilion of God, in Washington, D.C. She counsels women who have had abortions.

Ladies, thank you very much for joining us today on a difficult topic, one of perhaps even first impressions in the U.S. Senate. We do want to get at the facts of what the impact of abortion is on a woman.

And Ms. Forney, we will appreciate your testimony.

Your written testimony will be included completely in the record, so if you want to summarize, that would be fine; if you want to read your testimony, that's acceptable, as well. And I'm sure we'll have questions.

Mrs. Forney?

**STATEMENT OF GEORGETTE FORNEY, PRESIDENT, NATIONAL ORGANIZATION OF EPISCOPALIANS FOR LIFE (NOEL)**

Mrs. FORNEY. Thank you. It's a pleasure to be here, and I am humbled to come before you all.

Can you hear me OK?

Senator BROWNBACK. Yes.

Mrs. FORNEY. OK.

As I prepared my remarks, I realized that if I would have been invited to come here 10 years ago, I would have been speaking from a pro-choice position, because 10 years ago that's how I would have described myself. But a couple of things have happened in that ten-year period of time that I'd like to share with this Subcommittee to help you understand why I now am speaking on behalf of women and the abortion issue.

First, as you said, I had an abortion when I was 16 years old. I was living in Detroit, Michigan, at the time. And I took care of the decision all by myself. I drove to the clinic, had the abortion,



and then I drove on to my sister's house; I didn't go back home, because nobody—my parents didn't know I was even pregnant.

When I went to bed that night, I was overwhelmed. I had the sense of relief, on the one hand, but, on the other hand, I was just in turmoil, and I went to sleep crying. I woke up the next morning, and I got dressed, and I was in turmoil. And I thought, How am I going to deal with this? And the idea popped into my head that I would pretend that the abortion never happened, that I would just make the day before go away in my mind. I erased history. And that's how I lived for 19 years.

And I would have always described myself as pro-choice, and never said anything negative about abortion. But, as I said, three things happened to change my mind. The first thing was that, in 1994 I was in my basement, cleaning out some old boxes, and in the box I found my yearbook for my junior year in high school, the year I had my abortion. As I opened the book to go down memory lane, but that instead of looking at the kids' pictures, I felt my baby in my arms. Now, sir, you need to know that there was nothing in my past that prepared me for that. There was nothing that made that happen. It just was there. And she was there, and I could feel her little bum and her shoulders. And I knew she was a girl, and I knew I had missed out on parenting an awesome child. And it was such an incredible feeling. And for the first time in 19 years, I realized what my abortion did. It killed my baby. And I began weeping, and I began to grieve for the first time. And it could no longer be just that thing that I was able to deny.

The second thing that happened in my life was that, after I had gone through counseling and I had come to terms and found peace with my abortion experience, I had written out my story to share with some other women. And I had put a copy of it in my Bible and put it in there kind of as a safekeeping. Well, without realizing it, my 8-year-old decided to play church and went to the Bible to get some scriptures. And when she was going through it, she found my testimony, my story, and she read it. And the next evening, we were at a restaurant, and she said, "Mom, can I ask you a question?" And I said, "Sure, honey." And she said, "Were you married when you were 16 years old?" And I said, "No, why?" And she said, "Were you pregnant when you were 16?" I put down my fork, I said a prayer, I looked at my husband, and I said, "We need to get the check." And I said yes to her. And she said—she started to ask a question about the relationship—if you're allowed to have sex, and then she said, "Wait, where's the baby now?" And I was not prepared to have to try to explain to an 8-year-old what abortion was and what I had done to that baby.

We went through a couple of hours of discussion, her questions and so forth. Finally, about 8:30, I said, "Look, honey, it's time for you to be heading to bed. I—enough for the evening." She said, "OK, Mommy. But let me just get this clear, make sure I have this right." She looked me in the eye, and she said, "Tell me. You were pregnant when you were 16-years-old, and you killed your baby." And I had to look my 8-year-old daughter in the eye and say yes. And that is something I never want another woman to go through.

The third thing that happened is that after that experience, I began sharing my story a little bit more. And I was invited to be-

come an online counselor for women who were struggling with abortion issues. And I started getting e-mails from women over and over again, a 16-year-old girl was the first one, and she said, "I had an abortion yesterday, and they want me to go to school tomorrow and pretend everything is OK. I feel like dying." Over the years, there have been thousands of similar e-mails. Since then, when we started the "Silent No More Awareness Campaign," I have spent hours and hours and hours with thousands of women and men as they weep and grieve for their children.

Now, I'm a little confused when we talk about this issue and we say that there is no support that women have any problems, because the reality is, is that while the research says nobody has problems; I'm spending hours and hours counseling these women they say don't exist.

Thank you.

[The prepared statement of Ms. Forney follows:]

PREPARED STATEMENT OF GEORGETTE FORNEY, PRESIDENT, NATIONAL ORGANIZATION OF EPISCOPALIANS FOR LIFE (NOEL)

Mr. Chairman, good afternoon, my name is Georgette Forney, I am the President of the NOEL, a life-affirming ministry in the worldwide Anglican Communion and I live in Sewickley, Pennsylvania. I am humbled to come before you and share my testimony.

As I prepared my remarks, I realized that if I had been invited to speak ten years ago, I would have done so in support of a woman's right to choose. However, some things have happened that have changed my opinion. I would like to tell you what they are.

First you need to know on October 4, 1976, when I was sixteen years old, I had an abortion in Detroit, Michigan. Afterwards, I went to my sister's house to recover because my parents didn't know about my pregnancy. That night as I lay in bed, I cried until I fell asleep. As I dressed the next morning, I was struggling to make sense of the day before, and it hit me "I'll pretend yesterday never happened." And that's how I lived for nineteen years, in total denial.

Then, in 1994, I was with a small group of women, and we were sharing our struggles with one another. One young woman expressed how she had been struggling to bond with her newborn son. She said she had an abortion in college and felt it was why she couldn't bond with her baby. She said she was going through abortion recovery counseling. I told her I had an abortion when I was 16, and it was no big deal. I said she simply needed to get over it.

About six months later something strange happened, which forced me to recall that conversation. I was in my basement cleaning out boxes, and I found my yearbook from my junior year in high school. I picked it up and thought I'd take a quick stroll down memory lane.

But something strange happened. Instead of opening the book and seeing the kids' faces, I felt my baby in my arms. I knew instantly it was my child that I had aborted. I knew she was a little girl. I could feel her little bum in my right hand and her back and neck in my left. And I knew that I had missed out on parenting a wonderful person, who would have brought a lot of joy into my life.

For the first time in nineteen years, as I felt my baby's presence in my arms I realized the full impact of my abortion. And I began to weep. As I wept I remembered the conversation from six months earlier and I immediately called that woman. I was crying, and I said I needed help. She came over immediately and sat with me while I wept and began grieving for my aborted baby.

That day I started a journey that has changed my life. Like my friend, I too attended an abortion recovery program. As I went through the program I began to understand what forgiveness and repentance is all about. For the first time I knew that God loved me and that through Jesus' death and resurrection, He forgave me, and I was able to forgive myself. I also understood that my child was in Heaven with God, and she forgave me too.

During the abortion recovery program, they encourage you to recall different aspects of the abortion experience to help you heal. One of the strongest memories I have is of driving to the clinic and thinking: "This feels wrong, but because it's legal it must be okay." I share this with you because it's important for you to know that

millions of people, especially young people trust you to make laws that protect us—sometimes even from ourselves.

A second thing that caused me to change my opinion about abortion was having to explain to my eight-year-old daughter what abortion was. I had written out my story after going through the counseling, and I put a copy of it in my Bible. Not long after that my daughter was playing church and went to my Bible for some Scripture references. She found my testimony and read it. The next night we were at a restaurant having dinner and she asked me if I was married when I was 16. I said, “No, why?” She asked if I was pregnant when I was 16? I put down my fork, said a prayer and replied, “Yes.” She then asked, “Where is the baby?”

Trying to explain to an 8-year-old what abortion is and why I had one was extremely difficult. After some discussion, I said it was bed time, and she said, “Okay, but let me make sure I understand. You were pregnant when you were 16, and you killed your baby?” I had to look her in the eye and answer, “Yes.” The look of fear and disappointment in her eyes is something I will never forget.

After my daughter learned of my abortion, I started sharing my story publicly—and took the job as Executive Director of NOEL. Early in my tenure, I was asked to do on-line counseling for women who had had abortions. I began getting e-mails from women and girls who wrote hours after their abortions, or years later. Each e-mail expressed pain, and regret. Over the course of the three years I did it, I received over a thousand e-mails. I’ll never forget the first e-mail I received from a girl who was 16. She had had the abortion on Saturday and Sunday night she e-mailed saying “I can’t go to school tomorrow and pretend everything is fine, I feel like dying.” Others wrote things like: “I just saw a diaper commercial and I can’t stop crying.” I got e-mails from women worldwide who shared their abortion pain and how their lives were a mess. They wanted help; they wanted to know they weren’t the only one hurting. They always expressed relief to know help was available and they weren’t alone in their pain.

And that is why I have so radically changed my opinion about abortion and a woman’s right to choose. What I have learned from personal experience—and from thousands of other women—is that abortion does not solve problems; abortion just creates different problems. I cannot tell you how many women I have sat with as they cry and mourn for their babies. As their pain is released, they begin to see how it has affected their lives. It is so sad. And it is why I say: Women may have the right to choose abortion, but I know with everything in me, abortion is not right for women.

These experiences made me realize while abortion is wrong because of our babies die, abortion is also wrong for women. And I knew that women who have been there, and done that, needed to speak up and share the truth about abortion. To help the public understand that abortion hurts women more than it helps them, and to let women who are hurting know that help is available. So, I co-founded the National Silent No More Awareness Campaign in partnership with Janet Morana from Priests for Life to do just that.

Since developing the campaign, I have learned even more about abortion. There are a few things I’d like to quickly point out:

First, many women are forced or coerced into have an abortion. Jennifer O’Neill, the Silent No More Awareness Celebrity Spokeswoman, and well-known actress, who starred in the movie “Summer of ’42,” was forced by her fiancé to abort the baby she wanted. He told her that he would sue for custody of her older daughter if she didn’t abort their child. Recently, a woman e-mailed me and shared her story, which included the fact that her boyfriend took her at gunpoint to the clinic for the abortion. Coercion is a common theme heard in women’s testimonies.

Second, many women experience physical complications after abortion, and women still die from legal abortion.

In 1998 Denise Doe (not her real name) left a Louisiana clinic with a 2-inch gash across her cervix and an infection so severe it sent her into a coma for 14 days. For the next six months, she could not even use the bathroom—she had to rely on a colostomy bag. An emergency hysterectomy at a nearby hospital ultimately saved her life.

Lou Anne Herron wasn’t so lucky. Her 1998 abortion in Phoenix left her bleeding and unattended in a recovery room while Dr. John Biskind ate his lunch. Dr. Biskind then left the clinic while Ms. Herron screamed for help. When an administrator finally called 911—three hours later—the administrator asked emergency workers not to use their sirens and to come in through a side entrance. They did—but Ms. Herron had bled to death already. She left behind two children.

In February 2002, 25-year-old Diana Lopez died at a Los Angeles clinic because the staff failed to follow established protocols before and after the abortion. If they had followed protocols, they would have realized she was not a good candidate for

abortion because of blood pressure problems, and afterwards when her uterus was punctured during the abortion they should have called for an ambulance.

In September 2003, Holly Peterson died from using RU-486.

Third, please know I am not claiming that every woman will express regret her abortion—as I said at the beginning of my story, for 19 years I denied my abortion and therefore denied any feelings about it. Many women are where I was but what I have found since getting involved is that there is a sub-culture in our society that is dealing with the pain of abortion. There are 15 books published on this issue and at least twenty-one national abortion recovery programs.

Those who support abortion will say that at the most, 5–10 percent of women have emotional problems after abortion (which equals about 75,000–130,000 women a year). So I ask, would it not make sense to develop some sort of screening procedure to identify women who may have severe reactions to abortion and protect them?

Last year when we started the Silent No More Awareness Campaign, a pro-abortion professor from a California college wrote an article about the campaign. She cited research that disproves any claim that women suffer emotionally after abortion and suggested that: “Ms. Forney was probably un-stable before her abortion.” As I read the article—I was amazed that this professor would write such a thing—she didn’t even know me. It was my daughter’s response that put the issue into perspective for me. She said, “Mom, while they are talking about research that says women aren’t hurting, you’re working seven days a week counseling the women they say don’t exist.”

Finally, I would note that the Alan Guttmacher Institute believes 43 percent of women under the age of 45 have had abortions. Therefore, we are all around you. We are everywhere, and our pain affects your lives.

I would like to close with some quotes from women who have spoken at the campaign events here in Washington to help you see how our pain affects us and spills out to those around us.

Joyce said, “I was a crazy woman with a mask on. To everyone I looked like I had it together. My husband will tell you differently, my children will tell you differently. The warning label of abortion should read ‘Caution: abortion can result in years of grief, physical and emotional pain, mood swings, eating disorders, low self-esteem, health and relationship problems with your spouse and children.’”

Jennifer said, “I knew in my heart of hearts that I had done something radically wrong. That I had left a piece of me on that table.”

Olivia said, “I was never told about the pain that I would feel when the vacuum machine was turned on as it sucked my baby from my body.”

Ann said, “I became emotionally numb, I tried to kill myself three times.”

Janine said, “I represent everyone that thinks ‘I’m fine.’ But every time that you hear something about abortion your stomach turns just a little bit to let you know that you’re not fine.”

Sylvia said, “Feeling my baby burning in my womb—cannot be forgotten. I don’t know exactly how long it took for my baby to burn to death or how long labor lasted. The memory for me is not in hours and days but in sounds and feelings frozen in time. The haunting screams of the others in the room, crying out for release as they labored to give birth to death. The panicked cries of my own body as my baby was delivered dead, as planned. The tears I cried as I lay with my baby are the tears that have continued for 28 years.”

Karen said, “Immediately after the abortion, nothing mattered to me, school, my life. I had very low self-esteem. It was nine years after that first abortion just three years after the second, that I began to realize that all the years of substance abuse, low self esteem, suicidal tendencies, and self hatred began after that first abortion.”

For 31 years we’ve debated the humanity of the baby versus a women’s right to choose—but I believe it’s time to quit with the politics of abortion and admit that we have conducted a 31 year experiment on women. Did you know that one of the most common medical procedures done on women every year has never been properly researched or studied? Why not? Why can we not agree women’s health issues are more important than the politics of abortion? Why can we not fund an in-depth, long-term study on the impact of abortion on women? States are not even required to report the number of abortions performed annually. Let us at least make that a requirement.

Since December 2001, there have been 6 articles published in leading medical journals that indicate a significant correlation between abortion and later emotional distress. These studies and articles should support the need for more discussion and further research about the emotional aftermath of abortion.

1. Higher Rates of Long Term Clinical Depression—"Depression and unintended pregnancy in the National Longitudinal Survey of Youth: a cohort study," *British Medical Journal*, 324: 151-152. This study from December 2001 indicates that women who abort a first pregnancy are at greater risk of subsequent long term clinical depression compared to women who carry an unintended first pregnancy to term. An average of eight years after abortion, married women were 138 percent more likely to be at high risk of clinical depression compared to similar women who carried their unintended first pregnancies to term.
2. More Mental Health Problems—"State-funded abortions vs. deliveries: A comparison of outpatient mental health claims over five years." *American Journal of Orthopsychiatry*, 2002, Vol. 72, No. 1, 141-152. In this record-based study of 173,000 California women, women were 63 percent more likely to receive mental care within 90 days of an abortion compared to delivery. In addition, significantly higher rates of subsequent mental health treatment persisted over the entire four years of data examined. Abortion was most strongly associated with subsequent treatments for neurotic depression, bipolar disorder, adjustment reactions, and schizophrenic disorders.
3. Increased Substance Abuse—"History of induced abortion in relation to substance use during pregnancies carried to term." *American Journal of Obstetrics and Gynecology*, December 2002; 187(5). This study indicates that women with a prior history of abortion are twice as likely to use alcohol, five times more likely to use illicit drugs, and ten times more likely to use marijuana during the first pregnancy they carry to term compared to other women delivering their first pregnancies.
4. Problem Bonding with Future Children—"The quality of care giving environment and child development outcomes associated with maternal history of abortion using the NLSY data." *Journal of Child Psychology and Psychiatry*, 2002; 43(6):743-757. "The results of our study showed that among first-born children, maternal history of abortion was associated with lower emotional support in the home among children ages one to four, and more behavioral problems among five-to nine-year-olds," said Dr. Priscilla Coleman, a professor at Bowling Green State University and the lead author of the study. "This held true even after controlling for maternal age, education, family income, the number of children in the home and maternal depression."
5. Higher Risk of Depression—An article published in the *Medical Science Monitor*, May 2003 noted the author's summary as follows; "After controlling for several socio-demographic factors, women whose first pregnancies ended in abortion were 65 percent more likely to score in the 'high-risk' range for clinical depression than women whose first pregnancies resulted in a birth."
6. Need for Psychiatric Hospitalization—The Canadian Medical Association Journal also published an article in May 2003, which explored the link between abortion and increased rates of psychiatric hospitalization. It found that women who abort a pregnancy are 2.6 times more likely to require psychiatric hospitalization in the year after abortion than women who experience and un-expected pregnancy and carried to term.

Women have been at the center of a 31 year social experiment, and we should unapologetically insist on mandatory reporting of abortion complications for the sake of women's health, and in the interest of preventing a public health crisis.

I realize this hearing is informative in nature, but as you consider what you have heard today, please set aside any pre-conceived notions and ask yourself this: Is abortion a choice I want a woman that I care about to make? Do I want my daughters dealing with the grief that I have heard about today? Do I want my nieces dealing with the mourning that Georgette went through? Do I want my employees dealing with the shame and the pain that I have learned about? And if abortion is not good enough for the women you care about, then it is not good enough for any woman. I believe Women Deserve Better than abortion because abortion hurts women.

Thank you.

Senator BROWNBACK. Thank you for that testimony.  
Ms. Jenkins, thank you for joining us today.

**STATEMENT OF MICHAELNE JENKINS, EXECUTIVE  
DIRECTOR, LIFE RESOURCE NETWORK**

Ms. JENKINS. Thank you.

Thank you, Mr. Chairman. Good afternoon. My name is Michaelene Jenkins. I'm the Executive Director of Life Resource Network. I live in San Diego, California. I thank you for the opportunity to testify today.

Women's issues, women's right, and human rights have always been a passion of mine. As a teenager, I assumed that legalized abortion was necessary for women to attain their educational and career goals. So it's not surprising that when I became pregnant at 18, I thought about having an abortion. I also thought about adoption. But when I told my boyfriend, he said if I didn't have an abortion, that he'd kick me out. I turned to my employer for advice, but she agreed that abortion was the only logical option, and offered to arrange one for me.

My experience at the abortion clinic was painful and humiliating. Although the young women awaiting their abortions were anxious and tearful, the clinic staff was cold and aloof. I met briefly with a counselor, who characterized my eight-week pregnancy as a mass of cells and the product of conception.

When the abortion provider entered my procedure room, I started to panic, I started to have second thoughts, and I asked her assistant if I could have a few minutes. But the abortion provider yelled, "Shut her up," and started the suction machine. It was not an empowering experience. I felt violated and betrayed.

The promised solution, really the only option that was presented to me, wasn't the end of my nightmare, but only the beginning. Because of how I had viewed abortion, I was completely unprepared for the emotional fallout afterwards. I soon found myself in a cycle of self-destructive behavior that included an eating disorder. Desperate for a fresh start, I broke up with my boyfriend, quit my job, and moved from Minnesota to Hawaii.

While I was in Hawaii, in an attempt to make sense of what was going on, I educated myself about fetal development, and I was shocked to learn that, at 8 weeks, there was a tiny, but fairly formed child, human being, about a half-inch, that did have a head and eyes and legs and arms. I sank even deeper into depression and self-hatred as I realized that I had literally paid someone to end the life of my child. This continued for years until suicidal thoughts began to overwhelm me and I sought assistance.

With the help of counselors and the support of friends, the time of self-condemnation and self-punishment came to an end, and it allowed me to enter into a healthy grieving process. Throughout that process, I also became aware of the impact my choice had on others around me. Although I have repeatedly assured my parents that I knew they would have been supportive if I had chosen to carry the child to term, they continue to tell me that they feel responsible for the death of their grandchild. When I first told my sister, she was very upset and said she didn't want to know. She didn't want to know about this niece or nephew that was missing.

My oldest son found out quite young, and he still struggles with the reality of the loss of his sibling and also how his mom could have done this. My 8-year-old doesn't know yet. And right now I find that the most upsetting, to know that he will have to deal with the pain that I have inflicted upon him.

In addition to coping with the fallout my abortion has caused family members, there still are painful times for me. Healing doesn't mean forgetting. Mother's Day, in particular, is very difficult for me. It's a day that, as I celebrate the joy that I have with my living children, I ache for the child that I destroyed.

At one time, I thought that my abortion experience was unique. But over the years, I've found that it isn't. There's mounting evidence, both anecdotally and in published studies that women suffer emotionally and physically after an abortion. But since abortion is often held hostage to politics and special interest groups, in my opinion there are too few reliable studies that have been done. Abortion continues to be an unchecked and unstudied experiment on American women.

It has been 19 years since my abortion, and a lot has changed in this country. But not much has changed for women experiencing an untimely pregnancy. They still often face unsupportive partners and employers, and they're unaware of the community resources available to them. They undergo abortion, not so much as a choice, but out of desperation or as a last resort. And although some women are able to move on from that abortion, many are left with physical or emotional scars that negatively affect their lives for years and sometimes decades.

In all the noise that surrounds abortion, women are often forgotten. I think it's time to stop that noise and start listening to women who have experienced abortion. I'm very grateful that today you've taken the time to do that. And I encourage you to continue steps to understand the impact that abortion has on women.

Thank you very much.

[The prepared statement of Ms. Jenkins follows:]

PREPARED STATEMENT OF MICHAELNE JENKINS, EXECUTIVE DIRECTOR,  
LIFE RESOURCE NETWORK

Mr. Chairman, good afternoon; my name is Michaelene Jenkins, I am Executive Director of the Life Resource Network, and I live in San Diego, California. I thank you for the opportunity to testify before this Committee today.

Women's issues, women's rights and human rights have always been a passion of mine. As a teenager I assumed that legalized abortion was necessary for women to attain their educational and career goals. So, it's not surprising that when I became pregnant at 18 I thought about having an abortion. I also considered adoption, but when I told my boyfriend, he said he would kick me out if I didn't have an abortion. I turned to my employer for advice. She agreed that abortion was the only logical option and offered to arrange one for me.

My experience at the abortion clinic was painful and humiliating. Although the young women awaiting their abortions were anxious and tearful, the clinic staff was cold and aloof. I met briefly with a "counselor" who characterized my 8-week pregnancy as a "couple of cells" and the "products of conception."

When the abortion provider entered my procedure room, I began to have second thoughts and asked her assistant if I could have a few minutes. The doctor yelled "shut her up" and started the suction machine. It was not an empowering experience. I felt violated and betrayed.

The promised solution—really the only option presented to me—wasn't the end of my nightmare, but only the beginning. I was completely unprepared for the emotional fallout after the abortion.

I soon found myself in a cycle of self-destructive behavior that included an eating disorder. Desperate for a fresh start, I broke up with my boyfriend, quit my job, and moved from Minnesota to Hawaii.

While living in Hawaii I educated myself about fetal development. I was shocked to learn that an 8-week embryo is at least a half-inch long with a head, arms and legs, a beating heart and functioning brain. I sank even deeper into depression and

self-hatred as I realized that I had destroyed my own child. This continued for the next few years until I sought assistance when suicidal thoughts began to overwhelm me.

With the help of counselors and supportive friends the time of self-condemnation and self-punishment came to an end allowing me to enter into a healthy grieving process. In addition to grieving the loss of my child, I slowly became aware of the impact my choice had on other members of my family.

Although I have repeatedly assured my parents that I never doubted their support and assistance if I had decided to carry the baby to term, they continue to believe that somehow they failed me and that they are partly responsible for the death of their grandchild. When I first told my sister she cried and said she wished she didn't know about the niece or nephew that is missing. My oldest son found out quite young and still struggles with the loss of a sibling and the reality that his mother was the cause of the loss. My youngest son who is 8 hasn't been told yet, and it breaks my heart that he will have to deal with a loss that I inflicted.

In addition to coping with the fallout the abortion has caused in my family there are still times that are painful for me. After all, healing doesn't mean forgetting. Mother's Day is particularly difficult. As motherhood is celebrated I experience great joy in regard to my living children at the same time aching for the child that I destroyed.

At one time I thought that my abortion experience was unique, but over the years I have found that it is not. There is mounting evidence—both anecdotal and in published studies—that women suffer emotionally after an abortion. But since abortion is held hostage to politics and special interest groups there are too few reliable studies that have been done. Abortion continues to be an unchecked and unstudied experiment on American women.

It has been nineteen years since my abortion. Although much has changed in nineteen years, not much has changed for women experiencing an untimely pregnancy. They still face unsupportive partners and employers and are often unaware of the community resources available to them. They undergo abortion not so much out of choice, but out of desperation or as a last resort.

Although some women are able to move on from their abortion, many are left with physical or emotional scars that negatively affect their lives for years and sometimes decades.

In all the noise surrounding abortion, women are often forgotten. It is time to stop the noise and start listening to women who have experienced abortion. I am grateful that you have taken the time to listen and I urge you to continue to take steps to understand the impact abortion has on women.

Senator BROWNBACK. Thank you, Ms. Jenkins.

Rev. Dr. Smith-Withers, thank you for joining us today.

**STATEMENT OF REVEREND DR. ROSELYN SMITH-WITHERS, D. MIN., CO-CONVENER, CLERGY ADVISORY COMMITTEE OF THE RELIGIOUS COALITION FOR REPRODUCTIVE CHOICE (RCRC), AND FOUNDER AND PASTOR, THE PAVILION OF GOD**

Rev. SMITH-WITHERS. Good afternoon. First, I'd like to thank you for the opportunity to present testimony today on the important issue of the impact of abortion on the lives of women.

I am Rev. Dr. Roselyn Smith-Withers, Co-Convenor of the Clergy Advisory Committee of the Religious Coalition for Reproductive Choice, RCRC. The Religious Coalition for Reproductive Choice was founded in 1973. It is a national nonprofit education and advocacy organization whose members are national bodies from 15 denominations and faith traditions, with official positions in support of reproductive choice. These denominations include the Episcopal Church, Presbyterian Church USA, United Church of Christ, United Methodist Church, Unitarian Universalist Association, and Reform and Conservative Judaism.

As an ordained Baptist clergy person and clergy counselor trained in the RCRC model of counseling called "All Options Clergy Counseling," I have counseled many women with unintended and



unwanted pregnancies over the last 15 years. My goal in counseling is to help women discern what is right and best for them and their family, and to help them come to an understanding that what they believe is consistent with their faith and their conscience.

I believe that God has called me to a ministry that includes compassion for all of God's children through all phases of their experience. I believe that God speaks to women and enables them to make decisions for themselves. I believe that when we do not agree or understand the challenges that a woman is facing, we can be absolutely certain that God understands, loves them, and is with them.

I believe that we should support women facing the challenge of an unplanned or unwanted pregnancy as nonjudgmentally and as compassionately as possible, trusting that they have the moral authority to make decisions that are healthy, helpful, good, and of God.

I counseled a woman of faith a few years ago who was suffering from remorse and sadness. She told me that she had an abortion when she was 16. She talked about how judgmental people had been, and how she felt ashamed and alone. She told me that her family consisted of just her mother and herself, and that her mother was mentally ill. She talked about the challenges she faced daily caring for her mother, that, at 16, she didn't believe that she could have cared for her mother and survived a pregnancy.

She then told me about the compassion of her physician who performed her abortion. She thanked me for listening, not judging her. Just listening. She said, and I quote, "I believe God hears me, but I wish I had had someone to talk with then, someone who would listen to me. I believe I did the right thing, but I needed someone to hear me and care. Being alone can make you feel ashamed and so sad," end quote.

The attempt to stigmatize abortion and the women who have had abortions is so far-ranging that it is considered a campaign. Medical groups that call themselves pro-life and advocate against abortion, and even contraception, are active and growing. The campaign is also strongest in Christian denominations in which groups or caucuses have formed to reverse traditional church policies of compassion and care that support reproductive choice as an act of conscience.

My experience has been, and research has shown, that while some women may experience regret, sadness, or guilt after an abortion, the overwhelming responses are resolve, peace, and a feeling of having coped responsibly and morally with a very difficult situation.

To insist that women who have an abortion are devastated as a result, simplifies the complex nature of each woman's feelings. Even worse, such pronouncements induce guilt, undermine a woman's self-respect and confidence that God can and does speak directly to her, and convinces a woman that she must be forgiven even though abortion might be the most responsible, moral, honest, life-affirming decision that she can make at that time.

As a counselor who has talked to many with unintended pregnancies, I believe that women deserve our respect for making a difficult and complex decision. As their experiences indicate, it may

not be the abortion that causes harm, but the negativity and lack of compassion of others.

[The prepared statement of Rev. Smith-Withers follows:]

PREPARED STATEMENT OF REVEREND DR. ROSELYN SMITH-WITHERS, D. MIN.,  
CO-CONVENER, CLERGY ADVISORY COMMITTEE OF THE RELIGIOUS COALITION FOR  
REPRODUCTIVE CHOICE (RCRC), AND FOUNDER AND PASTOR, THE PAVILION OF GOD

Thank you for the opportunity to present testimony today on the important issue of the impact of abortion on women. I am Reverend Dr. Roselyn Smith-Withers, Co-Convener of the Clergy Advisory Committee of the Religious Coalition for Reproductive Choice (RCRC) and founder and pastor of The Pavilion of God in Washington DC. The Religious Coalition for Reproductive Choice (RCRC), founded in 1973, is a national non-profit education and advocacy organization whose members are national bodies from 15 denominations and faith traditions with official positions in support of reproductive choice, including the Episcopal Church, Presbyterian Church (USA), United Church of Christ, United Methodist Church, Unitarian Universalist Association, and Reform and Conservative Judaism.

As an ordained clergyperson and clergy counselor trained in the RCRC model of counseling called All Options Clergy Counseling, I have counseled many women over the last 15 years. Some women have spiritual and religious concerns as they consider their options. My goal in counseling is to help women discern what is right and best for them and their family and to help them come to an understanding that they believe is consistent with their faith and conscience. Women with an unintended or unplanned pregnancy have many different feelings and concerns as they consider their options and after they have decided on a course of action and taken that action. I tell women that there are no easy answers as to what to do, that they must weigh everything involved in this decision—whether they are prepared for parenthood, have the family and financial support they need, are physically and emotionally able to handle the challenges, and many other considerations that they know best. I assure them that, while a problem or unintended pregnancy can be devastating, it can also mark the beginning of a more mature life because it requires that they take charge of their own future. In my experience, women become stronger when they are able to make these most personal, morally complex decisions for themselves, without fear and without coercion. No woman chooses to be in a situation in which she must consider an abortion, but if that is the decision a woman has to make, I believe firmly that God is with her in that moment.

Women, both unmarried and married, become pregnant unintentionally for various reasons, including rape and date rape, failed birth control, and lack of information about contraception and sexuality. Many of these women experience a point of low esteem, some even wanting to die. Later, they can come to understand that they can heal and that their faith can be part of that healing.

Research has shown that, while some women may experience sensations of regret, sadness or guilt after an abortion, the overwhelming responses are relief and a feeling of having coped successfully with a difficult situation.<sup>1</sup> Yet the idea persists that women must be guilt-ridden by an abortion and that the decision will haunt them for the rest of their lives. There is an unfounded and unexamined presumption that a woman's conscience guides her not to have an abortion. In my experience as a counselor, I have more often seen women who are guided by their conscience and their sense of responsibility to have an abortion. Because abortion is so stigmatized, they do not express their true feelings and desires. The stigmatization of unplanned pregnancy and abortion can have a coercive effect, causing some women to continue a pregnancy that they prefer to terminate, with lifelong consequences to the woman and her family. Clergy who are trained in the All Options counseling model and who counsel women before and after abortions know that most women believe they have made a responsible decision.

Research studies support what women know in their hearts: that women's emotional responses to legal abortion are largely positive. In 1989, the American Psychological Association (APA) convened a panel of psychologists with extensive experience in this field to review the data. They reported that the studies with the most scientifically rigorous research designs consistently found no trace of "post-abortion syndrome" and furthermore, that no such syndrome was scientifically or medically recognized. The panel concluded that "research with diverse samples, different measures of response, and different times of assessment have come to similar con-

<sup>1</sup>Adler, NE. *et al.*, "Psychological Factors in Abortion: A Review." *American Psychologist*, 1992, 47(10): 1194–1204.

clusions. The time of greatest distress is likely to be before the abortion. Severe negative reactions after abortions are rare and can best be understood in the framework of coping with normal life stress.”<sup>2</sup> Adler pointed out that despite the millions of women who have undergone the procedure since 1973, there has been no accompanying rise in mental illness. “If severe reactions were common, there would be an epidemic of women seeking treatment,” she said.<sup>3</sup> In May 1990, a panel at the American Psychiatric Association conference argued that government restrictions on abortion are far more likely to cause women lasting harm than the procedure itself.

To insist, as do groups that oppose abortion in all cases, that women who have an abortion are devastated as a result simplifies the complex nature of each woman’s feelings. Even worse, such pronouncements induce and nurture guilt, undermine women’s self-respect, and convince women they must be forgiven for a sin, even though abortion might be the most responsible, moral decision.

Religious women who have had abortions have very different feelings from those described by groups that oppose abortion. The book *Abortion, My Choice, God’s Grace*, by Anne Eggebroten,<sup>4</sup> tells the stories of women who have had abortions. Elise Randall, an evangelical Christian and graduate of Wheaton College, who had an unwanted pregnancy, said, “I was filled with resentment and afraid that I might take out my frustrations on the child in ways that would do lasting damage.” She and her husband concluded that abortion “was the most responsible alternative for us at this time. The immediate result was an overwhelming sense of relief. Now we were free to deal with the existing problems in our lives instead of being crushed by new ones . . . Only God knows what might have been, but I like to think that our decision was . . . based on responsibility and discipleship.”

Christine Wilson, an active member of a Presbyterian church in suburban Baltimore and attorney, wife and mother of two grown children, became pregnant when she was 16 after having sex for the first time with her boyfriend. At first naïve and then later embarrassed and afraid, she did not tell her parents until she was five months pregnant. Because abortion was illegal at that time, her father took her to England for the abortion. For many years she suffered in silence from guilt and emotional turmoil. Now, she says, “If I had (legal) access in 1969, I know it would not have taken 25 years to attain the peace of mind I have today.”

The attempt to stigmatize abortion and the women who have had abortions is so far-ranging that it can be considered a campaign. Medical groups calling themselves pro-life, whose purpose is to promote misinformation about abortion, are active and growing; these groups use the professional credibility of doctors to promote a political agenda that includes opposition to emergency contraception and insurance coverage of contraceptives.<sup>5</sup> The campaign is also strong in some Christian denominations, in which groups or caucuses have formed to reverse traditional church policies that support reproductive choice as an act of conscience. The website of the National Organization of Episcopalians for Life (NOEL),<sup>6</sup> for example, which calls itself a “para-church organization within the Anglican tradition,” states that the group seeks to change “the growing ‘culture of death’ in America and the Episcopal Church,” in contrast to the resolution adopted by the church’s 1994 General Convention that “Human life, therefore, should be initiated only advisedly and in full accord with this understanding of the power to conceive and give birth that is bestowed by God.” The National Silent No More Awareness Campaign of NOEL and Priests for Life<sup>7</sup> works to make abortion “unthinkable” while the Episcopal Church, in another statement adopted by its official body, urges there be “special care to see that individual conscience is respected and that the responsibility of individuals to reach informed decisions in this matter is acknowledged and honored.”

It is important and heartening to all who care about women’s health and lives to know that the consensus in the medical and scientific communities is that most women who have abortions experience little or no psychological harm. The claim that abortion is harmful is not borne out by the scientific literature or by personal experiences of those who counsel women in non-judgmental, supportive modalities such as All Options Clergy Counseling. In fact, scientific data shows that the risk

<sup>2</sup>American Psychological Association. “APA Research Review Finds No Evidence of ‘Post-Abortion Syndrome’ But Research Studies on Psychological Effects of Abortion Inconclusive.” Press Release, January 18, 1989.

<sup>3</sup>New studies find abortions pose little danger to women. Time magazine, March 27, 1989.

<sup>4</sup>Eggebroten, Anne. *Abortion, My Choice, God’s Grace*. New Paradigm Books, Pasadena, California. 1994.

<sup>5</sup>Miller, Patricia. Special Report on Ideology in Medicine. Faith&Choices. Newsletter of the Religious Coalition for Reproductive Choice. Fall 2003.

<sup>6</sup>[www.noelforlife.org](http://www.noelforlife.org), March 1, 2004.

<sup>7</sup>[www.silentnomoreawareness.org](http://www.silentnomoreawareness.org), March 1, 2004.

for severe psychological problems after abortion is low and comparable to that of giving birth.

Yet while there is extensive political and media discussion of the supposed harm caused by abortion, the negative effects of unintended childbearing are basically ignored. Yet they have enormous consequences for women, children and families, and society at large. A recent study documents the negative effects of unintended childbearing on both the mother and her family.<sup>8</sup> Women who have had unwanted births sustain lower quality relationship with all of their children, affecting the children's development, self-esteem, personality, educational and occupational attainment, and mental health and future marital relationships. Mothers with unwanted births are substantially more depressed and less happy than mothers with wanted births. The negative effects of unintended and unwanted childbearing persist across the course of life, with mothers with unwanted births having lower quality relationships with their children from late adolescence throughout early adulthood.

In conclusion, as a clergy counselor I believe that women such as Elise Randall and Christine Wilson, whose stories were recounted in Eggebroten's book, deserve respect for making a complex decision. As their experiences indicate, it is not the abortion that can cause harm but the negative attitudes of others, including those who oppose abortion for personal, political, ideological or other reasons. Women who have an unintended pregnancy and decide to have an abortion need our compassion and support. To help women and families, we should work together to reduce unintended pregnancies through increased access to family planning and emergency contraception, comprehensive sexuality education, quality health care, and compassionate counseling.

Senator BROWNBAC. Thank you Reverend Doctor, I appreciate your testimony.

Thank you all very much on what, as I said, is a difficult topic.

We'll run the clock at 10 minutes, Senator Lautenberg, so we can bounce back and forth. If you will Ms. Forney, how many women have you counseled, either personally or over the Internet?

Mrs. FORNEY. You know, I've never kept an actual number count, but I was trying to estimate that the other day, because we—and I was thinking back to the fact that, on average, when I was doing online counseling, we would get about five e-mails a week. So 52 weeks out of the year, 250 over 3 years, 750 approximately. And we also have over 1500 women now on our Silent No More list, women who have registered at our Website so that they regret their abortion and they want to be silent no more. So I've personally dealt with maybe around 2200 or so, as well as phone calls and referrals.

Senator BROWNBAC. In counseling of over 2,000 women, are there any common experiences that you see, either psychologically or physically?

Mrs. FORNEY. It's hard to boil it down. I would say some common things are that when they were younger and they made the decision they did, they realize now that there wasn't enough information that they wished that they had taken more time to think through their decision, that the predicament of their situation didn't direct them. In a lot of the cases, I have to admit, I was surprised about how much coercion happens.

Two weeks ago, I got an e-mail from a woman who was asking me for help, and actually wanted information to find a clinic because she had been taken at gunpoint by her boyfriend to the clinic, and she was crying out for help.

<sup>8</sup> Barber, Jennifer S. *et al.*, (1999). "Unwanted Childbearing, Health, and Mother-Child Relationships." *Journal of Health and Social Behavior*, 40(3), 231–257.

So coercion is one thing that was a lot more common than I expected, but just a sense in which they wished that somebody would have given them some more background information.

And then I think the other thing I hear a lot is, "I wish that I knew earlier that there was help available, because I've lived in my own personal hell for so long."

Senator BROWNBAC. Psychologically.

Mrs. FORNEY. Yes. They're looking for other women to connect with to say, "What you're feeling is normal," that there are a lot of us out there that are hurting. But, see, the problem is, is that part of what we hear is, "It was just an abortion, and it was a blob of tissue, and it's no big deal. Get over it." But the other side also says, "You should be really guilty." So we get these two conflicting messages, and what we're looking for is somebody to say, "If you're hurting, there's help, and there's no judgment, and we've been there, done that, and we can relate."

Senator BROWNBAC. And that's what we're trying to focus on here, is not the issue about the abortion, but what should we be providing to women. What kind of information do they say they would like to have had that they are now experiencing something that they wish they'd known about ahead of time?

Mrs. FORNEY. That's a great question, because a lot of it has to do, not with things that we typically think of, like fetal development, because I think we're—as a Nation, we're very well versed in fetal development, or better than we were 30 years ago. But it has to do more with, "I wish somebody would have told me what I was going to have to deal with when I wanted children, but I struggled to bond with those children because they reminded me of what I had lost. I wish somebody would have talked to me about this grief and this loneliness that I feel, that I should have five children and now I only have three children or two children." Or, what I've heard more often than I care to tell you is that, "I wish somebody would have told me about the physical complications that are possible, because I thought, well, OK, now isn't the best time to have a child, but I can have one later. I had no idea that my abortion was going to lead to a full hysterectomy and that my only chance for a child is now gone." I have heard that, sir, more than you want to know.

Senator BROWNBAC. Ms. Jenkins, how many women have you talked with or counseled with that have had an abortion?

Ms. JENKINS. I actually do not engage in counseling, per se. I do a lot of my outreach on college campuses, and my interaction are with the students who come there, and occasionally with others. I've spoken to hundreds, whether they be the mother or the father of the child, or I see more often now even siblings of children who have been aborted, who then express their feelings on this issue to me.

Senator BROWNBAC. What kind of information are they requesting that they don't feel like they have access to?

Ms. JENKINS. What I'm hearing from students right now is, they feel a sense of frustration and anger that after 30 years we don't have some sort of conclusive, factual studies to point out what are the potential physical ramifications of abortion, as well as the emotional ramifications. It does not matter where a person stands on

the issue. That is one thing that I am hearing, that is there is just a need for that.

Also, they express that it seems like the pregnancy options are so overly simplified in the way we deal with them in public discourse, that they also feel they're at a disservice for that. If they find themselves in the crisis, they feel there is a lack of adequate information about what their choice will mean 1 year, 5 years, 10 years, twenty years down the line.

Senator BROWNBACK. Have you talked with women who have had abortions that were not counseled about the impact of the abortion 1 year, 5 years, 10 years, twenty years down the line?

Ms. JENKINS. Most of the women that I speak to feel that they either were given no information or they were given inadequate information. Also, a frustration that they have, that I have personally, as well, is that because of the lack of conclusive information that we have right now, there'll be one study that says perhaps you have an increased risk for this or that, maybe another one comes out that seemingly contradicts that, which raises all these questions of what should I be aware of, what could I potentially be at risk for, so that my doctor can then know that information and hopefully, help me at that time.

Senator BROWNBACK. What kind of Federal research do we need to have for women to know the near-term and long-term impacts of abortion? What kind of research is missing?

Ms. JENKINS. I think one fundamental that is missing right now is data. Over 30 years, and I think you mentioned we've had over 40 million abortions, and yet we have no national registry where we could have followed these women for 30 years and known what, if any, are the psychological ramifications. What percentage of women are predisposed to having that kind of a reaction? Perhaps we could do better counseling and screening for a woman beforehand. If she has these negative reactions, what is the best way that we can support her and bring her through that process. Also, with the physical ramifications, we've lost out, on 30 years of data and experience of women going through it. It's an experiment, as I look at it, on women.

Certainly some sort of a way to collect data, that would obviously protect the privacy of women. But we do collect data on many other types of things and, therefore, are able to start to see if there is a problem. Do we need to research that more? And then certainly you have studies that would be—I mean, there has been all sorts of problems that have been suggested, different emotional and psychological problems. There have been studies that have indicated perhaps increased risk to different types of reproductive cancers. We see studies that have suggested perhaps a correlation between, miscarriage and abortion, or pelvic inflammatory disease and abortion, things that impact women's ability to bear children, impact their ability to be parents, and we just do not have enough information right now. I don't have enough information.

Senator BROWNBACK. Mrs. Forney, what information is missing to provide women with better information when they go in for an abortion, about its near-term and long-term consequences, either physical or psychological?

Mrs. FORNEY. I think that, first of all, I'd like to say that the information that needs to be gathered and presented to women before they're in a crisis trying to make a decision. I think that this should be information—that we should be presenting information as a general knowledge that we give to young women so that they understand before they get into crisis. Because the one thing I've learned with dealing with young women is that when they're in a crisis, they're not processing quite the same. None of us do when we're in a crisis.

So I would say one thing we want to do is make sure whatever we get is published and publicized before we need the information, so it just becomes part of our healthcare knowledge.

The kind of things that we need to better understand are, what are the immediate complications and what are the long-term complications. I question whether or not the level of infertility problems that are happening so often amongst our friends, are they related to pelvic inflammatory disease? Are they related to other issues that sometimes occur during an abortion?

Senator BROWNBACK. Rev. Dr. Smith, let me ask you, is there any hole in the information that you would like to know about on the impact of abortion on women, psychologically or physically?

Rev. SMITH-WITHERS. What I have experienced, and many of my colleagues have, is that the support of clergy and other counselors that sit with women and help them recognize their personal power to make choice makes a tremendous difference. Women, as these women are indicating, want to make their own choices. And our Clergy Advisory Committee certainly supports women who choose to move forward with their pregnancy, and support women who choose to terminate a pregnancy. Women want the right to choose their own life and their destiny. They want information about their bodies, they want information about options in their life, whether it is planning education, whether it is healthcare options, and to be supported in all of those processes in their life. Women do feel, as these women are indicating, very unsupported in the process, and that's why our advising and helping ministers learn to support women and validate their own understanding of their faith, learning about their bodies, learning to face the challenges that they have at that moment.

Many women confuse the issue of abortion with the many issues that preexist. Many women come after having been sexually abused. And so they're looking at not just the issue of being pregnant, but the sexual abuse.

So it isn't a simplistic or simple issue. It is a complex one, and we need those who are trained and prepared to be compassionate and support women in all aspects of these issues.

Senator BROWNBACK. Senator Lautenberg?

Senator LAUTENBERG. Thanks, Mr. Chairman.

Your personal experiences are interesting, Mrs. Forney and Ms. Jenkins and—but the question that arises for me—and you heard me challenge what the jurisdiction of this Committee is, so I—my questions of you—and I feel badly that each of you had the kind of emotional reaction to something that you consciously decided to do. I assume, Ms. Jenkins, that you were not railroaded into this.

No one held a gun at your head to go ahead and do this. Is that correct?

Ms. JENKINS. That is correct.

Senator LAUTENBERG. And you obviously had very rude people taking care of you. But you'll forgive me if I don't get connection between the research and the rude people—the doctor who said, "Tell her to shut up." Terrible behavior. But what does that—what has that to do with the kind of research we do?

Mr. Chairman, it's very interesting for me, the subject of understanding what happens to people. What are the emotional impacts of a soldier who's gone to combat? Have you studied that in this Subcommittee at all?

Senator BROWNBACK. I think Armed Services had, and needs to study it some more.

Senator LAUTENBERG. Well, but you could do that, apparently, in this Committee, find out what happens to a young man who's 18, 19—I did it—and goes into the Army during wartime, and see what the 30-year impact is on that person and see—go visit our veterans clinics and find out.

Do you ever counsel people with an understanding that if they continue with this pregnancy and that child is addicted because the mother's an addict, that you're going to provide help to bring that child along and provide for their well-being?

Mrs. FORNEY. Sir, usually the women that contact me are not pregnant, but they've had the abortion already. So I can't directly respond to that. But I can say that last month when we at the Supreme Court building, there was a woman who was addicted to cocaine, alcohol, and methamphetamines. And the doctors and everybody told her that they didn't want her, and she shouldn't bring a child into the world that might be addicted to those drugs. But she stood there and talked about the fact that this was the only child she was ever able to conceive. And while she wishes that she had never used the drugs, and she wasn't asking for her behavior to be excused, she was expressing great regret over the fact that now she is childless, and she's all alone in the world.

Senator LAUTENBERG. Yes. Well, that, again—there are many tragic stories, and I know that these—this is never an easy decision. Never. I don't care who it is.

And I just wonder, in your organization, Mrs. Forney, do you provide a full range of advice on how to deal with a pregnancy, or do you only see women who have come in after they've had an abortion?

Mrs. FORNEY. Well, that's a great question, NOEL is working with churches to provide help prior to an abortion choice. In other words, what NOEL is trying to do—not only do we work with women after they've had an abortion, but we've actually developed a new project called the "Anglican Angel Project," in which we work with churches to train the members of the church to come alongside women so that when they're pregnant and they don't know what the choices are, there are people in the congregation to help them look at their choices, to understand the resources that are in the community, and to really meet their needs. Because we know that so many women say to us, "I'm not having an abortion."



I didn't have my abortion because I wanted one. I felt I had no other choice." It's a very common comment.

Senator LAUTENBERG. Yes.

Mrs. FORNEY. Might I also add, sir, that Mrs. Jenkins has created a wonderful resource in the San Diego County, which is something that when I travel and speak I'm always looking to see reproduced.

Senator LAUTENBERG. Thank you.

Ms. Jenkins, do you counsel women who are in the process of decisionmaking about abortions, or no? Or are they pregnant women who have not yet had an abortion or haven't made that decision?

Ms. JENKINS. The organization that I direct is involved in education. It's involved in public awareness. My understanding for coming to testify here today was to talk about what is the impact of abortions on women, and is there a need for additional study? And that's where I'm focusing. Certainly if we are to provide women, or whoever with a full range of options, there does need to be a full understanding of what those options are and how they impact their life. We all know that there is an impact if you choose adoption, there's an impact if you choose to carry to term and parent the child, there's an impact if you have an abortion. But there's a lack of information on how abortion impacts women—

Senator LAUTENBERG. Do you—

Ms. JENKINS.—and that's the point.

Senator LAUTENBERG.—do you also provide information to women who come in seeking advice that one of those choices might be to have an abortion? If life is so unendurable for this person, and she can't continue, for all kinds of reasons—that she's sick or she's got other children who are—who need attention and—do you ever say to them, "Well, look, obviously, one of the choices is there's something now as simple as a pill that can be taken the next day"? Would you ever give a woman that kind of information to help them through this crisis?

Ms. JENKINS. We are respectful of women. And part of that means that we don't deny them access to full information. So, obviously, all options and avenues are discussed with them.

The particular frustration that brings me here today is that we do not have the type of information that a woman deserves to know when it deals with how abortion will impact her, either—

Senator LAUTENBERG. Yes.

Ms. JENKINS.—immediately or in the future.

Senator LAUTENBERG. Do you ever find women who made a decision—I think Rev. Smith-Withers had an abortion and went on to have a healthy, productive life, with children coming on later on—and saying, "That was a decision. I made it this time in my life when things were so bleak that there was no way that I could care for a child." Do you ever interview women and—I mean, would you suggest that we do research on women who have had abortions and how life appears to them? Because the numbers are staggering for the number of women who have had abortions. One out of five women, I think, in America today, have had an abortion. The number is huge. Is that kind of counseling worth doing, Dr. Smith-Withers? What do you think?

Rev. SMITH-WITHERS. Oh, absolutely. The overwhelming experience that I have had is that women who have received counseling, that have been responsible and supportive, move on to have very, very productive lives. Generally, if there are other issues—and there are other issues involved—those are the things that women need to be supported with, as well. We presume that, because it's coincident with the abortion, that the abortion is the problem. The abortion is a challenge and is a problem, but that is not the only issue. And our job is to look at the women as a total person and help that woman manage the other issues in her life.

Women move on after having abortions, they have other children, they are productive in their work life and with their families. We want to help women make wise choices, choices that they understand help them to be whole people and people of faith.

Senator LAUTENBERG. Mrs. Forney, just, in short form, if you could, do you—how do you get your people to come to your clinics?

Mrs. FORNEY. We have—the campaign, the Silent No More Awareness Campaign, we have gatherings, and they actually participate in a gathering, sharing their testimony. And how do we get them? Basically, we are in communication with organizations that do counseling, and we let them know that the campaign is available. There are also billboards out there in which we just have our message out there, and women contact us, so that if they're hurting, the number for help is available. So we're not walking around saying, "Did you have an abortion, and are you guilty?"

Senator LAUTENBERG. Yes. But your only contact—I want to be sure about this—is with women who already have had a procedure, an abortion.

Mrs. FORNEY. For the most part. That is the main thrust of the "Silent No More Awareness Campaign," are women who have had abortions. But really what we're saying is, is that there are problems—there are health issues and there are emotional issues—but we don't have the data. We need more information so we are making an informed choice.

Senator LAUTENBERG. More information about—

Mrs. FORNEY. The long-term effects of abortion on women's health and the—

Senator LAUTENBERG. Would you want to compare that to women who have had an abortion and have gone on to healthy lives—

Mrs. FORNEY. But, sir—

Senator LAUTENBERG.—producing a family, a childhood practically—

Mrs. FORNEY. Everything was fine—for 19 years, I would have been one of those women.

Senator LAUTENBERG. Yes, but—

Mrs. FORNEY. And that's—

Senator LAUTENBERG.—but it—

Mrs. FORNEY.—the point.

Senator LAUTENBERG.—didn't turn out that way for you. But there are other women, I'm sure, who it—

Mrs. FORNEY. Then let's study it.

Senator LAUTENBERG.—turned out differently, because an escape before marriage might just be a terribly traumatic thing, but yet I'm sure lots of women have gone on from there and said, "Now

that's behind me, and I'm going to build a healthy, positive life for me and my children and my husband"——

Rev. SMITH-WITHERS. See, and with support that woman can learn from that experience and use that experience to inform her in her other life choices. It is important that we help women be empowered and to use their own ability to make decisions and make moral and healthy decisions for themselves, and not decide, for them, that they are not being, one, God-fearing or God-aware in the process of making their decision, that they are not being moral people in the process of making their decision. And it minimizes their ability, and it also devalues them as human beings.

Ms. JENKINS. May I——

Senator LAUTENBERG. Thank you——

Ms. JENKINS.—may I answer?

Senator LAUTENBERG.—Mr. Chairman.

My time is up.

Senator BROWNBAC. Please, go ahead.

Ms. JENKINS. OK. I just wanted to comment that I did mention, in my testimony, that there are women who have the abortion and move on from there, and do not appear to have the types of problems that I was describing. And certainly if we're going to study the issue, it's obvious that we would be looking at the whole population of women who have made not only the choice to abort, but the choice to carry their children to term, et cetera; otherwise, you're not going to have any type of valid statistical data to know if there—if a woman is, indeed, at an increased risk when she undergoes the abortion.

I just wanted to comment that, to me that's an obvious thing, that if you're going to look at something scientifically, you have to look at all of that to have any type of valid data.

Senator BROWNBAC. It's a good point.

Dr. Reverend, have you counseled any women who have regretted having an abortion?

Rev. SMITH-WITHERS. Absolutely. Fortunately, being clergy, women come to us in positions of any pain. And certainly abortion would be one of the reasons. And the regret often is attached to not having the support when they needed it.

The woman that I described was one who had a great deal of pain, and the pain was because she was not supported; not just in terms of the abortion, but the issues that she had with her mother and that she didn't have the compassion that she needed. She didn't hear people who understood that she believed in God and that she really was acting in a God-directed manner. When those issues were resolved, and really the resolution was an opportunity to talk with someone who would support her, love her, and really listen to her. And she was able to resolve it. The regret was just not being in a compassionate, supportive environment; and that was resolved.

Senator BROWNBAC. Have any women come to you and said they regretted having children?

Rev. SMITH-WITHERS. Oh, absolutely. We live with a great deal of diversity, in terms of experience. But what I have learned is that it's never a very simple matter. Women and men—who regret one thing are often conflicted with a number of issues. And that is not

simplistic or simple. And so what I try to do is listen and invite people to consider the other elements that are involved in their life.

Senator BROWNBAC. Ms. Forney, have you met any women who have regretted having an abortion?

Mrs. FORNEY. Well, all the women I deal with regret having an abortion. I've never met any women that regret having children.

Senator BROWNBAC. Ms. Jenkins, what about you? The same question, Have you run into women that have regretted having an abortion?

Ms. JENKINS. Yes, I've run into many women who have.

Senator BROWNBAC. What about that have regretted having a child?

Ms. JENKINS. I have not heard that expressed to me, but I certainly have had women express the difficulties of single-parenting that can ensue. I think something with abortion is its permanence, you can't go back and undo it, and that's something that I hear a lot from women who have made that choice. They can't undo that. And as they age, as I am, you see it a little bit differently, and you think about how old your child is every year, which, even with the women who have expressed to me that they feel at peace and they've always been OK with their abortion experience, and it appears that they are, but they also do express to me that they can recount how old their child would be right now. And there's always a loss surrounding that.

Senator BROWNBAC. This is what's been puzzling to me as I've delved into this more. I'm pro-life. I want to admit that to everybody. But what's been puzzling to me about it is that, as I've dug into this more and more from the woman's perspective, is that you constantly run into this, "Oh, gosh, I wish I hadn't done it, I was pressured and was pushed, I didn't know," I mean, just a litany of issues here and there.

And I also want to say, a lot of times—Dr. Reverend, I think you had a good point about—a lot of people are looking not for judgmental, but, "Just listen to me, just hear me." And I've tried to do that, and, regrettably, I'm sure at times I haven't done it very well. But I constantly run into this, "I wish I hadn't, I wish I'd have know, what about this, what about that?" And I rarely, if ever, run into a woman saying, "I wish I hadn't had my children."

Rev. SMITH-WITHERS. Could I—

Senator BROWNBAC. And so you look at that, and you're saying—there must be some data points we're missing here, and that we've had this vast amount of abortions in the country, so this is a very common experience known by all in the nation, and it's impacting every family in the country in some way or another, and we just don't have the data points or the research as to this long-term—so that people that choose to have this, where we have legal abortion in the United States, really know 1 year, 5 years, 10 years, 20 years down the line, this is the likely—you have this percentage of people that are going to have an increased intensity of experience psychologically, physical impacts. And that's—that we really owe that to the women of the country to know those data points and that information. I'd love to hear your response.

Rev. SMITH-WITHERS. You know, I think it's so important that you share that. One of the things that I think—I'm in a unique po-

sition, and all clergy—most clergy that's often in that position, and certainly physicians, where women share their fears, their doubts, their regrets. And I've also heard the opposite, where women who have had children and they regret having had children. It's a challenging thing to hear. They love their children, they're committed to their children, they love their family, and they're very involved and committed to their family life. But what women say to clergy and to their physicians are those private places. They regret not knowing options and not knowing choices and—because their lives are affected also.

Women who had great visions for themselves are often diminished completely by having children—and not having the ability to have birth control, or to know when they—that there are options, in terms of unwanted pregnancies, these are things that are very, very challenging to hear. And women don't say those things when they are not in a place where they feel they will not be judged.

We're all in process. They love their children, but they often regret having had them. And I've heard that, and it's a very challenging thing to hear, but we need to hear it and understand that our stories are not simple, they're not—there is not just one story.

We're a complex community. And women cannot be seen in a monolithic manner at all. And we have to find ways to empower women to express their vision and their concerns for their lives. Many of the women—and I'm sure you know that many of the women who have children have had—they're victims of incest. And this is something we don't talk about. There are many women who hide in the shadow, who are rape victims, who are victims of incest, and they have those children, too, that they love and regret having had.

Senator BROWNBACK. Thank you all very much. Appreciate the panel. I think you've helped provide some insight to us. And thanks. It's a tough topic, and I do appreciate your coming forward.

A vote's been called at 3:30. I think what we'll do is put in for a short recess here, and go over and vote, and then come right back. So we'll be in for a 10 to 15 minute recess, and then we'll come back with the second panel at that time.

I'm sorry to have to do that to you, but the vote was called at 3:30, and it's a 15 minute roll call vote. So we will be in recess until 10 minutes to 4.

[Recess.]

Senator BROWNBACK. I call the hearing back to order.

Our second panel is Dr. Elizabeth Shadigian. She's a Medical Doctor and Researcher at the University of Michigan School of Medicine. Dr. Shadigian is the author of an Obstetrical and Gynecological Survey, and article titled "Long Term Physical and Psychological Health Consequences of Induced Abortion: Review of the Evidence," brings to this Committee a great deal of research, experience, and knowledge of the impact that abortion has on women. Dr. Shadigian is the mother of three children, two girls and a boy.

And we also have on the panel Dr. Nada Stotland, Medical Doctor, M.P.H., Professor of Psychiatry and Professor of Obstetrics and Gynecology at Rush Medical College. Dr. Stotland has been a practicing psychiatrist for a number of years, and is mother to four daughters.

Let's, if we could, get somebody to close the door here so we don't have quite as much outside information coming in.

Ladies, thank you both very much for joining us on a tough topic, but one we're trying to get at a basis of what information we do have.

Dr. Shadigian, thank you for joining us, and the floor is yours.

**STATEMENT OF ELIZABETH SHADIGIAN, M.D., CLINICAL ASSOCIATE PROFESSOR, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, UNIVERSITY OF MICHIGAN**

Dr. SHADIGIAN. Thank you, Senator Brownback, for this opportunity to address the Subcommittee and the people here in this room. I really appreciate it.

I am a Clinical Associate Professor of Obstetrics and Gynecology at the University of Michigan School of Medicine. I'm a practicing clinician, which means I see women for obstetrics and gynecology-type issues. I teach medical students and residents at the University of Michigan, and I also perform research. Not only do I do research on abortion complications, but I do research on gender issues in OB/GYN, and also violence against women.

I'm not here to argue any pro-life or pro-choice kind of political issues, or about legalization or non-legalization of abortion. I'm here to talk about abortion complications.

So I'm here as a medical expert advocating for science, for accuracy in available scientific evidence, and for the availability of this medical information to all women and men in America, and really all over the world.

I recently co-authored a compilation of research articles called "A Systematic Review," evaluating the long-term implications on women's health, both psychologically and physically, and it included all the things that were never included before. Usually we had research on what happened right after abortion, what kind of complications there were in the first 42 days. Instead, our research focused on what happens after those 42 days. Were there any positive or negative implications? Also, we also looked at big studies, of at least 100 women each, in there.

Approximately 25 percent of all pregnancies are terminated in the United States, and approximately—or at least 43 percent of women who are American undergo an abortion at some time in their lives. Therefore, if there's a small negative or positive effect of induced abortion on subsequent health, many women will be affected.

My study concluded that there is an increased long-term risk of the following different kinds of diseases or situations: one, breast cancer; two, placenta previa; three, pre-term birth; and, four, maternal suicide.

Our study also looked at other outcomes which were not associated with induced abortion, and those were subsequent spontaneous abortion or miscarriage, ectopic or tubal pregnancy, and infertility.

In addition—and this is not included in our study, but just some background information—that the Center for Disease Control reports about one death for every 100,000 abortions, and many of the data about the safety of abortion on women's health is based on

those numbers from the CDC. Instead, the number that is more likely is probably at least six per 100,000, if you look at long-term effects plus short-term effects. This higher number is calculated using data from all 50 states. Right now, CDC does not receive data from all 50 states about maternal mortality around abortion, and it is not currently mandatory to do so. In addition, if we included maternal suicides, breast cancer deaths, and increased C-section deaths due to these pre-term births and placenta previa, the numbers would be higher than CDC actually gets.

One of the issues is around informed consent. Healthcare providers are obliged by law to inform patients of the benefits and risks of undergoing a treatment being pondered before the actual health decision is made. In the case of a woman deciding if she wants to continue the pregnancy she's experiencing, or to not continue it, women need as much accurate medical information as possible.

Induced abortion is associated with an increased risk in breast cancer, placenta previa, pre-term birth, and maternal suicide, and maternal deaths from induced abortion are currently under-reported. However, first of all, these do need to appear on abortion consent forms. They currently do not, for most situations.

I am part of the American College of Obstetricians and Gynecologists, which is a national organization group of OB/GYN doctors in the country. And the OB/GYNs, in their last compendium issue, which is just basically a compilation of all our official policies on how do we manage different kinds of medical problems and position statements, says, and I'm going to quote—that the American College of OB/GYNs, says, in quotes, “Long-term risks sometimes attributed to surgical abortion include potential effects on reproductive function, cancer incidents, and psychological sequelae. However, the medical literature, when carefully evaluated, clearly demonstrates no significant negative impact on any of these factors with surgical abortion.”

I'm a proud member and fellow of ACOG, but I am deeply troubled that ACOG makes assurances to their membership and to women everywhere claiming a lack of long-term health effects of induced abortion. Instead, ACOG should be insisting that these health effects appear on abortion consent forms.

Why doesn't ACOG insist on long-term health consequences of induced abortion be included? I would like to shift our attention to the 1950s and 1960, and the early research on cigarette smoking and lung cancer and heart disease. Initially, studies didn't show a correlation, and then they did, and it was highly politicized. The American Medical Association came out and said there was no association between cigarette smoking and long-term health effects, and finally did reverse themselves on that.

This has happened also with hormone replacement therapy. Recently, we all thought it was wonderful for women to get hormone-replacement therapy, and when we've done the larger, more-controlled studies, we found out, in fact, that it isn't a perfect panacea for every woman, and it's not good for their health sometimes.

So I think it's important to understand that we are in a state of flux; in fact, there should be a morally neutral common ground between people of every kind of political sensibilities and different

kinds of issues. If you believe in the moral status of a child inside the mother or not, that, in fact, we need to be worried about women's health in the long term. Because so many women have had abortions, we need to be able to study and follow them over their lifetimes. I need to know how to order mammograms for my patients.

And if they have had an abortion, they may need more surveillance. Also, pre-term birth continues to go up and up in this country, and this has been linked to induced abortion. In fact, a history of an induced abortion raises pre-term birth rates, almost doubles them. So March of Dimes tries to talk about those things. We also have a higher and higher incidence every year of breast cancer and breast-cancer deaths.

So I wanted to applaud the Subcommittee for taking on such a politically difficult topic in an effort to show women the respect they deserve by supplying them with accurate medical information and to hopefully continue a process where we can look at the scientific evidence to see how abortion may or may not affect different health issues for women.

Thank you.

[The prepared statement of Dr. Shadigian follows:]

PREPARED STATEMENT OF ELIZABETH M. SHADIGIAN, M.D., CLINICAL ASSOCIATE  
PROFESSOR OF OBSTETRICS AND GYNECOLOGY, UNIVERSITY OF MICHIGAN MEDICAL  
SCHOOL

REVIEWING THE MEDICAL EVIDENCE: LONG-TERM PHYSICAL AND PSYCHOLOGICAL  
HEALTH CONSEQUENCES OF INDUCED ABORTION

### Introduction

Most of the medical literature since induced abortion was legalized has focused on short-term surgical complications, surgical technique improvement, and abortion provider training.

Long-term complications had not been well studied as a whole, until now, due to politics—specifically, the belief that such studies would be used either to limit or expand access to abortion. The two commissioned studies that attempted to summarize the long-term consequences of induced abortion concluded that future work should be undertaken to research long-term effects.<sup>1</sup>

The political agenda of every researcher studying induced abortion is questioned more than in any other field of medical research. Conclusions are feared to be easily influenced by the author's beliefs about women's reproductive autonomy and the moral status of the unborn.

Against this backdrop of politics is also a serious epidemiological concern: researchers can only observe the effects of women's reproductive *choices*, since women are not exposed to induced abortion by chance. Because investigators are deprived of the powerful tool of randomization to minimize bias in their findings, research must depend on such well-done observational studies. These studies depend on information from many countries and include legally mandated registers, hospital administrative data and clinic statistics, as well as voluntary reporting (or surveys) by abortion providers.<sup>2</sup>

Approximately 25 percent of all pregnancies (between 1.2–1.6 million per year) are terminated in the United States, so that if there is a small positive or negative effect of induced abortion on subsequent health, many women will be affected.<sup>3</sup>

<sup>1</sup>Wynn M. and Wynn A., *Some Consequences of Induced Abortion to Children Born Subsequently*, London Foundation for Education and Research in Childbearing, 27 Walpole Street, London (1972); "More on Koop's Study of Abortion," *Family Planning Perspectives* (1990), Vol. 22 (1): 36–39.

<sup>2</sup>Thorp J.M., Hartmann K.E., Shadigian, E.M., "Long-term Physical and Psychological Health Consequences of Induced Abortion: Review of the Evidence," *Obstet. and Gynecol. Survey*, 58(1), 2003.

<sup>3</sup>*Supra* note 1.



A recent systematic review article critically assesses the epidemiological problems in studying the long-term consequences of abortion in more detail.<sup>4</sup> It should be kept in mind that: (1) limitations exist with observational research; (2) potential bias in reporting by women with medical conditions has been raised and refuted; (3) an assumption has been made that abortion is a distinct biological event; (4) inconsistencies in choosing appropriate comparison groups exist; and (5) other possible confounding variables of studying abortion's effects over time also exist.

Nonetheless, given the above caveats, my research, which included individual studies with no less than 100 subjects each, concluded that a history of induced abortion is associated with an increased long-term (manifesting more than two months after the procedure) risk of:

- (1) breast cancer
- (2) placenta previa
- (3) preterm birth and
- (4) maternal suicide.

### Outcomes Not Associated with Induced Abortion

Induced abortion has been studied in relation to subsequent spontaneous abortion (miscarriage), ectopic pregnancy, and infertility. No studies have shown an association between induced abortion and later spontaneous abortion. An increase in ectopic or tubal pregnancies was seen in only two out of nine international studies on the topic, while only two out of seven articles addressing possible subsequent infertility showed any increased risk with induced abortion.<sup>5</sup>

### Outcomes Associated with Induced Abortion

#### 1. Breast Cancer

Based upon a review of the four previously published systematic reviews of the literature<sup>6</sup> and relying on two independent meta-analyses, (one published<sup>7</sup> and one unpublished<sup>8</sup>), induced abortion causes an increased risk of breast cancer in two different ways.<sup>9</sup> First, there is the loss of the protective effect of a first full-term pregnancy ("fftp"), due to the increased risk from delaying the ftp to a later time in a woman's life. Second, there is also an independent effect of increased breast cancer risk apart from the delay of ftp.

The medical literature since the 1970s has shown that a full-term delivery early in one's reproductive life reduces the chance of subsequent breast cancer development.<sup>10</sup> This is called "the protective effect of a first full term pregnancy (fftp)." This is illustrated in Figure 1 which uses the "Gail Equation" to predict the risk of breast cancer for an 18-year-old within a five-year period and also within a lifetime. The Gail Equation is used to help women in decision-making regarding breast cancer prevention measures.

In the first scenario, the 18 year-old decides to terminate the pregnancy and has her ftp at age 32, as compared to the 18 year-old in the second example who delivers at term. The individual risk of these women is then assessed when the risk of breast cancer peaks. As figure 1 shows, having an abortion instead of a full-term pregnancy at age 18 can almost double her five-year and lifetime risk of breast cancer at age 50, regardless of race.<sup>11</sup>

An independent effect of increased breast cancer risk apart from the delay of first full-term pregnancy has been controversial. Four published review articles have been written. Two of the reviews found no association between induced abortion and

<sup>4</sup>Thorp *et al.*, *supra* note 2.

<sup>5</sup>*Id.*

<sup>6</sup>*Id.*

<sup>7</sup>Brind J., Chinchilli V., Severs W., Summy-Long J., "Induced Abortion as an Independent Risk Factor for Breast Cancer A Comprehensive Review and Meta-analysis, *J Epidemiology Community Health* 1996; 50:481-496.

<sup>8</sup>Shadigian, E.M. and Wolf, F.M., Breast Cancer and Spontaneous and Induced Abortion: A Systematic Review and Meta-analysis" (in review).

<sup>9</sup>Thorp *et al.*, *Supra* note 2.

<sup>10</sup>McMahon M., Cole B., Lin T., *et al.*, "Age at First Birth and Breast Cancer Risk," *Bull World Health Organ.* (1970); 43:209-21.

<sup>11</sup>Thorp *et al.*, *Supra* note 2.

breast cancer,<sup>12</sup> while one paper found a “small to non-significant effect.”<sup>13</sup> The sole published meta-analysis reported an odds-ratio (“OR”)<sup>14</sup> for breast cancer of 1.3 (or 95% CI=1.2, 1.4) in women with a previous induced abortion.<sup>15</sup> One yet unpublished independent meta-analysis found the OR=1.21 (95% CI=1.00, 1.45).<sup>16</sup> Brind *et al.*, used older studies and translated non-English ones. He did not exclude any studies and used a different statistical approach. The unpublished study used exclusion criteria and only English language studies. Another finding was that breast cancer is increased if the abortion is performed before a first full term pregnancy. Brind found an OR=1.4 (95% CI=1.2, 1.6), while the unpublished study showed an OR=1.27 (95% CI=1.09–1.47). The two meta-analyses used different methodologies, but reported nearly equivalent results, which are statistically significant, and do show that induced abortion is a independent risk factor for breast cancer.

Some other findings from individual research papers included in my review concluded that the risk of breast cancer increases with induced abortion when: (a) the induced abortion precedes a first full term pregnancy;<sup>17</sup> (b) the woman is a teen;<sup>18</sup> (c) the woman is over the age of 30;<sup>19</sup> (d) the pregnancy is terminated at more than 12 weeks gestation;<sup>20</sup> or (e) the woman has a family history of breast cancer.<sup>21</sup> One researcher (Daling) also reported, in her study, that *all* pregnant teens with a family history of breast cancer who aborted their first pregnancy developed breast cancer.<sup>22</sup>

## 2. Placenta Previa

“Placenta previa” is a medical condition of pregnancy where the placenta covers the cervix, making a cesarean section medically necessary to deliver the child. In general, this condition puts women at higher risk, not just because surgery (the c-section) is necessary, but also because blood loss is higher, and blood transfusions may be necessary. There is also a higher risk of hysterectomy (the loss of the uterus), and therefore the need for more extensive surgery.

Three studies with over 100 subjects each were found examining induced abortion and placenta previa, as well as one meta-analysis. The three studies found a positive association, as did the meta-analysis. Induced abortion increased the risk of placenta previa by approximately 50 percent.<sup>23</sup>

## 3. Pre-Term Birth (“PTB”)

Twenty-four studies explored associations between abortion and pre-term birth or low birth weight (a surrogate marker for pre-term birth). Twelve studies found an association which almost doubled the risk of preterm birth. Moreover, seven of the twelve identified a “dose response effect” which means a higher risk for pre-term birth for women who have had more abortions.

“Also notable is the increased risk of very early deliveries at 20–30 weeks (full-term is 40 weeks) after induced abortion, first noted by Wright, Campbell, and

<sup>12</sup>Wingo P., Newsome K., Marks J., Calle E., Parker S., “The Risk of Breast Cancer Following Spontaneous or Induced Abortion,” *Cancer Causes and Control* (1997) 8, at pp 93–108; Bartholomew L., and Grimes D., “The Alleged Association Between Induced Abortion and Risk of Breast Cancer: Biology or Bias?,” *Obstet. Gynecol. Survey* 1998, Vol. 53(11) 708–714.

<sup>13</sup>Michels K., Willett W., “Does Induced or Spontaneous Abortion Affect the Risk of Breast Cancer?” *Epidemiology* 1996, Vol. 7(5) 521–528.

<sup>14</sup>The odds ratio of an event is the ratio of the probability of the event occurring, to the probability that the event does not occur. An “OR” equal to 1 (OR=1) indicates that there is no association with the disease. An OR which is greater than 1 indicates a positive association with the disease. An odds ratio of less than 1 indicates a negative association. Similarly, a relative risk (or “RR”) of greater than 1 is said to be a risk factor between an exposure and the end event. “CI” refers to the “confidence interval.” A confidence interval which is greater than 95 percent, where the numbers in question do not cross 1, is considered statistically significant and most likely not due to chance. In this paper only statistically significant numbers are quoted.

<sup>15</sup>Brind J., Chinchilli V., Severs W., Summy-Long J., “Induced Abortion as an Independent Risk Factor for Breast Cancer A Comprehensive Review and Meta-analysis,” *J Epidemiology Community Health* 1996; 50:481–496.

<sup>16</sup>Shadigian, E.M. and Wolf, F.M., “Breast Cancer and Spontaneous and Induced Abortion: A Systematic Review and Meta-analysis” (in review).

<sup>17</sup>Brind *et al.*, *supra* note 7; and Shadigian and Wolf, *Id.*

<sup>18</sup>Daling J.R., Malone KE, Voigt LF, *et al.*, Risk of breast cancer among young women: relationship to induced abortions. *J Natl Cancer Inst.* 1994;86:1584–92.

<sup>19</sup>Daling, *et al.*, (1994) *supra* note 17.

<sup>20</sup>Melbye M., Wohlfahrt J., Olsen J.H. *et al.*, “Induced Abortion and the Risk of Breast Cancer,” *N Engl J Med.* (1997); 336(2):81–5.

<sup>21</sup>Daling J.R., Brinton, L.A., Voigt L.F., *et al.*, Risk of Breast Cancer Among White Women Following Induced Abortion,” *Am J Epidemiol.* (1996); 144:373–80.

<sup>22</sup>Daling *et al.*, (1994), *supra* note 17.

<sup>23</sup>Thorp *et al.*, *supra* note 2.

Beazley in 1972. Seven subsequent papers displayed this phenomenon of mid-pregnancy PTB associated with induced abortion. This is especially relevant as these infants are at high risk of death shortly after birth (morbidity and mortality), and society expends many resources to care for them in the intensive care unit as well as for their long-term disabilities. Of particular note are the three large cohort studies done in the 1990s, 20 to 30 years after abortion's legalization. Each shows elevated risk and a dose response effect. Because these studies were done so long after legalization, one would assume that the stigma of abortion that might contribute to under-reporting would have waned."<sup>24</sup>

#### 4. Suicide

Two studies have shown increased rates of suicide after induced abortion, one from Finland<sup>25</sup> and one from the United States.<sup>26</sup> The Finnish study (by Gissler *et al.*) reported an OR=3.1 (95% CI=1.6, 6.0) when women choosing induced abortion were compared to women in the general population. The odds ratio increased to 6.0 when women choosing induced abortion were compared to women completing a pregnancy. The American study (by Reardon *et al.*) reported recently that suicide RR=2.5 (95% CI=1.1, 5.7) was more common after induced abortion and that deaths from all causes were also increased RR=1.6 (95% CI= 1.3, 7.0).

In addition, self-harm is more common in women with induced abortion.<sup>27</sup> In England psychiatric hospital admissions because of suicide attempts are three times more likely for women after induced abortion, but not before.<sup>28</sup>

#### Maternal Mortality

There is no mandatory reporting of abortion complications in the U.S., including maternal death. The Centers for Disease Control (CDC) began abortion surveillance in 1969. However, the time lag in CDC notification is greater than 12 months for half of all maternal deaths.<sup>29</sup> Maternal deaths are grossly underreported, with 19 previously unreported deaths associated with abortions having been identified from 1979–1986.<sup>30</sup> The CDC quotes approximately one maternal death for every 100,000 abortions officially, which is death between the time of the procedure and 42 days later.<sup>31</sup> Therefore, statements made regarding the physical safety of abortion are based upon incomplete and inaccurate data.

Many women are at much higher risk of death immediately after an induced abortion: for example, black women and minorities have 2.5 times the chance of dying, and abortions performed at greater than 16 weeks gestation have 15 times the risk of maternal mortality as compared to abortions at less than 12 weeks. Also, women over 40 years old, as compared to teens, have three times the chance of dying.<sup>32</sup>

Late maternal mortality, which includes deaths occurring after the first 42 days following abortion are not reflected in CDC numbers, nor are data from all 50 states, because reporting is not currently mandatory. To accurately account for late maternal mortality, maternal suicides and homicides, breast cancer deaths and increased caesarian section deaths from placenta previa and pre-term birth would also be included with other abortion-related mortality.

#### Informed Consent

Health care providers are obliged by law to inform patients of the benefits and risks of the treatment being pondered before a medical decision is made. In the case of a woman deciding to terminate a pregnancy, or undergoing any surgery or significant medical intervention, informed consent should be as accurate as possible.

Induced abortion is associated with an increase in breast cancer, placenta previa, pre-term birth and maternal suicide. Maternal deaths from induced abortion are

<sup>24</sup> *Id.* (Risk ratio elevation of 1.3 to 2.0)

<sup>25</sup> Gissler M., Hemminki E., Lonnqvist J., "Suicides After Pregnancy in Finland," 1987–94: register linkage study. *BMJ* 1996; 313:1431–1434.

<sup>26</sup> Reardon D.C., Ney P.G., Sheuren F., Cogle J., Coleman P.K., and Strahan T.W., "Deaths Associated With Pregnancy Outcome: A Linkage Based Study of Low Income Women," *Southern Med. J.* 2002;95 (8): 834–41.

<sup>27</sup> Gilcrest A, Hannaford P, Frank P *et al.*, Termination of pregnancy and psychiatric morbidity. *Br J Psychiatry* 1995;167:243–248.

<sup>28</sup> Morgan C, Evans M, Peters J *et al.* Suicides after pregnancy (letter). *BMJ* 1997;314:902.

<sup>29</sup> Lawson H.W., Frye A., Atrash H.K., Smith J.C., Shulman, H.B., Ramich, M. "Abortion Mortality, United States, 1972 through 1987," *Am J Obstet Gynecol* (171),5,(1994).

<sup>30</sup> Atrash, H., Strauss, L., Kendrick, J., Skjeldestad, F., and Ahn, Y., "The Relation between induced abortion and ectopic pregnancy," *Obstet. and Gynecol.* 1997;89:512–18.

<sup>31</sup> Centers for Disease Control, MMWR (Morbidity and Mortality Weekly Report): Abortion Surveillance in the United States, 1989–present.

<sup>32</sup> Lawson (1994), *supra* note 28.

currently underreported to the Centers for Disease Control. These risks should appear on consent forms for induced abortion, but currently are not.

#### American College of Obstetricians and Gynecologists (ACOG)

In the most recent edition of medical opinions set forth by the American College of Obstetricians and Gynecologists (*Compendium of Selected Publications, 2004, Practice Bulletin #26*), ACOG inexplicably states:

“Long-term risks sometimes attributed to surgical abortion include potential effects on reproductive functions, cancer incidence, and psychological sequelae. *However, the medical literature, when carefully evaluated, clearly demonstrates no significant negative impact on any of these factors with surgical abortion.*”<sup>33</sup> (Italics added for emphasis)

I am a proud member and fellow of ACOG. Because of groups like ACOG American women enjoy some of the best health, and health care, in the world. However, I am deeply troubled that ACOG makes assurances to their membership, and to women everywhere, claiming a lack of long-term health consequences of induced abortion. Instead, ACOG should be insisting that these long-term health consequences appear on abortion consent forms.

Why *doesn't* ACOG insist that long-term health consequences of induced abortion be included?

ACOG seems to claim that they have adequately evaluated the medical literature, but they do not consider our study nor the many older studies we evaluated. This situation is akin to the early studies that indicated that cigarette smoking was linked to heart disease and lung cancer in the 1950s and 1960s. Eventually, larger, improved studies were funded that could thoroughly assess the health effects of smoking. We are at a similar crossroads for women today—just as we were regarding smoking and long-term health effects in the 1950s and 1960s.

#### Conclusion

A clear and overwhelming need exists to study a large group of women with unintended pregnancies who choose—and do not choose—abortion. If done properly, a dramatic advance in knowledge will be afforded to women and their health care providers—*regardless of the study's outcome*. A commitment to such long-term research concerning the health effects of abortion including maternal mortality would seem to be the morally neutral common ground upon which both sides of the abortion/choice debate could agree.

In the meantime, there is enough medical evidence to inform women about the long-term health consequences of induced abortion, specifically breast cancer, placenta previa, pre-term birth, and maternal suicide. They should also be informed of the inadequate manner in which maternal death is reported to the government, thus grossly underestimating the risk of death from abortion.

I applaud this subcommittee for taking on such a politically difficult topic in an effort to show women the respect they deserve by supplying them with accurate medical information.

#### Figure 1<sup>34</sup>

*Scenario: All Four Women Are Pregnant At Age 18; #1 & #3 abort their first pregnancy and deliver at 40 weeks in their next pregnancy at age 32. #2 and #4 continue their first pregnancy and deliver at 40 weeks at age 18.*

Gail Variable	#1	#2	#3	#4
Race	Caucasian, Non-Black	Caucasian, Non-Black	Black	Black
Age	50	50	50	50
Menarche	12	12	12	12
Age 1st live birth	32	18	32	18
Number of first-degree relatives with breast cancer	0	0	0	0
Number of previous breast biopsies	0	0	0	0
5-year breast cancer risk	1.3%	0.7%	0.8%	0.4%
Lifetime breast cancer risk	12.1%	6.5%	6.7%	3.6%

<sup>33</sup>Compendium of Selected Publications, the American College of Obstetricians and Gynecologists, 2004, Practice Bulletin #26.

<sup>34</sup>Thorp *et al.*, *supra* note 2

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## CME REVIEW ARTICLE 2

CHIEF EDITOR'S NOTE: This article is part of a series of continuing education activities in this Journal through which a total of 36 AMA/PRA category 1 credit hours can be earned in 2003. Instructions for how CME credits can be earned appear on the last page of the Table of Contents.

### Long-Term Physical and Psychological Health Consequences of Induced Abortion: Review of the Evidence

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and Elizabeth Shadigian, MD‡

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Induced abortion is a prevalent response to an unintended pregnancy. The long-term health consequences are poorly investigated and conclusions must be drawn from observational studies. Using strict inclusion criteria (study population >100 subjects, follow up >60 days) we reviewed an array of conditions in women's health. Induced abortion was not associated with changes in the prevalence of subsequent subfertility, spontaneous abortion, or ectopic pregnancy. Previous abortion was a risk factor for placenta previa. Moreover, induced abortion increased the risks for both a subsequent preterm delivery and mood disorders substantial enough to provoke attempts of self-harm. Preterm delivery and depression are important conditions in women's health and avoidance of induced abortion has potential as a strategy to reduce their prevalence. Only review articles including the single published meta-analysis exploring linkages between abortion and breast cancer were relied upon to draw conclusions. Reviewers were mixed on whether subsequent breast neoplasia can be linked to induced abortion, although the sole meta-analysis found a summary odds ratio of 1.2. Whatever the effect of induced abortion on breast cancer risk, a young woman with an unintended pregnancy clearly sacrifices the protective effect of a term delivery should she decide to abort and delay childbearing. That increase in risk can be quantified using the Gail Model. Thus, we conclude that informed consent before induced abortion should include information about the subsequent risk of preterm delivery and depression. Although it remains uncertain whether elective abortion increases subsequent breast cancer, it is clear that a decision to abort and delay pregnancy culminates in a loss of protection with the net effect being an increased risk.

**Target Audience:** Obstetricians & Gynecologists, Family Physicians

**Learning Objectives:** After completion of this article, the reader will be able to define the terms *abortion rate* and *abortion ratio*, to outline the epidemiologic problems in studying the long-term consequences of abortion, and to list the associated long-term consequences of abortion.

In the late 1960s and early 1970s, abortion was legalized in most of the western world. Legalization culminated in more women choosing termination

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than had been expected (1, 2), with young, socially deprived, and childless women making up the largest proportion (3). Initially, research focused on early complications, immediate maternal mortality, and optimization of abortion technique (4). Subsequent interest in the potential long-term health consequences entered scientific discussion later, not primarily driven by specific hypotheses, but rather by

those with conflicting viewpoints, vis a vis, the moral status of the embryo or fetus, and the desire to either limit or expand access to abortion (5). As profound sociologic changes in reproductive behavior were documented in the form of rising abortion rates, political pressures motivated governments to appoint special study commissions charged with the task of reporting on the long-term health implications of induced abortion (6, 7). The resulting reports lament the lack of long-term follow-up and call for detailed study of the health effects of this common procedure. Despite strong recommendations for substantive research, and the clear need for women to have accurate information as they execute their autonomy, current data remain sparse, studies are small and methodologically flawed, and the conclusions are often intertwined with the political agendas of their authors and publishers (8).

#### ABORTION EPIDEMIOLOGY

Epidemiologic data exist on abortion from most countries in which it is legal. However, the completeness of these data are subject to local statutes and their enforcement (3). Sources of information include legally mandated registers, hospital administrative data and clinic statistics, and voluntary reporting or surveys of abortion providers. With these limitations in mind, nonetheless, we can calculate abortion incidence. Both abortion rates and ratios are important measures in understanding the epidemiology of legal abortion. Rates reflect abortions per 1000 reproductive-age women, and ratios are the number of abortions per 100 live births or pregnancies. Readers should note that abortion ratios increase as the number of births diminish, and increases in abortion ratios can reflect not only the incidence of women deciding to terminate a pregnancy, but also the incidence of women deciding to conceive.

From the early 1970s, the annual number of abortions performed in the United States peaked at 1.61 million in 1990. Abortions have declined over the last decade with 1.37 million in 1996; this drop is attributed in part to aging of the population (9, 10) and a fall in unintended pregnancies amongst adolescent women (11, 12). In 1996, the U.S. abortion rate per 1000 women aged 15 to 44 was 23 of 1000, the lowest reported rate since 1975. The abortion ratio in 1996 was 26 abortions per 100 live births and abortions. Thus, 26% of all recognized pregnancies were terminated (6, 7). Overall, the United States abortion rate (23/1000 in 1996) is high compared

with similarly developed countries. In 1995, the abortion rates were 16 of 1000 in Canada, 15 of 1000 in England, 6 of 1000 in the Netherlands, and 18 of 1000 in Sweden (13).

One can presume that abortion is most often chosen as a response to a crisis or unintended pregnancy. The high prevalence of a history of induced abortion means that even small positive or negative effects on long-term health could influence the lives of many women and their families.

#### EPIDEMIOLOGIC PROBLEMS IN STUDYING THE LONG-TERM CONSEQUENCE OF ABORTION

Abortion is an exposure that cannot be assigned to women by chance as part of an experimental design. Thus, investigators are deprived of the powerful tool of randomization to minimize bias in their findings. Progress in research must depend on well-done observational studies.

Observational studies are more prone to bias than experimental trials and thus less likely to allow the drawing of conclusions regarding causality. Potential problems in observational research done on the health consequences of induced abortion include two important sources of error: 1) Bias in assessment of true exposure status: This may occur through information bias, namely differing accuracy of information about abortion history across comparison groups. This is the case if medical records or registries systematically over-report or under-report elective abortions (i.e., missing events or the result of reporting bias—e.g., if women's self-report selectively reveals or suppresses information about their abortion history); 2) Selection of an inappropriate comparison group of women without a history of abortion. Populations of women who choose abortion differ in many ways from those who do not. At the time of the abortion, they are likely to be younger, poorer, and less able to reliably contracept than a sample of the general population of women (14). Dissimilarities in socioeconomic status, stress, access to health care, and lifestyle may persist across time, and they may actually be associated with adverse health events. This introduces risk of uncontrolled confounding of the estimates of association between abortion and long-term outcomes—in other words, observed associations may stem from other confounding differences between women who choose abortion and those who do not. For a careful comprehensive analysis of the limitations of observational research in this area and a useful scheme for

categorizing study design, readers are referred to the work of Hogue (15).

The most consistently debated problem in the study of long-term health effects of induced abortion is ascertainment of true exposure status: it is thought that women with a significant medical problem such as breast cancer or a preterm delivery may be more likely to report an induced abortion than controls who do not have such a health problem (16–19). Paradoxically, Tang et al. (20) in a methodologic study to assess underreporting in breast cancer cases and controls could find no evidence of a hesitancy to report (21). Udry et al. (22) found a similar prevalence of induced abortion underreporting in a study of women with and without health problems where self reports were compared with medical records. Soderberg et al. (23) demonstrated high nonparticipation rates of women with prior induced abortion in long-term follow-up studies. Moreover, they showed that nonparticipation was linked with being young, unmarried, and of low socioeconomic status.

Daling et al. (24) examined the possibility of differential reporting in an article that examined breast cancer risk in relation to induced abortion. They did so by completing a substudy case-control analysis of cervical cancer and induced abortion in which they could find no evidence of differential underreporting of prior induced abortion. Lindefors-Harris et al. (25) linked self reports of induced abortion to a national registry. While these authors claimed to have found evidence of ascertainment bias, subsequent reanalysis done with the assumption that women who had not undergone abortion would not falsely report such caused Dahling et al. (24) to question their findings.

Beyond difficulties in ascertaining abortion status, there is not a clear consensus about how investigators should conceptualize abortion as a risk factor. One analytic approach views an interrupted pregnancy as a fraction of a complete pregnancy, for instance assuming that an abortion at 8 weeks is the biologic equivalent of 20% of a pregnancy. Others treat abortion as a distinct biologic event focusing on the abruptness of termination and subsequent hormonal changes (26). The latter approach is used most commonly, although more sophisticated approaches to capture additional detail about duration of pregnancy as well as history and mode of abortion are warranted.

For the purposes of summarizing current knowledge, critical reviewers and meta-analysts are limited by the narrow focus of electronic searches using abortion as a search heading when many other studies of an array of exposures include information

about reproductive history. For instance, Ananth et al. (27) in their review and meta-analysis of induced abortion and placenta previa located three of the five pertinent articles via hand searches. Each article's identifiers had been designed to address the effects of smoking on placentation. Their discovery and inclusion allowed for meta-analysis and the drawing of a conclusion a review such as ours would have been unable to do. This obscurity of potential sources of information is both a challenge and an opportunity. It increases the logistical difficulty and, therefore, effort and cost of systematic review, but suggests the literature contains a rich reserve of data for future analyses.

#### METHODS AND SOURCES

We performed our research for relevant publications using the MEDLINE database. We searched under "abortion" and "abortion complications" headings from 1966 to 2002, restricting the search to publications in English. Abstracts were then reviewed to see if they met the inclusion criteria for this article. The bibliographies of relevant articles were analyzed to identify additional reports. Appropriate articles were obtained for full review.

Inclusion criteria were: The study must have had over 100 subjects with follow-up of two months or longer after elective abortion. A study size criterion was applied based on the premise that long-term complications are rare and reported effect sizes small, thus studies with fewer than 100 subjects would most likely not have adequate power to detect differences. Long-term was defined as  $\geq 2$  months, paralleling clinical advice that a return to optimal fertility after elective abortion would take at least that long.

Articles were abstracted by a single author (J.M.T.). Information abstracted included time and location of the study, the number of subjects, the study design, the findings, and appropriate comments. Our review is limited to legal abortions performed using surgical techniques. Illegal abortions are often done without sterile technique. We did not identify studies of medical abortions with long-term follow-up. When exploring the possible association between induced abortion and breast cancer, we did not believe that another review of the up to 31 observational studies published heretofore would add much to the four reviews and/or meta-analyses already in the literature. Thus, we have provided summaries of these reviews similar to Davidson in his

"personal view" article on breast cancer and induced abortion done in the 2001 issue of the *Lancet* (28).

#### INDUCED ABORTION SUBSEQUENT SPONTANEOUS ABORTION

Five studies (26, 29–32) were evaluated for associations between induced abortion and miscarriage (Table 1). Two used cohort design and three were case-control studies. None found a significant association between induced abortion and early pregnancy loss. Those that analyzed their data by the number of previous elective abortions did not show a dose-response effect (26, 29, 31, 32). Likewise, use of logistic regression to control for confounding variables failed to demonstrate any significant associations (26, 29–32).

#### INDUCED ABORTION AND SUBSEQUENT PLACENTA PREVIA

Three studies (33–35) were found exploring induced abortion and placenta previa (Table 2). Both the cohort (33) and the two case-control studies (34, 35) found a positive association. The article by Taylor et al. (35) generated an odds ratio of 1.3 with confidence intervals (CI) of 1.01 to 1.66. That estimate of risk was maintained in a logistic regression analysis.

Ananth et al. (27) used meta-analysis to study abortion and placenta previa. He combined five observational studies (33, 36–39) [only one of which met our inclusion criteria and is presented in Table 2 (33)] and found that women with prior induced abortion had a relative risk of placenta previa of 1.7 (RR = 1.0, 2.9). He also noted substantial heterogeneity in effect estimates across studies.

#### INDUCED ABORTION AND SUBSEQUENT ECTOPIC PREGNANCY

Nine articles examined associations between induced abortion and ectopic pregnancy. (40–48) (Table 3). All but two of these used case-control design

(41, 47). An Italian case-control study (n = 559) showed a strong association between induced abortion and ectopic pregnancy (OR = 2.9; CI = 1.6, 5.3) (44).

A French case-control study showed a significant effect with a dose-response with two or more abortions: one abortion, OR = 1.4 (CI = 1.0–2.0) and two or more abortions OR = 1.9 (CI = 1.0–3.7) (48). The other seven studies did not demonstrate an association between abortion and subsequent ectopic pregnancy (40–47).

#### INDUCED ABORTION AND SUBSEQUENT PRETERM BIRTH

We found 24 studies that explored associations between abortion and preterm birth (PTB) (or a surrogate marker for PTB—low birth weight (LBW) (49–72) (Table 4). Twelve studies found an association between these two phenomena with consistent results in risk ratio elevation of 1.3 to 2.0. Moreover, 7 of the 12 identified a "dose-response effect" with risk estimates rising as a woman had more induced abortions. Also notable is the increased risk of very early deliveries at 20 to 30 weeks' gestation after induced abortion, first noted by Wright, Campbell, and Beazley in 1972 (49). Seven subsequent articles displayed this phenomena of midpregnancy PTB associated with induced abortion (57, 59, 60, 63, 64, 70, 72), which is especially relevant because these are the infants with the most dire risk of morbidity and mortality, upon which society expends so many resources (73). Of particular note are the three large cohort studies done in the 1990s, 20 to 30 years after legalization (70–72). Each shows elevated risk and a dose-response effect. One would assume that these studies were done so long after legalization that the stigma of abortion that might contribute to underreporting would have waned. Henriot and Kaminski (72) did sensitivity analyses of nondifferential underreporting of previous induced abortion in women experiencing a preterm birth and found that their risk estimates were stable even with underreporting rates of 50%.

TABLE 1 Induced abortion and subsequent spontaneous abortion

Reference	Epoch	Location	Number	Abortion Ascertainment	Design	Findings
26	1987–1989	Canada	1324	Self report	Case control	No association
29	1990–1995	Italy	2325	Self report	Case control	No association
30	1975–1977	Germany	3042	Medical records	Cohort	No association
31	1980–1982	USA	3110	Self report	Cohort	No association
32	1974–1982	USA	989	Self report	Case control	No association



TABLE 2 Induced abortion and subsequent placenta previa

Reference	Epoch	Location	Number	Abortion Ascertainment	Design	Findings
33	1979–80	USA	3,184	Self report	Cohort	Induced abortion is associated with placenta previa.
34	1984–87	USA	2,084	Self report	Case control	Induced abortion associated with placenta previa, (OR = 1.30)
35	1993–97	Thailand	16,169	Self report	Cohort	2 induced abortions associated with placenta previa (OR = 2.1)

TABLE 3 Induced abortion and subsequent ectopic pregnancy

Ref	Epoch	Location	Number	Abortion Ascertainment	Design	Findings
40	1976–1978	USA	583	Self report	Case control	No association
41	1975–1980	USA	102,320	Medical records	Cohort	No association
42	1976–1978	USA	2,788	Self report	Case control	No association
43	1986–1987	Greece	140	Self report	Case control	No association
44	1992–1994	Italy	559	Self report	Case control	Relative risk of ectopic pregnancy increased 2.9 (1.6–5.3)
45	1987–1990	Finland	289	Self report	Case control	No association
46	1988–1990	USA	1,238	Self report	Case control	No association
47	1987–1992	Norway	3,754	Medical records	Cohort	No association
48	1989–1991	France	1,955	Self report	Case control	Relative risk of ectopic pregnancy increased 1.4 (1.0–2.0). Also dose-response effect.

#### INDUCED ABORTION AND SUBSEQUENT SUBFERTILITY

Seven articles have studied links between abortion and the subsequent inability to conceive (Table 5) (74–80). Only two studies from Greece (74, 79) have seen any association. Each was done in different decades. Other studies found no association. Finding an appropriate control group for fecundity studies limits all such articles. Women undergoing abortion are by definition fertile, and neither women who have never conceived nor those who have born children constitute an ideal comparison group.

#### INDUCED ABORTION AND SUBSEQUENT BREAST CANCER

As described earlier, we have addressed the linkages between induced abortion and breast neoplasia differently from the other topics. Rather than replicate the tables and works of numerous other authors, we have summarized four review articles (81–84), one of which conducted a meta-analysis (83) (Table 6). Two of the four reviewers (81, 82) found no association between induced abortion and breast cancer, although one found a “small to nonsignificant effect” (84). The sole meta-analysis by Brind et al. (83) reported a summary odds ratio for breast cancer of 1.3 (95% CI, 1.2, 1.4) in patients with a previous

induced abortion. They concluded that induced abortion is an independent risk factor for breast carcinoma (83).

All the reviews comment on the potential for bias in data collection, presentation, and analysis emphasizing in particular the sensitive nature of abortion with its potential for underreporting. All the reviewers acknowledge that these potential biases could obscure real relations or create spurious associations. In addition, reviewers comment on the high likelihood of a “file drawer” effect with pertinent studies being withheld from publication due to the highly politicized atmosphere in which their findings would be reported. None of the reviewers seems to be comfortable with the scope and content of the current literature. Each advocates for the analysis of prospectively gathered data that link known pregnancy outcomes to subsequent neoplastic events (28, 85). Brind et al. (83) have demonstrated clearly the need for such studies by showing that despite the relatively low increase in risk they discovered, the high incidence of both breast cancer and induced abortion would ensure a substantial impact on women’s health if their conclusions are correct. Weed and Kramer (85) have thoughtfully considered the ways in which the conclusions one draws on this “thorny” issue are influenced by the moral values each reviewer brings to these complex data. Nonetheless, a statistically significant positive association between induced abortion

TABLE 4 Induced abortion and subsequent preterm birth or low birth weight (LBW) infant

Reference	Epoch	Location	Number	Abortion Ascertainment	Design	Findings
49	1971	England	3,314	Self report	Case-control	Increase in PTB
50	1971	Japan	3,877	Self report	Case-control	No association
51	1966-1968	Greece	13,242	Self report	Cohort	Increased risk PTB
52	1966-1968	Israel	11,057	Self report	Cohort	Increased risk LBW
53	1972-1976	USA	1,042	Self report	Cohort	No association
54	1974-1975	Denmark	7,327	Self report	Cohort	No association
55	1972-1976	Norway	3,780	Self report	Cohort	No association
56	1970-1972	Norway	1,238	Self report	Case-control	No association
57	1974-1976	USA	31,917	Self report	Cohort	Increased risk PTB RR:1.99 (1.09-3.62)
58	Prior to 1979	Finland	1,046	Self report	Case-control	No association
59	1973-1974	Denmark	7,270	Self report	Cohort	No association
60	1976-1978	USA	1,312	Self report	Case-control	Association with PTB <29 wks., proportional to the number abortions; increased with increasing numbers
61	1976-1978	USA	6,179	Self report	Case-control	Association with pregnancy failure*
62	1974	USA	6,832	Self report	Case-control	No association
63	1973-1977	Netherlands	133	Self report	Case-control	Association with PTB
64	1977-1980	USA	9,823	Self report	Cohort	Increased abortion association with PTB via ROM OR:1.9 (1.3,2.9)†
65	1976-1979	England	1,339	Med. Records	Cohort	No association
66	1976-1979	England	2,483	Med. Records	Cohort	No association
67	1985-1989	China	550	Self report	Case-control	No association
68	1986-1989	USA	420	Med. Records	Case-control	Association with spontaneous PTB 1.6 (1.9, 2.7); increased risk with increasing numbers
69	1984-1987	USA	6,451	Med. Records	Cohort	No association, no > risk with multiple abortions
70	1994	Germany	106,345	Med. Records	Cohort	Association with PTB 1.8 (1.6-2.1) increased with increasing numbers
71	1996	Denmark	61,753	Med. Records	Cohort	Association d with increased risk LBW 1.9 (1.6,2.3); increased with increasing numbers
72	1995	France	12,432	Self report, Med. Records	Cohort	Association with increased risk PTB 1.4 (1.1, 1.8), dose response effect; increased with increasing numbers

\* SAB, ectopic, perinatal death.

† Rupture of membranes.

TABLE 5 Induced abortion and subsequent subfertility

Ref	Epoch	Location	Number	Abortion Ascertainment	Design	Results
74	1973-74	Greece	249	Self report	Case control	Associated with increased risk of subfertility 3.4 (1.4, 8.4)
75	1974-75	Denmark	7,720	Self report	Cohort	No association
76	Before 1984	Hungary, Korea	448	Self report	Case control	No association
77	1979-81	USA	395	Self report	Cohort	No association
78	1973-83	England	140	Medical record	Cohort	No association
79	1987-88	Greece	252	Self report	Case control	Associated with increased risk of subfertility 2.1 (1.1, 4.0)
80	1976-87	England	1,468	Medical records	Cohort	No association

TABLE 4 Induced abortion and subsequent preterm birth or low birth weight (LBW) infant

Reference	Epoch	Location	Number	Abortion Ascertainment	Design	Findings
49	1971	England	3,314	Self report	Case-control	Increase in PTB
50	1971	Japan	3,877	Self report	Case-control	No association
51	1966-1968	Greece	13,242	Self report	Cohort	Increased risk PTB
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55	1972-1976	Norway	3,780	Self report	Cohort	No association
56	1970-1972	Norway	1,238	Self report	Case-control	No association
57	1974-1976	USA	31,917	Self report	Cohort	Increased risk PTB RR:1.99 (1.09-3.62)
58	Prior to 1979	Finland	1,046	Self report	Case-control	No association
59	1973-1974	Denmark	7,270	Self report	Cohort	No association
60	1976-1978	USA	1,312	Self report	Case-control	Association with PTB <29 wks., proportional to the number abortions; increased with increasing numbers
61	1976-1978	USA	6,179	Self report	Case-control	Association with pregnancy failure*
62	1974	USA	6,832	Self report	Case-control	No association
63	1973-1977	Netherlands	133	Self report	Case-control	Association with PTB
64	1977-1980	USA	9,823	Self report	Cohort	Increased abortion association with PTB via ROM OR:1.9 (1.3,2.9)†
65	1976-1979	England	1,339	Med. Records	Cohort	No association
66	1976-1979	England	2,483	Med. Records	Cohort	No association
67	1985-1989	China	550	Self report	Case-control	No association
68	1986-1989	USA	420	Med. Records	Case-control	Association with spontaneous PTB 1.6 (1.9, 2.7); increased risk with increasing numbers
69	1984-1987	USA	6,451	Med. Records	Cohort	No association, no > risk with multiple abortions
70	1994	Germany	106,345	Med. Records	Cohort	Association with PTB 1.8 (1.6-2.1) increased with increasing numbers
71	1996	Denmark	61,753	Med. Records	Cohort	Association d with increased risk LBW 1.9 (1.6,2.3); increased with increasing numbers
72	1995	France	12,432	Self report, Med. Records	Cohort	Association with increased risk PTB 1.4 (1.1, 1.8), dose response effect; increased with increasing numbers

\* SAB, ectopic, perinatal death.

† Rupture of membranes.

TABLE 5 Induced abortion and subsequent subfertility

Ref	Epoch	Location	Number	Abortion Ascertainment	Design	Results
74	1973-74	Greece	249	Self report	Case control	Associated with increased risk of subfertility 3.4 (1.4, 8.4)
75	1974-75	Denmark	7,720	Self report	Cohort	No association
76	Before 1984	Hungary, Korea	448	Self report	Case control	No association
77	1979-81	USA	395	Self report	Cohort	No association
78	1973-83	England	140	Medical record	Cohort	No association
79	1987-88	Greece	252	Self report	Case control	Associated with increased risk of subfertility 2.1 (1.1, 4.0)
80	1976-87	England	1,468	Medical records	Cohort	No association

TABLE 6 Induced abortion and subsequent breast cancer relevant review articles and meta-analyses

References	Epoch	No. of Studies	Meta-Analysis	Findings
81	1966–1996	32	No	Breast cancer risk did not appear to be associated with induced abortion.
82	1966–1998	Cannot ascertain	No	Breast cancer risk did not appear to be associated with induced abortion.
83	1966–1996	21*	Yes	Abortion is an independent risk factor for breast cancer [Odds ratio 1.3 (1.2–1.4)]
84	1966–1996	18	No	Any relation is likely to be small or non-significant

\* 21 independent studies with representative data from 26 published reports.

TABLE 7 Induced abortion and subsequent mental health

Ref.	Epoch	Location	Number	Abortion Ascertainment	Design	Follow-up Length	Outcome Studied	Findings
88	1984–91	U.S.	4,403	Self-report	Cohort	5–10 yrs	Depression	Married (not unmarried women) with previous abortion were more likely to be at increased risk of depression or 2.4(1.1,5.2)
89	1974	New Zealand	309	Telephone survey	Cohort	3–9 mos	Emotional effects defined by authors as Suicide	No emotional repercussions
90	1987–94	Finland	9,192	Death certificates	Cohort	>30 days		Increased risk of suicide after induced abortion; OR-3.1(1.6,6.0)
91	1993	U.S.	882	Self-report	Cohort	2 yrs	Depression, self-esteem	Abortion regret associated with preexisting depression
92	1996	U.S.	700	Self-report	Cohort	Up to 15 yrs	Substance abuse	Women who aborted first pregnancy more likely to report substance abuse
93	1991–95	England	408,000	Medical records	Cohort	30 days post-abortion	Suicide admission	Induced abortion associated with increased risk of admission after but not before RR-3.2(1.8,5.9)
94	1989	Sweden	854	Self-report	Cohort	1 yr after abortion	Emotional distress	50–60% of women experienced emotional distress, severe in 30%
95	1996–2000	U.S.	54,419	Insurance claims	Cohort	4 years	Claim for mental health care	More claims after abortion
96	1989–97	U.S.	173,279	Medical records	Cohort	1–8 years	Death, suicide	Death (all causes) RR-1.6 (1.3,7.0); suicide RR-2.5 (1.1,5.7) more common after elective abortion
97	1976–79	Great Britain	13,261	Medical records	Cohort	6 months	Deliberate self-harm	Self-harm more common in women with induced abortion RR-1.7(1.1,2.6)

and breast cancer cannot be easily dismissed because Brind et al. (83) review is the only one that is quantitative.

#### INDUCED ABORTION AND SUBSEQUENT MENTAL HEALTH

The literature on psychosocial sequelae of induced abortion is confusing, and results are confounded by not only the research problems described above but the cultural, religious, and legal milieu of reproductive decision making within the society studied (86). Given the psychological distress faced by a woman with an "unwanted or unintended" pregnancy, separating the sequelae of such a pregnancy from its ultimate disposition can be quite difficult (87). Given the breadth of mental health outcomes postulated to be associated with induced abortion, we present tables that reflect the range of outcomes in published reports. Because mental health status may change over time, we have also annotated the duration of follow-up for each particular study.

Table 7 presents our tabulation of these studies; of particular note is the association between induced abortion and either suicide or suicide attempt (89, 90, 92, 93, 95-97). This is an objective rather than a subjective outcome, and because the effects are seen after induced abortion rather than before (90, 93) indicates either common risk factors for both choosing abortion and attempting suicide, such as depression, or harmful effects of induced abortion on mental health. This phenomena is not seen after spontaneous abortion (91). Other studies tabulated that demonstrated increased risk of depression or emotional problems after induced abortion in certain subgroups may explain the psychopathology that culminates in deliberate self harm (88, 91, 94).

#### CONCLUSIONS

The long-term health effects of elective abortion are difficult to study and thus poorly understood. This lack of knowledge stems from a variety of causes. First and foremost, exposure to abortion cannot be assigned on an experimental basis, restricting researchers to rely on observational studies and precluding randomized trials. Thus, all research in this realm is prone to an array of different sources of bias that complicate the process of drawing conclusions. Second, it is not clear what group of women constitutes an appropriate comparison group for these observational studies. Third, the decision to terminate a

pregnancy is emotionally difficult for many women. Hence, regret, remorse, or shame may cause them to not disclose having made such a decision when queried about their reproductive histories. Fourth, the long-term health consequences of elective abortion have been highly politicized. Those who would grant a moral status to an embryo or fetus and thus limit elective abortion, often use adverse health consequence claims as a tool to further their moral agenda, while those who support no restrictions on abortion access are at times unwilling to consider that pregnancy interruption could affect future mental and physical health. Finally, the effect sizes are small with risk ratios when present falling in the range of a doubling or less of risk for comparatively rare outcomes. The potential for modest influence on events that are unlikely and distant for an individual woman hinders the ability of clinicians or patients to use their experience and judgment to use such information in decision making.

One might then reasonably ask why study such a complicated, politically treacherous, and difficult to understand phenomena. Studies would have to be large and, thus, expensive to have adequate power to detect small effects and control for the biases described and might not directly influence clinical care. We would point to cigarette smoking and its health consequences as an answer. In the 1950s and 1960s, each point delineated in the preceding paragraph could have been, and were, applied to the dilemma of studying whether tobacco consumption has adverse health consequences. Although no individual clinician or patient could discern the harm of cigarette smoking and all studies had to be observational with their inherent biases, well-done epidemiologic research was able to document adverse consequences and ultimately inform public opinion and policy. Elective abortion must be studied in the same fashion with similar vigor, given the frequency with which women choose to terminate a pregnancy and the important and prevalent health conditions that some of the data gathered heretofore have linked to elective abortion, e.g., preterm birth and breast cancer. Women deserve to be fully and accurately informed about potential health effects of elective abortion, preferably in a health education context separate and distinct from the timeframe of actually being faced with making difficult decisions about whether to continue or end a pregnancy.

Until further research and meta-analyses are forthcoming, we are faced with the uncertainties outlined in this review. We find little evidence to support the claims that elective abortions increase the risk of

subsequent subfertility, ectopic pregnancy, and spontaneous abortion. Of more concern are the possibility of links to preterm birth, placenta previa, breast carcinoma, and serious mental health problems.

Abortion is a procedure most used by women at the outset of their reproductive life. Most women having an induced abortion are under 30 years old (72). Preterm birth is common, affecting around 10% of deliveries in the western world, and is the leading cause of infant morbidity and mortality (73). Despite substantial investigative effort, primary preventive measures to lower the rate of preterm births have proven futile and rates have been steady or increased over the past two decades (73). The population-based studies we reviewed suggest that induced abortion increases the risk of preterm birth in subsequent pregnancies. Moreover, these reports suggest that a dose-response effect is present with increasing numbers of abortions associated with increasing risk, and that the linkage is most strong with extremely premature deliveries (<32 weeks), which is the population of newborns that experiences the bulk of the morbidity and mortality that occur from being born prematurely. Clinicians should remember that the increased risk of early childbirth associated with induced abortion occurs over and above the background risk of preterm birth (estimated to be 10%) inherent with any pregnancy. The respective roles of various surgical and medical techniques used for induced abortion and their impact on preterm birth remain unexplored and may mitigate these consequences. Considering these data, we think that women in general, including those considering abortion, need to be informed that surgical abortion procedures may increase the likelihood of subsequent preterm births, and that the risk associated with other methods is unknown. For those women who choose abortion, techniques that in theory protect the cervix from trauma, such as laminaria or preabortion cervical ripening, should be used.

Placenta previa affects 0.3% to 0.8% of pregnancies and is the leading cause of uterine bleeding in the third trimester and of medically indicated preterm birth. Pregnancies complicated by placenta previa result in high rates of preterm birth, low birth weight, and perinatal death (27). Both the observational studies included in our review and meta-analysis by Ananth et al. (27) show a link between placenta previa and previous induced abortion. The meta-analysis (27) incorporated articles outside the scope of our search and exemplifies how review of other articles on topics such as smoking and placenta previa can inform the search for linkages between abor-

tions and reproductive health. Ananth et al. (27) speculate that a 50% reduction in induced abortion would be required to avert 1.5% of placenta previa cases. Placenta previa is rare enough and the impact of this change is so small that we would not feel obliged to mention this to women contemplating their first abortion. Our advice might change if a woman had had a previous cesarean delivery, an independent risk factor for placenta previa; or if she were contemplating undergoing a second elective pregnancy termination (27). In other venues, information about the existence and magnitude of risk may be appropriate for health education summaries of the reproductive correlates of elective abortion.

Potential links between breast cancer and abortion are the most controversial long-term health consequence explored in our review. Findings are mixed with reviewers and authors of original manuscripts drawing different conclusions. The one meta-analysis performed to date points to a small but significant link between abortion and breast carcinoma. The current literature is insufficient to be informative for counseling. Nonetheless, the topic is worthy of well-designed and conducted research and of careful meta-analyses using the hand-search techniques used by Ananth et al. (27) to explore sources of published data not focused on the direct link between abortion and breast cancer. In the interim should we, and how do we, inform patients? We think that given the undisputed protective effect of a full-term delivery early in one's reproductive life on subsequent breast cancer development that a young woman facing an unwanted or crisis pregnancy can and should be informed of the loss of that protection that would derive from a decision to terminate her pregnancy and delay having a baby (98,101). To illustrate, Table 8 uses the Gail Equation to predict 5-year and lifetime risk of breast carcinoma for an 18-year-old

TABLE 8 Gail Equation is used to calculate risk estimates

Gail Variable	Scenario			
	1	2	3	4
Race	White, nonblack	White, nonblack	Black	Black
Age	50	50	50	50
Menarche	12	12	12	12
Age of first live birth	32	18	32	18
No. of first-degree relatives with breast cancer	0	0	0	0
Number of previous breast biopsies	0	0	0	0
5-Year risk (%)	1.3	0.7	0.8	0.4
Lifetime risk (%)	12.1	6.5	6.7	3.6

TABLE 9 White women with unintended or crisis pregnancy at 18, 28, 38 years of age: effects of delaying first live birth by 5, 10, 20 years compared With delivery now\*

Age at Pregnancy	5-year Risk at 50			
	With delivery now	With 5-year delay	With 10-year delay	With 20-year delay
18	0.7	0.9	1.1	1.3
28	1.1	1.3	1.3	
38	1.3	1.3		

\* Assume term delivery, menarche at 12 years of age, no family history of breast cancer, no breast biopsies.

TABLE 10 Black women with unintended or crisis pregnancy at 18, 28, 38 years of age: Effects of delaying first live birth by 5, 10, 20 years compared with delivery now\*

Age at Pregnancy	5-year Risk at 50			
	With delivery now	With 5-year delay	With 10-year delay	With 20-year delay
18	0.4	0.9	1.1	1.3
28	1.1	1.3	1.3	
38	1.3	1.3		

\* Assume term delivery, menarche at 12 years of age, no family history of breast cancer, no breast biopsies.

woman with an unintended or crisis pregnancy. The Gail model (99) is considered the best available measure for estimating an individual woman's risk of developing breast cancer. It was used to calculate risk estimates for the National Cancer Institute's breast cancer chemoprevention trial and is specifically designed to be useful in decision making by women (100). In the first scenario, she decides to terminate and then has her first term delivery at age 32, where in the second, she has a live-born infant. We then assess her individual risk at age 50 when the risk of breast cancer begins to peak. For both black and white women, her decision at age 18 and subsequent reproductive choices can almost double her 5-year and lifetime risk of breast neoplasia at age 50. Tables 5, 9, and 10 demonstrate that the "loss of protection" effect is most pronounced in women under 20 years of age who elect to undergo abortion rather than continue their pregnancy. We think, now, that clinicians are obliged to inform pregnant women that a decision to abort her first pregnancy may almost double her lifetime risk of breast cancer through loss of the protective effect of a completed first full-term pregnancy earlier in life. Additionally, we believe that women should be aware of the studies that support induced abortion as an independent risk factor for breast cancer, with the only quantita-

tive analysis showing a small but statistically significant odds ratio of 1.3, although the other three reviews (which are nonquantitative) refute this.

The effects of elective abortion on mental health are challenging to interpret for the reasons outlined. Although earlier studies focusing on secondary outcomes were reassuring, more recent, large cohort studies linking abortion to the "hard" outcomes of either suicide, psychiatric admission, or deliberate self harm are concerning (90, 93, 97). A major question remains unanswered because of the lack of a proper control group. Is the observed phenomena a correlate of the circumstance that may lead to a crisis or unintended pregnancy regardless of a woman's decision to choose abortion, or is this a function of both? Until that question can be answered, it will be hard to inform women as to what, if any, additional risk a decision to terminate will produce. Likewise, the uncertainty limits a clinician's ability to reassure such a woman that her decision will not have long-term mental health effects. The observation of the association, regardless of the lack of causal linkage, suggests careful screening and follow-up for depression and anticipatory guidance/precautions for women who choose elective abortion.

#### INFORMED CONSENT IMPLICATIONS

Informed consent is a bioethical tool used in medical practice to protect an individual's autonomy as he or she makes a healthcare decision. Clinicians are obliged by law to inform patients before a medical decision of the benefits and risks of the treatment being pondered. The goal is not to confuse a patient nor direct her decision-making process but to provide patients with the information that a reasonable person would want to know. Thus, not every possible good or bad consequence or consequences that are uncertain are obliged to be shared. Because of our review, we think that any woman contemplating an induced abortion should be cautioned about the mental health correlates of an increased risk of suicide or self-harm attempts as well as depression and a possible increased risk of death from all causes. Analogous to the clinical practice with puerperal depression, women undergoing abortion should be screened for depression at follow-up visits, warned of the signs and symptoms of depression and suicidal ideation, and provided easy access to mental health evaluation and treatment.

The informed consent process is an interaction between two individuals, clinician and patient, with the intent to respect the patient's autonomy. Individ-

ual patients will weigh the importance of these potential risks differently based on their life experiences and values. Furthermore, we anticipate the outcry arising from this approach from both sides of the abortion debate. Those who would ascribe a moral status to an embryo or fetus will view calculation of risk as a cruel calculus compared with the loss of an individual life. Their opponents who view maternal autonomy as paramount and fear that an unwanted pregnancy limits a woman's capacity for fulfillment will view information about remote risk from abortion as an attempt to limit access to the procedure. Nevertheless, we think abortion decision making should include the protection of informed consent and women who wish to know the long-term physical and mental consequences of their decision should be informed.

Furthermore, women contemplating their first induced abortion early in their reproductive life should be informed of two major long-term health consequences. First, their risk of subsequent preterm birth, particularly of a very low-birth weight infant, will be elevated above their baseline risk in the current pregnancy. Second, they will lose the protective effect of a full-term delivery on their lifetime risk of breast carcinoma. This loss of protection will be in proportion to the length of time that elapses before they experience their first delivery. Increased rates of placenta previa and the disputed independent risk of induced abortion on breast cancer risk warrant mention as well. Failure to provide this information is a direct threat to maternal autonomy, diminishing a woman's ability to give informed consent. We believe a reasonable person is entitled to know these conclusions and their limitations and having been informed, will find herself in a better place to personally evaluate the long-term health consequences of an induced abortion.

We acknowledge that the setting of informed consent at the time of counseling about an undesired or crisis pregnancy is suboptimal as an opportunity to be first introducing the potential risks of elective abortion. Women would be better served by having preexisting knowledge about the scope and nature of potential risks. This suggests that reproductive health education opportunities in clinical settings, schools, and the media, would serve the interests of women best by featuring currently available information about potentially associated risks. Such knowledge could hypothetically reduce behaviors that place individuals at risk of an undesired pregnancy, and certainly would protect against the undesirable but necessary circumstance of being provided with such

information for the first time in the setting of a crisis pregnancy.

Given the central role that abortion has played in the life of women over the past 30 years, we are distressed by the lack of term-term, well-done research designed to understand the sequelae. A clear and overwhelming need exists for a large epidemiologic, cohort study of women with an unintended or crisis pregnancy. Follow-up across participants' lifetimes with careful measurement of other pertinent exposures would dramatically advance knowledge. Until such an investigation is invested in, women are making important health decisions with incomplete information. A commitment to such research would seem to us to be morally neutral common ground upon which both sides of the abortion/choice debate would agree is critical.

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Senator BROWNBACK. Thank you. Thank you for traveling here. We appreciate your being here.  
Dr. Stotland?

**STATEMENT OF NADA L. STOTLAND, M.D., M.P.H., PROFESSOR OF PSYCHIATRY AND PROFESSOR OF OBSTETRICS AND GYNECOLOGY, RUSH MEDICAL COLLEGE**

Dr. STOTLAND. Thank you for allowing me to address you today.

My name is Nada Logan Stotland. I'm a practicing psychiatrist with an M.D., as well a master's degree in public health, and, as you said, a professor of psychiatry and OB/GYN at Rush Medical College, in Chicago. My expertise is in the psychiatric aspects of women's reproductive health. I'm currently the Secretary of the American Psychiatric Association, whose official policy is that the option of terminating a pregnancy is important for women's mental health. And I'll underscore what Dr. Shadigian said about what ACOG has to say about abortion and women's health.

But my original focus was on birth. I'm the mother of four daughters, and I have an enchanting little granddaughter. But let me talk—turn to science.

Most of us remember C. Everett Koop, who was an anti-abortion advocate, became the American Surgeon General, and held hearings, as we're having today, to learn from people and organizations on all sides of the debate. I was assigned to review the literature and represent the American Psychiatric Association. Dr. Koop ultimately testified that, "The psychological effects of abortion are minuscule from a public health standpoint."

As Dr. Koop concluded, there is no credible evidence that induced abortion is a significant cause of mental illness. My written testimony references the rigorous studies supporting that assertion. But, as you've heard, there are assertions to the contrary, and let me explain why they don't stand up to scientific scrutiny.

There are ten overriding reasons. One is, as was referred to in the earlier panel, self-selected populations, not populations in general. Second, they confuse emotions with psychiatric illness. Sadness, grief, and regret do follow some abortions. These are not diseases. There's no evidence that women regret abortions more than they regret other decisions. Probably most of the 50 percent of couples who divorce regret having gotten married, but we are working to promote marriage, not to make it difficult. There are intervening variables that influence how someone comes out many years later, as people learn after they get married.

First, they do not distinguish women who terminate unwanted pregnancies from those who have to terminated wanted pregnancies because of serious threats to their own health or fetal malformation.

Second, they overlook the fact that only pregnant women have abortions. They don't compare the after-effects of abortion with the after-effects of childbirth. Over 10 percent of women who have babies in the United States develop postpartum depression, which is a real mental illness. A smaller percentage of women develop postpartum psychosis. Some of these women, as we know, tragically kill themselves or their children. A far lower percentage of

women have clinical depression following abortion, and most of these women were depressed before their abortion.

Third, they failed to account for the reasons women conceive unwanted pregnancies and decide to have abortions, preexisting mental illnesses that make it more difficult for women to refuse sex or contracept effectively, poverty, violence, incest, lack of education, abandonment, as we heard earlier, and overwhelming responsibilities.

Fourth, they failed to take into account the mental health of the woman before she has an abortion. Preexisting mental state is the most powerful predictor of post-abortion mental state.

Fifth, they describe a so-called "abortion trauma syndrome," based on anecdotal evidence. This sounds like PTSD, post-traumatic stress disorder, but it is not a recognized psychiatric disease. I published an article some years ago in the Journal of the American Medical Association called "The Myth of the Abortion Trauma Syndrome."

Sixth, they do not account for pressure and coercion, as we heard earlier. Women who make their own decisions and receive support, whatever they decide, have the best mental health outcomes.

Also, they do not address the mental health impact of barriers, social pressure, and misinformation. Imagine being stigmatized, having to make excuses for your absence from homework or school, travel a great distance, endure a waiting period, perhaps without money for food or shelter. Imagine going through a crowd of demonstrators to enter a medical facility. Imagine being told that the medical procedure you are having causes mental health problems, even though it's not true. Stress caused by these external factors should not be confused with reactions to the abortion.

Last, they don't respect the lessons of the past. Making abortion illegal, which is threatened in this country, doesn't make it go away. When I was in medical school, hospital wards were filled with ill and dying women who had risked their health, their fertility, and their lives to have abortions under unsanitary conditions, without anesthesia. More fortunate women, like the loved ones of most of us, could find sympathetic physicians willing to risk their careers to provide abortions, or they could go to countries where abortions were legal and safe. Unsafe abortion is still a major cause of maternal mortality around the world. We have a choice. We can have wanted children and safe and legal abortions, or we can have maimed women and families without their daughters, sisters, wives, and mothers.

As a mother, grandmother, practicing physician, scientific expert, and citizen, I hope and pray we will opt for the former.

Thank you.

[The prepared statement of Dr. Stotland follows:]

PREPARED STATEMENT OF NADA L. STOTLAND, MD, MPH, PROFESSOR OF PSYCHIATRY  
AND PROFESSOR OF OBSTETRICS AND GYNECOLOGY, RUSH MEDICAL COLLEGE

Good afternoon, Senators. Thank you for allowing me to appear before you today.

#### **Introduction**

My name is Dr. Nada L. Stotland. I hold Doctor of Medicine and Master of Public Health degrees, and have been a practicing psychiatrist for more than 25 years. Currently I have a private clinical practice and am also Professor of Psychiatry and

Professor of Obstetrics and Gynecology at Rush Medical College. I have devoted most of my career to the psychiatric aspects of women's reproductive health and health care. I have served in a number of leadership positions within the American Psychiatric Association, the major medical organization with more than 35,000 psychiatrists members in the United States and internationally. I spent seven years as Chair of the Committee on Women's Issues and currently serving as the elected Secretary. The official position of the American Psychiatric Association, the oldest and fourth largest specialty medical society in the United States, is that the right to terminate a pregnancy is important for women's mental health.

My primary professional interest is in the psychology of pregnancy, labor, and childbirth. I gave birth to four wonderful daughters, now adults, and I was determined that their births be as safe as possible. I studied methods of prepared childbirth, used them, and became the Vice President of the national Lamaze prepared childbirth organization. I first became involved with the abortion issue during my specialty training. As a young resident in 1969, I was one day assigned a new patient who announced that she was pregnant and that she would kill herself if she were not allowed to have an abortion.

As a practicing psychiatrist, I have seen a fifteen-year-old girl who was pregnant as a result of being raped by a family friend, her grades falling and depression descending as she and her mother desperately sought funds to pay for an abortion to avoid compounding on the trauma of the assault. I have seen a young woman who had an abortion in her teens without support from family or friends, and who did not have the opportunity to talk about her feelings until entering psychotherapy for other reasons later in her life. There, she concluded that the decision had been painful but correct, and went on to have several healthy children. I worked with a woman who had an abortion early in her life and had to come to grips, decades later, with the fact that she might never have a child, and in the process reaffirmed that she had made the right decision when she was younger. My professional experiences reflect the scientific findings; women do best when they can decide for themselves whether to take on the responsibility of motherhood at a particular time, and when their decisions are supported. No one can make the decision better than the woman concerned. Mental illness can increase the risk of unwanted pregnancy, but abortion does not cause mental illness.

After I completed my training, President Ronald Reagan appointed Dr. C. Everett Koop as the Surgeon General of the United States and asked him to produce a report on the effects of abortion on women in America. Dr. Koop was known to be opposed to abortion, but he insisted upon hearing from experts on all sides of the issue. The American Psychiatric Association assigned me to present the psychiatric data to Dr. Koop. I reviewed the literature and gave my testimony. Later I went on to publish two books and a number of articles based upon the scientific literature. My expertise and interest in the topic later led me to be recruited by an education and advocacy organization for physicians, and I am now a board member of *Physicians for Reproductive Choice and Health*®.

Dr. Koop, though personally opposed to abortion, testified that "the psychological effects of abortion are miniscule from a public health perspective." It is the public health perspective which with we are concerned in this hearing, and Dr. Koop's conclusion still holds true today.

### History

Prior to the historic *Roe v. Wade* decision in 1973 legalizing abortion, many women were maimed or killed by illegal abortions. Abortion is still a major cause of maternal mortality around the world in countries where women lack access to safe and legal procedures. The fact is that throughout history, and all over the world, women who are desperate to terminate a pregnancy are willing to undergo, and *do* undergo, illicit, terrifying abortions, often without anesthesia, risking their health, their fertility, and their lives to do so. Millions of women become desperately ill, or die, in the process. According to the World Health Organization, 80,000 women die each year from complications following unsafe abortions.<sup>1</sup> We can outlaw safe abortion, we can make it difficult to access a safe abortion, but we cannot keep abortions from happening.

Prior to the *Roe v. Wade* decision, psychiatrists were often asked to certify that abortions were justified on psychiatric grounds. Today the mental health aspects of abortion have become central in anti-abortion literature and in debates about legislation limiting access to abortion. All too often legislative decisions have been based

<sup>1</sup> World Health Organization. *Prevention of unsafe abortion*. Available at [http://www.who.int/reproductive-health/publications/MSM\\_97\\_16/MSM\\_97\\_16\\_chapter5.en.html](http://www.who.int/reproductive-health/publications/MSM_97_16/MSM_97_16_chapter5.en.html). Accessed 3/1/04.

on inaccurate information. In some states, physicians have even been required by law to misinform their patients. The purpose of my testimony today is to provide accurate scientific information about mental health aspects of abortion and to inform the subcommittee about common errors in the methodology of some of the published studies.

### **Abortion and Mental Health**

Despite the challenges inherent in studying a medical procedure about which randomized clinical trials cannot be performed, and despite the powerful and varying effects of the social milieu on psychological state, the data from the most rigorous, objective studies are clear. Abortions are not a significant cause of mental illness.

Unfortunately, there are active and somewhat successful attempts to convince state and national legislatures, members of the judiciary, the public, and women considering abortion of the negative psychiatric and physical consequences for which there is no good evidence.

The vast majority of women have abortions without psychiatric sequelae, or secondary consequences. A study of a national sample of more than 5,000 women in the U.S. followed for eight years concluded that the experience of abortion did not have an independent relationship to women's well-being.<sup>2</sup>

The most powerful predictor of a woman's mental state after an abortion is her mental state before the abortion. The psychological outcome of abortion is optimized when women are able to make decisions on the basis of their own values, beliefs, and circumstances, free from pressure or coercion, and to have those decisions, whether to terminate or continue a pregnancy, supported by their families, friends, and society in general.

I have submitted with my testimony some of the excellent scientific articles, published in the world's most prestigious medical journals, upon which I base my professional conclusions. These articles speak for themselves.

I would like to address the very serious methodological errors in some literature claiming that abortion does cause psychological harm. Some articles, and statements aimed at the public, have gone so far as to claim the existence of an "abortion trauma syndrome." We are all familiar with post-traumatic stress disorder, or PTSD, a condition tragically brought to public attention by the horrific events of September 11, 2001. Unlike PTSD, "abortion trauma syndrome" does not exist in the psychiatric literature and is not recognized as a psychiatric diagnosis. On the other hand, an article I authored, "The Myth of the Abortion Trauma Syndrome," has been published by the *Journal of the American Medical Association*.

The fact that there is no psychiatric syndrome following abortion, and that the vast majority of women suffer no ill effects, does not mean that there are no women who are deeply distressed about having had abortions. Some are members of communities that strongly disapproved of abortion and some were unaware of or unable to access other options. Some had to terminate their pregnancies illegally and dangerously, or in facilities where the staff blamed them for their situations. It was difficult in the past for some of these women to discuss their negative feelings. Some now actively organized to affirm and underscore those feelings, and to publish and publicize their accounts. These accounts, however, are not scientific studies, which cannot rely on self-selected populations, or those specifically recruited because of negative feelings. Public policy must not be based on bad science.

### **Scientific Findings**

The scientific findings are clear. Some women report feeling sad or guilty after having had an abortion. The most prominent response is relief. There is no evidence that induced abortion is a significant cause of mental illness. I have referenced in my written testimony the articles by exacting, renowned scientists who have come to that conclusion. There are some articles that come to other conclusions. Let me explain why:

- They confuse emotions with psychiatric illnesses. The term "depression" can be used for both a passing mood and a disease. Sadness, grief, and regret follow some abortions, for very understandable reasons which I will mention shortly. These are not diseases. There is no evidence that women regret deciding to have abortions more than they regret making other decisions, including having and raising children, or allowing their babies to be adopted by others. We have a 50 percent divorce rate in this country. One might conclude that many or most of those 50 percent regret having gotten married, but, as a nation, we are working to promote marriage, not to make it difficult.

<sup>2</sup>Russ NF, Zierk KL. *Abortion, childbearing, and women's well-being*. Professional Psychology. 1992; 23: 269-280.

- They do not distinguish women who terminate unwanted pregnancies from those who have to terminate wanted pregnancies because of threats to their own health or serious malformations in their fetuses. Those circumstances can cause terrible disappointment, a sense of failure, and concern over the possibility of future pregnancies, all of which are stressors independent of the abortion itself.
- They overlook an obvious reality: only pregnant women have abortions. They fail to compare the aftereffects of abortion with the aftereffects of pregnancy, labor, and childbirth. Full-term pregnancy is associated with considerably greater medical and psychiatric risk than is abortion.

The incidence of psychiatric illness after abortion is the same or less after birth. One study reports that for each 1,000 women in the population, 1.7 were admitted to a psychiatric inpatient unit for psychosis after childbirth, and 0.3 were admitted after an abortion.

More than 10 percent of women who have babies in the United States develop post-partum depression, which is a diagnosable, potentially serious but luckily treatable, mental illness. In fact, 10 percent of women of childbearing age experience clinical depression. A much smaller, but real, percentage of women develop postpartum psychosis. I am sure you are familiar with the tragedies that disease can cause. Some of these unfortunate women kill their children and/or themselves. A far lower percentage of women have clinical depression following abortion, and most of these women were depressed before their abortions. Complications of pregnancy or delivery increase the risk of psychiatric illness. Even perfectly normal deliveries make women into mothers. Being a mother, a seven day a week, twenty four hour a day task, is under the best circumstances the greatest joy, but even then, perhaps, the most challenging and stressful responsibility anyone can undertake.

- They fail to account for the reasons women become pregnant when not intending to have babies, and the reasons pregnant women decide to have abortions. Pre-existing depression and other mental illnesses can make it more difficult for women to obtain and use contraception, to refuse sex with exploitative or abusive partners, and to insist that sexual partners use condoms. Poverty, past and current abuse, incest, rape, lack of education, abandonment by partners, and other ongoing overwhelming responsibilities are in themselves stressors that increase the risk of mental illness and increase the risk of unintended pregnancy.
- They fail to take into account the mental health of the woman before she has an abortion. Pre-existing mental state is the single most powerful predictor of post-abortion mental state. As we all learned in school, association does not mean causation. It may be the women most seriously affected by mental illness at a given time who decide that it would not be appropriate to become mothers at that time.
- They do not distinguish decisions made by women, on the basis of their own situations, religious beliefs, and values, from abortions into which women are coerced by parents or partners who view their pregnancies as inconvenient or shameful. The scientific literature indicates that the best mental health outcomes prevail when women can make their own decisions and receive support from loved ones and society whether they decide to continue or terminate a pregnancy.
- They do not address the literature demonstrating that children born when their mothers are refused abortions fare poorly, and are more likely to fail in school and come into conflict with the penal system, as compared with those born to mothers who wanted to have them.
- They assume that all women who have abortions require mental health intervention. There is no evidence that women seeking abortions need counseling or psychological help any more than people facing other medical procedures. Standard medical practice demands that patients be informed of the nature of a proposed medical procedure, its risks, benefits, and alternatives, and that they be allowed to make their own decisions. Of course this applies to abortion as well. Because the circumstances and decision can be stressful, most facilities where abortions are performed make formal counseling a routine part of patient care.

Close to 30 percent of women in the United States of reproductive years have abortions at some time in their lives,<sup>3</sup> and very few of these seek or need psychiatric help related to the procedure, either before or after. Our role, as mental health professionals, when patients do seek our consultation under those circumstances, is to help each patient review her own experiences, situation, plan, values, and beliefs, and make her own decision. Sometimes we see patients in acute mental health crises, or whose psychiatric illnesses make it more difficult to assert themselves effectively with sexual partners, to “say no,” or obtain and use contraception effectively. Sometimes we see patients who are in abusive relationships where refusal to comply with sexual demands can result in physical harm or death, not only for themselves, but for their children. We need, under those circumstances, to make sure that our patients are fully informed about contraception and abortion. There are now a number of institutions that forbid us to do so.

We also see women who have taken powerful psychotropic medications before becoming aware that they are pregnant, and women who are at grave danger of recurrence of serious psychiatric illness if they discontinue psychotropic medication, but do not wish to expose an embryo or fetus to the possible effects of these medications.

- They do not address the impact of barriers to abortion, social pressure, and misinformation on the mental health of women who have abortions. Imagine being in a social milieu where your pregnancy is stigmatized and abortion is frowned upon, having to make excuses for your absence from home, work, or school, travel a great distance to have the procedure, endure a waiting period, perhaps without funds for food or shelter. Imagine having to face and go through a crowd of demonstrators in order to enter a medical facility. Finally, imagine being told that the medical procedure you are about to undergo is very likely to cause mental and physical health problems—although this is not true. Any stress or trauma caused by these external factors should not be confused with reactions to the abortion itself.
- They state or imply that women who become pregnant before the age of legal majority are incapable of making decisions about their pregnancies, and recommend that young women who decide it is best to terminate their pregnancies be forced to notify their parents or obtain their parents’ consent. Laws such as these run counter to the recommendations of the American Academy of Pediatrics and to the evidence published in several recent scientific studies. There is no evidence that they improve family relationships or support for young women.

In addition, these laws contradict common sense. A pregnant young woman who is not permitted to have an abortion will become a mother. In the United States, adolescents who are pregnant are entitled to make the decision to carry their pregnancies to term, and then to make decisions regarding their prenatal, labor, and delivery care. Once they deliver, they are entitled to make the decision to keep their infants or choose to release them for adoption. If they choose to keep their infants, they are completely legally responsible and entitled to make all parental decisions, including those regarding major medical interventions. Requiring parental consent means that we entrust the care and protection of a helpless infant to a woman we have deemed too immature to decide whether to become a mother or not. “Pregnancy among school-age youth can reduce their completed level of education, their employment opportunities, and their marital stability, and it can increase their welfare dependency.”<sup>4</sup>

One study involved adolescents who had negative pregnancy tests with those who were pregnant and carried to term and those who were pregnant and had terminated the pregnancy. All three groups had higher levels of anxiety than they showed one or two years later. But the interesting result was that two years later, the adolescents who had abortions had better life outcomes—including school, income, and mental health—and had a significantly more positive psychological profile, meaning lower anxiety, higher self-esteem, and a greater sense of internal control than those who delivered and those who were not pregnant.<sup>5</sup>

<sup>3</sup>Henshaw, SK. *Unintended pregnancy in the United States*. Fam. Plan. Perspect. 1998; 30(1): 24–29.

<sup>4</sup>Nord, CW, et al., *Consequences of teen-age parenting*. J Sch Health 1992; 62: 310–318.

<sup>5</sup>Zabin LS, et al., *When urban adolescents choose abortion: effects on education, psychological status and subsequent pregnancy*. Fam. Plann. Perspect. 1989; 21: 248.



It is already an accepted part of medical practice to help a young woman think through her situation realistically and involve her parents if she then decides that it would be a good idea to do so. Usually that is exactly what she decides.

- They assume that adoption is a benign option. We are often reminded that pregnant women who do not wish to become mothers have the option of delivering their babies and allowing other families to adopt them. Those who do so may feel that they have offered the babies a good life and made another family happy. However, the real data on the impact of giving up babies for adoption is very limited. Women whose babies have been adopted often do not wish to be followed up in studies of their emotional adjustment. Much of the literature on this topic is based on self-selected subjects. Many of them report long-standing distress as a result of giving up their babies. The few studies on more randomly selected populations seem to demonstrate that the psychological sequelae of adoption for biological mothers are more intense than those affecting women who choose to abort.
- They make incorrect assertions about medical sequelae of abortion. Breast cancer is a good example. "The relationship between induced and spontaneous abortion and breast cancer risk has been the subject of extensive research beginning in the late 1950s. Until the mid-1990s, the evidence was inconsistent. . . . Since then, better-designed studies have been conducted. These newer studies examined large numbers of women, collected data before breast cancer was found, and gathered medical history information from medical records rather than simply from self-reports, thereby generating more reliable findings. The new studies consistently showed no association between induced and spontaneous abortions and breast cancer risk."<sup>6</sup>

The most highly regarded and methodologically sound study on the purported link between abortion and breast cancer indicates that there is no relationship between induced abortion and breast cancer.<sup>7</sup> In contrast with most of the studies in this area, this study contains a large study sample (1.5 million women) and relies on actual medical records rather than women's recollection, which can be influenced by fear and the attitudes of their community.

In February 2003, the National Cancer Institute, a part of the U.S. Department of Health and Human Services, brought together more than 100 of the world's leading experts on pregnancy and breast cancer risk. Workshop participants reviewed existing population-based, clinical, and animal studies on the relationship between pregnancy and breast cancer risk, which included studies of induced and spontaneous abortions. This workshop "concluded that having an abortion does not increase a woman's subsequent risk of developing breast cancer."<sup>8</sup> The World Health Organization, which conducted its own review of the subject, came to the same conclusion.<sup>9</sup>

In plain language, there is no medical basis for the claim that abortion increases the risk of breast cancer. This position, shared by the National Cancer Institute and the American Cancer Society is based on a thorough review of the relevant body of research. Among studies that show abortion to be associated with a higher incidence of breast cancer, most are unreliable due to recall bias and other methodological flaws. By contrast, studies that were designed to avoid such biases show no relationship. It is irresponsible for politicians to develop public policy that is based upon false medical allegations.

- They don't remember the past. They fail to acknowledge that abortion has existed and been practiced in every known society, throughout history. When I was in medical school, there were emergency rooms and hospital wards literally filled with direly ill and dying women who had risked their health, their future fertility, and their lives to have abortions under unsanitary conditions, often without anesthesia of any kind. More fortunate women were insulated from these horrific experiences. They could find sympathetic physicians willing to risk their careers to provide abortion services, or go to countries where abortion

<sup>6</sup>National Cancer Institute. *Abortion, miscarriage, and breast cancer risk*. 5/30/03.

<sup>7</sup>Melbye M, et al., *Induced abortion and the risk of breast cancer*. The New England Journal of Medicine. 1997; 336(2): 81-85.

<sup>8</sup>National Cancer Institute. *Summary report: Early reproductive events and breast cancer workshop*. 3/25/03

<sup>9</sup>World Health Organization. *Induced abortion does not increase the risk of breast cancer*. Fact Sheet No. 240: June 2000.

was safe and legal. Globally one in eight pregnancy-related deaths, an estimated 13 percent, are due to an unsafe abortion.<sup>10</sup>

Psychiatric and other medical rationales for legal barriers to abortion are spurious and injurious to women's mental and physical health. Our patients look to us, their physicians, to provide sound scientific information to help them make informed decisions about health issues. The allegation that legal abortions, performed under safe medical conditions, cause significant severe and lasting psychological or physical damage is not born out by the facts.<sup>11,12,13</sup>

We can have wanted children and safe and legal abortions, or we can have maimed women and families without their daughters, sisters, wives, and mothers. As a mother, grandmother, practicing physician, scientific expert, and citizen, I hope and pray we will opt for the former.

Thank you again for the opportunity to speak with you today.

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Senator BROWNBACK. Dr. Shadigian, I want to go into the specific physical items that you cite in your review. You did a review of the studies that have been done on the impacts of abortion on women, is that correct?

Dr. SHADIGIAN. That's correct. It's an international literature review that looks at studies that have been done all over the world about different health outcomes. Some of them were psychological outcomes, but most of them were physical outcomes.

Senator BROWNBACK. OK, I want to focus on the physical outcomes, if we could, and that's what you've primarily focused on here. Apparently, there have been some studies done in a number of different countries on the impact of abortion, and you list four areas of increased problems for women in your literature review, is that correct?

<sup>10</sup> World Health Organization. *Prevention of unsafe abortion*. Available at [http://www.who.int/reproductive-health/publications/MSM\\_97\\_16/](http://www.who.int/reproductive-health/publications/MSM_97_16/) MSM\_97\_16\_chapter5.en.html. Accessed 3/1/04.

<sup>11</sup> Blumenthal SJ. An overview of research findings. In Stotland, NL, ed. *Psychiatric Aspects of Abortion*. Washington, DC: American Psychiatric Press. 1991.

<sup>12</sup> Dagg PKB. *The psychological sequelae of therapeutic abortion—denied and completed*. Am J Psychiatry. 1991; 148: 578–585.

<sup>13</sup> Osofsky JD, Osofsky JH. *The psychological reaction of patients to legalized abortion*. Am J Orthopsychiatry. 1972; 42: 48–60.

Dr. SHADIGIAN. That is correct.

Senator BROWNBAC. What do we know, from studies either abroad or here about the increased possibilities of breast cancer in women who have abortions?

Dr. SHADIGIAN. One thing that basically all scientists agree on is that if a woman, for example, at 18 years of age, has an abortion, versus going to term with that baby, and the women who have the abortion and then have their baby at age 30, the women who aborted first and then delayed their childbearing probably double their five-year and lifetime risk of breast cancer. This is called the loss of protective effect of a pregnancy on a woman's risk of breast cancer.

A more controversial area, and a second area of breast cancer interest is independent effect, that the abortion itself would somehow increase the risk of a woman having breast cancer later. And this is hypothesized from rat data and also from data on women, because their breasts don't mature the same way when there's an abortion that takes during the pregnancy, especially in the first or second trimester, versus going toward their due date and having their baby.

So in terms of breast cancer risk, comparing an 18 year old to a 30 year old, it basically doubles their breast cancer risk for something called just loss of protective effect. Women, we know, who have children earlier in their lives have less breast cancer, and that's data from the 1970s. And that's not what is disputed. In fact, the National Cancer Institute agrees with that.

Senator BROWNBAC. That data is not disputed.

Dr. SHADIGIAN. That part is not disputed. The only part that is disputed, and why we need more studies on the topic is—this independent effect.

Senator BROWNBAC. Were the studies in dispute on the second associated of higher levels of breast cancer?

Dr. SHADIGIAN. The studies on independent effect are more difficult to analyze because of their retrospective, or "looking backward," nature for most of them, and also because there could be different ways of reporting abortions in the environment in which those are done. There are several different issues around it.

Basically, the best thing would be to actually look at data where they have big data sets, where we can actually look at women who have had induced abortion early in their lives and then look at breast cancer registries and see if there's any increased risk or not. And places like New York State have such data registries.

Senator BROWNBAC. But we don't have that data available—

Dr. SHADIGIAN. We don't have that data yet. So there are some things we've seen, but some things we really need to start looking at in more intense detail.

Senator BROWNBAC. And that's—you would request—you would like to see more information and research on that breast cancer link, is that right?

Dr. SHADIGIAN. Right. I just looked at the new numbers, and it looks like about one in seven women will get breast cancer within their lifetime. So it is a very important topic for women.

Senator BROWNBAC. Dr. Stotland, I presume you wouldn't disagree with that.

Dr. STOTLAND. Let me clarify what Dr. Shadigian has just said. It's better to have your children when you're young. Well, we could have a policy about that. It has nothing to do with the abortion; it has to do with having your children later or earlier. Nothing to do with the abortion.

In terms of the breast cancer in the independent effect, there was just recently a consensus conference. A number of scientists came together because there was a government Website that was saying there was an association, and that has been removed from the government Website, because a large group of experts on this have concluded that we do have the evidence, and abortion is not associated with breast cancer. And the fact that there is a lot of breast cancer is a shame, but it has nothing to do with abortion.

Senator BROWNBAC. Dr. Shadigian, your response or thoughts?

Dr. SHADIGIAN. Well, I was really disappointed in the NCI panel, because they wouldn't give a minority opinion. The majority opinion was that there was no association or independent effect, but there were several dissenters who actually were at the NCI meeting, and they weren't allowed to publish any of their thoughts.

So I think, especially around these issues, if people could just come together and put the politics aside and actually do the better studies, and if we could all commit to have researchers with different pro-life or pro-choice biases, Republican, Democrat, just from all different areas, if they could all get together and say, "You know, we want to do the best study we can to really see if there's an effect," rather than just saying, "Oh, for sure there is and for sure there isn't," when there really isn't the best data to say, on either end of the issue, that we'd probably get a lot farther than just saying yea or nay. Just like the Supreme Court always has a majority opinion and a minority opinion, we should be doing that in science, as well.

Senator BROWNBAC. Placenta previa, what did you base the statement that this is increasing upon?

Dr. SHADIGIAN. There were several studies that looked at placenta previa. Again, this is where the placenta grows over the cervix of a woman and doesn't allow the baby to come out vaginally, then becomes necessary to have a C-section. And there's a lot of more bleeding and blood transfusions in C-sections, and, therefore, maternal deaths, from placenta previa. Basically, the risk was increased by 50 percent for women who have had induced abortions.

Senator BROWNBAC. Pre-term birth, you reviewed studies and literatures from around the world on this issue?

Dr. SHADIGIAN. Yes. Pre-term birth is one of the ones that has actually the strongest data in the things that are some of the most remarkable, in terms of pre-term birth. The reason is, is that a lot of the—I'm going to go back to what Dr. Stotland said about Dr. Koop's report—a lot of this data has been since Dr. Koop's report. He looked at data in 1989 and 1990, and now we have studies from the mid-1990s that, in fact, show that not only if a woman has a history of one induced abortion, that she's maybe up to twice as likely to have an early baby, but, in fact, the more abortions she's had—two, three, four—it actually increases her risk over time. That's called a dose-response effect. The more number you have of a certain risk factor, then the higher the outcome is.

And what's so important about this, we spend so much money on this country taking care of little, tiny babies, who are born way too early, and it costs a lot of money; and it also, not only costs money to take care of the children, but, in fact, there are long-term effects, such as cerebral palsy, respiratory disease in these babies, so it's a huge impact for that. And women in their reproductive years need to know that they might be at higher risk, of even twice higher risk, of having an early baby so that their obstetricians can take care of them better and monitor the cervical length and do other tests to prevent pre-term births. So, not only do women need to know, but doctors need to know how to take care of the women they take care of.

Senator BROWNBAC. Now, maternal suicide, what all data did you review to come up with the conclusion that this area increases?

Dr. SHADIGIAN. I like Dr. Stotland's point about it's hard to show that there's a lot of negative psychological sequelae, in terms of post-traumatic stress or depression. I think she's right that those are harder things to prove. But the interesting thing about the suicide is, that's a hard endpoint. That's not something that a point or two on a depression scale is going to make a big difference. But whether a woman kills herself or not, that's something that is a hard endpoint and why it's so concerning that women who have had an induced abortion have two-and-a-half to three times the rate of suicide later on in their life, within a year or up to 8 years.

The important point about that data is, it doesn't mean that women having an abortion are committing suicide, but that there's some kind of correlation. Not that the induced abortion causes the suicide, but there's a correlation going on, and we need to figure that out. Is there another factor going on, in between the induced abortion and the suicide, or not? So we need to get more data. But the data on those two—on the suicide, the two studies from Finland and also from California, are very compelling. In fact, the California data showed that all kinds of death is higher in women who have had an induced abortion.

Senator BROWNBAC. All kinds of death.

Dr. SHADIGIAN. Right.

Senator BROWNBAC. What do you—identify what—

Dr. SHADIGIAN. They looked at cardiovascular disease, they looked at homicide, they looked at all kinds of deaths, and it turns out that all deaths are higher in women who have induced abortions.

Senator BROWNBAC. And did they make any conclusions? Can they not make conclusions as to what the correlation or causation might be?

Dr. SHADIGIAN. I think we can't decide why yet. I think that's—the whole point of this, there are things pointing us in directions at this point. This is the first article we've ever had looking at the world's literature and trying to sort it in terms of topic, and see if there are any kind of trends going on. And when we see a trend, it's something we should investigate and do better research on.

I thought the other thing that was so fascinating was that our other panel, many of the women didn't know if maybe infertility was higher if they've had an abortion, or miscarriages. It turns out, when we looked at this data, it wasn't. So those are things that

women shouldn't be worried about if they've had an induced abortion, if they're going to have more miscarriages or more infertility.

So I think the point is, we don't want to falsely assure or we don't want women to worry about things that they really just don't need to worry about.

Senator BROWNBACK. And that would be my thought of areas that we need to research, is that these statements and claims and research keeps coming forward, but the environment is so politically charged. It's as if we cannot or we dare not advise women of the choice. It's just do it or don't do it. And we aren't going to really advise you of consequences, even though in virtually every other medical setting, certainly in every advertising that's on television today of any drug that you take, there's the list of all of these consequences of potential side effects, and we tend to like that. We want to know. And that's the case here. We need to know what the case is.

Dr. SHADIGIAN. I really think that the Federal Government has a wonderful opportunity here to fund the right kind of research with the right kind of scientists from all ends of the political spectrum so that women can get real answers about their healthcare afterwards. This isn't about just at the time of decisionmaking for women, but, in fact, following women for their whole entire lives afterwards. How can doctors make good, rational decisions with their patients unless they have good data?

Senator BROWNBACK. You've identified several areas of needed increased research that we'll look at on a Federal level of providing additional research funding on, its positive or negative impacts of abortion on women. What other areas that you haven't identified here would need to be researched to provide practitioners with more or better data?

Dr. SHADIGIAN. I think the other big thing is maternal mortality, that we need to understand how many women really die from childbirth, from induced abortions, from ectopic pregnancy, from both surgical and medical induced abortions. And so it's important that the Federal Government get involved. And CDC does collect information on abortion mortality and maternal mortality, so we already have mechanisms in place; we don't need to recreate the wheel. But we need to tighten the system up, we need to have scientists come in and say how can we really get better data. A woman may come in with a pulmonary embolus, which is a clot in her lungs. She gets admitted to an intensive care unit. No one takes her reproductive history if she's previously had a—necessarily either an abortion or even a term baby. A lot of times they may come in comatose. And we don't count those numbers on either side of the equation. So we need to start counting the numbers and figuring out if there are correlations or not.

Senator BROWNBACK. You've put forward a broad study, an excellent study. How have you been received? Has this been a difficult political climate to put a study out, given the charged atmosphere around this?

Dr. SHADIGIAN. I've been surprised that the American College of OB/GYN and other medical organizations haven't started talking about it more. Instead, they just rely on the old data, and haven't been talking about it more, sometimes when a study comes out, it

takes awhile, but it's been out over a year now. I'm just surprised that more people aren't interested in talking about it. But I think people are scared. I think the important thing is to be brave, and that physicians need to be brave, and women need to be brave and start talking how do we figure out how to do these studies?

Senator BROWNBAC. People are scared. Scared to talk about this? Scared that something'll change in the political atmosphere if they do talk about it?

Dr. SHADIGIAN. I think people are just scared to know the information, that they were given assurances that there wasn't any problem, by major medical organizations, and now that there might be, is a little frightening to some people, and they're not sure, you know, what to do about it. So I think just the fact that we're talking about and it's OK to talk about it, is very helpful.

Senator BROWNBAC. Dr. Stotland, your area is primarily in psychiatric work, so it'll be on mental health issues that you would know the most, and that's your practice, primarily?

Dr. STOTLAND. Yes.

Senator BROWNBAC. You heard the—you were here for the first panel to talk about some of the stress situations. Is there any data you would like to know that isn't broadly available on the impact of abortion on women, psychologically?

Dr. STOTLAND. I think it would be useful to know more about the impact of restrictive laws and demonstrators and so on. I think those are big problems. In fact, in several states we are giving people or misleading information about the incidence of depression and so on that doesn't—often information that doesn't compare childbirth with abortion just takes abortion separately. And information about the quality of the research that's being published—for example, when we talk about maternal suicide, that's why I mentioned that we have to understand why someone gets pregnant when they don't want to be and has an abortion in the first place. We heard these horrible stories about people being coerced, people not being treated well, and so on. We can't confound, as we say in science, those variables with the variables of having an abortion. It stands to reason that people who are in trouble, overwhelmed, poor, raped, et cetera, et cetera, would be at higher risk for a suicide later on, and all kinds of bad outcomes, and deaths from other reasons, because it's not our happiest population. Our lucky people don't get pregnant in the first place.

Senator BROWNBAC. As a researcher, you would want to know more of that correlation, I would guess.

Dr. STOTLAND. Well, I think we've got that data. We've got over a million, as you referenced earlier, abortions happening in this country a year now, and we just don't see all the terribly sick people coming into our offices.

Senator BROWNBAC. So you don't want to know that data.

Dr. STOTLAND. I think we're clear about the quality of the data on the maternal suicide. I would like to know more about the impact of having someone else adopt your child. There's some—the only data we have on that is mostly self-selected populations, and those people are pretty unhappy.

Senator BROWNBAC. So you might support a broad research set that would include your objectives with, then, a better, broader

study. Because I think that's what Dr. Shadigian is getting at, we need to know more information here so that people, when they would get counseling, they can make a more informed decision. We've left this choice and placed it on people in a difficult situation, and that we would want them to have as much information about, well, what does happen to a mother if she lets somebody adopt her child, or what does happen to a mother if she gets an abortion, that we would want to provide that level of knowledge to a person in a tough choice.

Dr. STOTLAND. Well, my concern about that, aside from the fact that it's an enormous task, and the difficulty is that so many other things happen to women in their lives that it's really hard to impute their condition 20 years later to a procedure that they had for 5 minutes, even in the context of a decision of a difficult time long ago, and also that in the climate today, which I would characterize as people being more afraid in this climate of talking about abortion being OK than it not being OK—we don't have a representatives from ACOG here today, which is kind of interesting—that you start tracking people who have an abortion, when we already have Websites, we already have people taking pictures of people who have abortions, publishing their names, publishing their addresses. I have only published literature on this subject; I don't do abortions, and people have published my children's addresses on the Web. So I'm a little worried about how we would undertake this study without exposing a great number of women, who have a private medical procedure, to being harassed and worse.

Senator BROWNBACK. Well, I understand your concern on privacy, and I think that's very legitimate. On the other hand, I do think we really need to provide as information, and up to date—as I see from Dr. Shadigian's work, that we really need to know a lot more. And so that person, who is in a tough situation, can make as long-term and informed a choice as possible.

I appreciate very much—Dr. Shadigian, I hope you continue to do your research and review of this. It has been striking to me to see the shortage of material on something that's so common, we really should be trying to have the best information as possible for people's choice, for their long-term health.

How do you advise patients, when they come in, that are contemplating abortion? You don't do the abortion, but you might come in contact with people that are considering that. Is there information you rely upon to date to be able to advise people?

Dr. SHADIGIAN. Well, I have lots of women come in with pregnancies that they didn't necessarily want at the beginning. In fact, about 40 to 60 percent of all women say they don't want their pregnancy right at the beginning, that it's not something they planned. I guess unplanned is a better word. So I see women all the time who are in that situation, because I'm in a general office setting. So I talk to women all the time, and basically I tell them that they need to just think really hard about what they're doing and what is—you know, why they're doing it. If it's because they don't have money for a baby, if it's because they aren't wed, or for other reasons, they just need to think really hard about is that the most important thing or not. They need to put it in context. It turns out that there has been some research that showed women who did



choose abortion had some better college outcomes and some other things, and that's Dr. Lori Zabin's research, from Hopkins.

So I tell women that it's their choice. They need to make a decision that makes sense for them at the time. They need to be aware of the long-term complications—and I, in fact, even made a patient brochure about that, so they could understand those things—and that they need to know that it's a legal procedure, and it's safe in the right kind of people's hands who know what they're doing, but that, you know, I can't tell them what to do. It's up to them what to do.

So I try to always tell them, also, that I'd be glad to take care of them, whether they choose to have an abortion or whether they choose not to.

Senator BROWNBACK. Do you advise them about the concern of breast cancer, placenta previa, pre-term birth, or maternal suicide?

Dr. SHADIGIAN. Yes.

Senator BROWNBACK. Is that common advice or practice, or is that because you've been doing this research and so you know these cases exist?

Dr. SHADIGIAN. I probably have been some of the first people to do that because I do know the data so well. But the whole point is, we need to, you know, let the other doctors understand what those issues are. Not just OB/GYNs counsel women. People at Planned Parenthood counsel women, people in psychiatry offices and family practices offices—women go to their doctors and to other healthcare professionals, and they just need to hear all the information and let them make decisions on their own.

I don't think this data is going to make people choose to have an abortion or not just because of the long-term effects. I don't think that's going to have a huge impact in a crisis pregnancy situation. But it is something they need to know, and they do need to know they might have a twice-greater risk of having a pre-term baby the next time. They do need to know that. Whether that's going to influence their decision at the moment with a crisis pregnancy is, again, another area we could study.

Senator BROWNBACK. Don't we also know that there are certain—when women have a certain genetic sequence—over the higher risk for breast cancer, of a certain genetic sequence?

Dr. SHADIGIAN. Yes.

Senator BROWNBACK. In the future, are we going to want people to know if they're at a higher risk there when make that decision for an abortion, based upon breast cancer issues? Or are we not going to want to let people know that?

Dr. SHADIGIAN. Well, I think women need to know what the numbers show. You can liken this whole issue of breast cancer also to women on oral contraceptive pills who have half the risk of ovarian cancer. So as a preventative measure for ovarian cancer, we put women on birth control pills. If women want to know how to reduce their chance of breast cancer, they need to know—it doesn't mean they're going to have kids early. If I'm a woman whose mother and grandmother both had breast cancer, and I'm at high risk, I need to know that I could have both my breasts removed to reduce my risk of breast cancer, I need to know that if I have my kids earlier in my life I could reduce my breast cancer risk, and

if I breast fed for at least 12 months out of my life I could reduce my breast cancer risk. I could make certain dietary changes. Any woman deserves to know what those risks are.

This is just one piece of the puzzle. It's not just about abortion, but it's about counseling women about their health choices and reproductive choices.

Senator BROWNBACK. And that's the issue.

Thank you very much, ladies. I appreciate your input on this tough subject, which is difficult to even broach. But with the prevalence of abortion in America and the effects on women and—as I got into this issue more and more, it seemed to me that the vast group that was under-discussed was the impact on women of abortion. It was one that both sides—one was fighting for a right; the other was fighting for what's happening to this child, and left out was what is happening here to the woman that goes through this process. It's such a politically charged atmosphere that it's tough, because there's a lot of judgmentalism. We're not talking about really what's happening to this precious person here in a crisis situation. And we really need to try to disassociate ourselves, if we can, from some of the battleground issues of it and provide as much data, hard information, as we can.

So thank you both very much for coming forward. We will keep the record open for the requisite number of days. If you'd like to put in additional information, or if you have specific suggestions on Federal research that needs to be done that would be helpful, I would certainly entertain that and would like to hear about it.

Dr. STOTLAND. Thank you, Senator.

Dr. SHADIGIAN. Thank you, Senator.

Senator BROWNBACK. Thank you all for coming.

The hearing's adjourned.

[Whereupon, at 4:30 p.m., the hearing was adjourned.]



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