Research on the Psychological Complications Associated with Abortion: Past, Present, and Future

Introduction

The literature pertaining to abortion decision-making and adjustment has grown substantially since legalization in the U.S. 32 years ago. However, the available research has suffered from methodological shortcomings and the findings often do not seem to do justice to the complexity of abortion experiences among women residing in a cultural context that continues to exhibit intense conflict over the legality and morality of abortion.

By age 45, 43% of women in the United States have had at least one abortion. In some other nations the numbers are even higher.

Women who choose to abort come from every socio-demographic group.

- They are single, married, and divorced women.
- They range in age from as young as 10 to as old as 50.
- Some have dropped out of school before graduating from high school and others have advanced degrees.
- They come from every income group - the very poor to the very wealthy.
- They represent all religions as well the non-religious

With nearly half of the female population of the U.S. undergoing this common medical procedure, understanding potential negative effects should be a national priority in our country.

My plan this afternoon is to share:

- General conclusions from previous research on psychological adjustment to abortion.
- Examine methodological problems plaguing post-abortion research and describe studies that I’ve worked on recently with several collaborators in an effort to overcome some of the limitations.
- Finally, I’ll discuss future directions

Previous research on psychological adjustment to abortion

Research conducted over the last few decades has consistently shown that a minority of women (approximately 10-20%) experience adverse, prolonged post-abortion reactions.

With 1.3 million U.S. abortions performed annually - this frequently cited "minority" refers to a large subgroup of women experiencing post-abortion difficulties.

More specifically, a minimum of 130,000 new cases of mental health problems are likely to surface each year.
Common negative effects reported in the literature include:

1) **GUILT**, which results from violation of one’s sense of what is right or moral.

   For women who believe that they have consented to killing a human being, the burden of guilt can be unbearable.

2) **ANXIETY** is another common negative effect:

   Post-abortive women may experience anxiety in various ways:
   - Tension (inability to relax, irritability, and so forth)
   - Physical responses (dizziness, pounding heart, upset stomach, headaches)
   - Worry about the future
   - Difficulty concentrating
   - Disturbed sleep

3) **PSYCHOLOGICAL 'NUMBING'** is a 3rd effect observed in post-abortive women:

   People who experience painful losses will sometimes respond by avoiding future situations likely to cause emotional upset. They work hard to avoid experiencing a wide range of emotions - there is blunting of affect or psychological numbing.

   This obviously hampers one’s quality of life significantly – in particular, the ability to form and maintain close interpersonal relationships may be adversely affected.

4) **DEPRESSION AND THOUGHTS OF SUICIDE** also occur:

   While few women with a history of abortion reach the point of an overt clinical depression, many will experience symptoms of depression including
   - Sad moods
   - Sudden and uncontrollable crying episodes
   - Low self-esteem
   - Sleep, appetite, and sexual disturbances
   - Reduced motivation
   - & Disruption in interpersonal relationships
5) ALCOHOL AND/OR SUBSTANCE ABUSE in post-abortive women often begin as a form of self-medication - a way of coping with the mental pain of abortion memories.

6) RE-EXPERIENCING THE ABORTION can occur:
Some women who experience an abortion have distressing, recurring 'flashbacks' of the abortion procedure, with no apparent explanation for what is causing them.

   Recurring nightmares about babies may also occur.

7) PREOCCUPATION WITH BECOMING PREGNANT AGAIN is sometimes observed in women who suffer emotionally from an abortion.
A significant percentage of all women who have abortions become pregnant again within one year of their abortion.

   This may represent hope for a new pregnancy to become a replacement for the one that was aborted.

8) EFFECTS ON PARENTING:
After having an abortion, a woman might not allow herself to properly bond with future children because of a fear of loss.

   Or she may begin another pregnancy intending to be the world's most perfect mother.

9) DEVELOPMENT OF EATING DISORDERS:
This has been less actively researched, but it seems that Anorexia may become a form of control for the woman who feels her life is totally out of control after an abortion.

   Also, an underweight condition can lead to the stopping of a woman's cycle, which would prevent any future pregnancies.

   Further, Anorexia may represent a slow form of suicide.

The psychological consequences of induced abortion are both complex and incompletely understood.

1) The complexity is due to the many domains of experience that are

   - interwoven with,
   - potentially affected by the abortion,
   - and likely to be related to women’s willingness to share their experiences.

Just to name a few, some of the relevant domains of experience include:

- Childbearing
- Contraception
- Health
• Relationships
• Personality and identity
• Perceptions of stress and coping abilities
• Personal beliefs
• Moral development
  and cultural beliefs

As Armsworth noted back in 1991,

“Abortion is an issue that cuts through multiple levels of individual, societal, cultural, and political spheres, all of which seem to have an impact on the individual response”

2) The psychological effects are incompletely understood because of

• The insufficient number of studies that have been conducted

• & Because much of the existing research is limited due to various methodological shortcomings, which I’ll talk about in a minute.

Most of the recent focus of post-abortion research has been on identifying the

• Individual

• Socio-demographic

• Relationship

• & Situational characteristics of women who are likely to be predisposed to psychological disturbance after an abortion.

The existing data suggest a number of risk factors for experiencing post-abortion psychological problems.

The risk factors include:

• Low levels of confidence related to coping with the abortion.

• Low self-esteem.

• External locus of control – or feelings that events in one’s life are directed by factors outside the individual (God, others, chance, etc.).

• Perceptions of one’s partner, family members, or friends as non-supportive of the decision to abort.

• Conservative views of abortion, viewing it as morally wrong and/ or being very religious.
• If the pregnancy is initially intended.
• With unstable or immature partner relationships.
• When women are unmarried or poor.
• With feelings of being forced into abortion by significant individuals or by life circumstances.
• Pre-abortion ambivalence or decision difficulty is actually another primary risk factor.
• Second trimester abortions may lead to more trauma.
• More pronounced maternal orientation or identification with the role of being a mother is another risk factor.
• Pre-existing emotional problems or unresolved trauma.
• Prior abortions or having had children previously.
• A history of a negative relationship with one’s mother is another risk factor.
• Timing during adolescence is associated with more difficulty.

Adolescents are generally much less well-prepared both emotionally and financially to assume the responsibilities associated with parenthood

& thus they are logically the recipients of much greater social pressure to terminate a pregnancy.

Also, compared to older women:

- Adolescents are usually less focused in terms of future life goals
- They are more likely to have a less supportive social network

& they are at lower levels of intellectual, moral, and emotional maturity.

For women who have one or more of these risk factors, undergoing an abortion may initiate a life-time of suffering.

Methodological problems associated with addressing the topic

There are a number of methodological problems associated with previous post-abortion research that we have tried to address in studies published since 2002.

What I would like to do is examine some of the methodological limitations while referring you to our work summarized in the yellow handout.
1) Both recruitment of potential participants and retention of research subjects in longitudinal investigations have been hurt by the sensitive nature of the topic.

   - Initial consent rates are often as low as 50-60%
   - With attrition or drop out rates as high as 60%

   & Research evidence indicates that women who decline to participate or drop out are more adversely impacted by the experience than those who participate fully.

   So, current prevalence rates for post-abortion difficulties are likely to be an underestimation.

   • In our studies using Medi-Cal records of existing claims filed, all women in the state of California who received state funds for an abortion or delivery were included

   Therefore, consent and attrition problems were avoided completely (these are studies 1-3 on the yellow handout).

   • Most of our other studies used data from large-scale data collection efforts focusing on a variety of other topics.

   Reproductive history was just one of many variables, so women weren’t consenting to participate in a study on abortion per se.

      - This helps avoid the low initial consent and high attrition problems.

2) A 2nd limitation is that many studies have been conducted with small samples (typically under 300) confined to one geographical locale, restricting the generalizability of findings.

   All our studies have used large samples – most in the thousands.

   & several used nationally representative, ethically diverse samples (see studies 4, 5, 6, 8, and 9).

3) Another problem is Concealment - women who have had a previous abortion will frequently deny it.

   The percentage of women reporting abortions is only around 50% of that expected given published prevalence rates.

   Although our studies using existing data sets suffer from the concealment problem, our Medi-Cal studies do not, since medical claims were used.

4) Use of non-standardized measures of psychological health also compromises the integrity of research in this area.
(Only brief questionnaires are often used)

The Medi-Cal studies clearly overcome this limitation as we used inpatient and outpatient claims with diagnostic codes assigned by trained professionals.

In our other studies we were careful to select reliable and valid outcome measures from the available data.

5) The fifth limitation is that few relative risk studies have been conducted using appropriate control groups – comparing women who abort to those who carry to term.

Ideally comparisons are made to women who carry an unintended pregnancy.

Only 3 of our 9 studies didn’t use women who delivered as a control group -

and in 3 of our studies (#8, #9, & #12 on the yellow handout) we actually used women who delivered an unintended pregnancy as the control group.

Another logical group to make mental health status comparisons with is women who have experienced other forms of perinatal loss.

In study # 7 on the yellow handout we found that abortion was associated with enhanced likelihood of various forms of substance use in a subsequent pregnancy.

But, non-voluntary forms of perinatal loss (stillbirth and miscarriage) were not associated with increased risk for substance use.

This study illustrates the uniquely destructive nature of abortion compared to other forms of loss.

Use of control groups help to build the case for causal relationships between abortion and mental health problems.

Another strategy to assist in exploring the causal question is to simply ask women if they believe any psychological difficulties experienced are directly due to a prior abortion experience.

This was our strategy in our cross-cultural study in which we compared American and Russian women’s responses to abortion. This is study #10 on the yellow handout.

6) Prior to our publishing this work, very few studies utilized controls for pre-existing psychological problems. This is the 6th limitation.

- The studies that have considered prior psychological health have often been used to shrug off all negative effects of abortion, suggesting that only women with pre-existing mental health problems are bothered by an abortion.
In studies 1, 2, 3, 5, 8, and 9 we were able to control for prior psychological problems or state.

7) Finally, there are far too few longitudinal Investigations.

- Unfortunately, most post-abortion studies are conducted within a framework presupposing that an abortion experience, even if viewed as traumatic, will be time-limited.

However, abortion, unlike many other stressful life events, involves a conscious, irreversible decision that may lead to feelings of regret and/or self-reproach, which may be difficult to come to terms with and move beyond.

As a participant in a qualitative study by Patterson and colleagues put it “There is this feeling that you are going to be in this place for the rest of your life – that nothing can move these feelings of fear and guilt… Because you can’t undo it …can’t give the money back. It’s an ultimate act. It really is. There is no going back.”

- Short-term studies are potentially misleading because women may suppress their emotional responses until a later date when other life events trigger a delayed reaction:

Research suggests that:

- Carrying a subsequent pregnancy to term.

- Or an anniversary of the abortion procedure or due date may trigger a delayed response.

Data on post-abortion reactions has typically been collected within hours or weeks of the event. Assessments extending beyond 6 months are uncommon.

All of our studies except for 2 of them (§4 and §7 on the yellow handout) involve repeated assessments over time.

Overview of the results

It would be too difficult and tedious to describe all the findings from these 12 studies in the time that we have, but there are some central results that I would like to point out.

1) First, based on the methodological improvements characterizing these studies, prior work indicating that abortion is an emotionally benign medical procedure for most women should be questioned.

2) Second, in all of the analyses conducted, women with a history of abortion were never found to be at a lower risk for mental health problems than their peers with no abortion experience.

Only occasionally did our analyses reveal no significant differences between the two groups.
3) Third, the published studies indicate that women with a history of induced abortion are at a significantly higher risk for

- Inpatient and outpatient psychiatric claims

  Particularly:
  - adjustment disorders
  - bipolar disorder
  - depressive psychosis
  - neurotic depression, and schizophrenia

- Substance use (illicit drugs and alcohol) generally and specifically during a subsequent pregnancy

- Clinically significant levels of depression and anxiety

- Parenting difficulties, and

- Death from various violent and natural causes

4) Fourth, when compared to unintended pregnancy carried to term and other forms of perinatal loss, abortion seems to pose more significant mental health risks.

5) Fifth, the results of a study published last year (#10 on the yellow handout) called into question the often-voiced view that psychological problems associated with abortion are socially constructed rather than representing a natural response to something that is inherently wrong.

Specifically, significant numbers of Russian women indicated symptoms of Post-Traumatic Stress Disorder associated with an abortion. This was in a culture wherein abortion is a very common and accepted practice.

- The U.S. women reported experiencing more negative emotions and behaviors associated with their abortions,

However, the Russian women reported higher rates of disruption in cognitive schemata or organized thoughts pertaining to basic needs impacted by the trauma. *(These related to safety, trust, self-esteem, intimacy, and self-control).*

- It seems that cultural factors may play a role in how stress is experienced and reported.

Higher rates of behavioral and emotional manifestations reported by the U.S. women may be more consonant with a social environment that is conflicted on the abortion issue.

On the other hand, in a cultural context wherein abortion is normative and a much less volatile social issue, women who suffer may be more inclined to deal with the stress on a cognitive level.
Struggles to Inform the Public

Although many of our articles have been published, it has been a struggle to inform the public.

- Several press releases have gone out and we have been interviewed by a few radio, newspaper, and internet news reporters
  - However, our studies have tended to only command attention from political, professional, and religious groups opposed to abortion.
  - The mainstream media has pretty much ignored our work.

  We did have articles:
  - On the CNS News website
  - In the Washington Times
  - Reuter’s Health did a story
  - The Chicago Sun Times
  & The Toledo Blade publicized the results.

- The tendency of the media to ignore our results surprised me at first given that the Medi Cal studies are the largest U.S. post-abortion studies ever published.

- What is really annoying is that very small, methodologically flawed studies showing no negative effects or positive effects are blasted everywhere by the media.

  For example, there was a study conducted by Nancy Russo from Arizona a few years ago, which suggested that abortion experience was associated with high self-esteem.

  - She used a 10-item self-esteem index and the newspaper headlines coast to coast read “Abortion Linked with Women’s Well-Being”
  - Well, self-esteem is not synonymous with well-being
    and self-esteem tends not to be impacted by single events –it is more stable.

  We actually have used the same data set (The National Longitudinal Study of Youth), which Russo used and found several associations, which she failed to report on.

  For example, abortion was related to higher rates of depression (Study #5 on the yellow handout) and substance use (Study #8 on the yellow handout)

Future Directions

So where do we go from here? I would like to spend a few minutes considering future directions.

Our recently published studies relying primarily on existing data sources have successfully addressed many of the methodological difficulties facing this area of research.
However, there are several remaining limitations with the research, which I hope to address in future studies.

1) First, the available research hasn’t given sufficient attention to individual experiences of women & the range of negative effects.

- People who abort are a very heterogeneous group with their reactions likely to be diverse and represent a complex mixture of positive and negative reactions

We need to conduct more substantive individual interviews in a sensitive, compassionate manner in order to more fully understand the depth and breadth of experiences.

Qualitative studies need to:

   Probe women’s thoughts and feelings pertaining to personal, relationship, and situational factors that entered into their decisions to abort

   and study their post-abortion emotions, thoughts, and experiences more thoroughly in order to do justice to the inherent complexity of this area of study.

Interestingly, a study published in 2001 by Kero and colleagues involving 211 Swedish women seeking an abortion revealed:

- $2/3$ of the respondents expressed both positive and negative feelings about the abortion

- & the remaining $1/3$ reported only negative emotions.

Anxiety, relief, grief, anguish, and emptiness were commonly reported feelings.

At the close of their report, these authors noted that: “The relief to be saved from unwanted parenthood did not exclude painful feelings that may reflect experiences of ethical conflicts and feelings of loss. This complexity is seldom recognized in abortion studies.”

Difficulties assessing and ultimately understanding the full complexity of women’s responses to abortion are likely to be rooted in various experiences.

For example,

- Women may experience denial of emotional experiences at the time of the abortion in order to “get through” the procedure once they have made the intellectual decision to abort.

One participant in a study published in 1995 by Patterson and colleagues conveys this type of response:
“I was just waiting to get it over with, get it done, get it over with as quickly as possible, as painlessly as possible. I was in a state of numbness, just really going through whatever motions were required to get this job done… I was in an abnormal state, that was not who I was”

- Accurate assessment may be further hindered if negative experiences are expressed less directly in the form of maladaptive behaviors or psychosomatic complaints

and when women with underlying ambivalent feelings regarding abortion are reluctant to openly express problems encountered.

Catherine Coyle, Vince Rue, and I recently launched a new web-based data collection effort where we are using surveys and open-ended interview-type questions.

We have measures posted for men, women, grandparents, and medical professionals with abortion-experience.

The response has been great from women, but we haven’t received much response from the other groups.

2) A second remaining limitation of the post-abortion research is that most of the existing studies have relied almost exclusively on self-reports.

- Research including information from additional sources such as significant individuals in women’s lives and/or behavioral assessments will enhance efforts to assess the complexity of women’s experiences before, during, and after the decision to abort.

3) A 3rd limitation relates to the need for more tightly controlled research to rule out alternative explanations for the mental health differences observed between women who abort and those who don’t.

- An abortion history is really a package variable comprised of numerous personal and situational factors leading up to the decision to abort in addition to embodying the potential to trigger negative psychological effects.

- Women with a history of abortion, compared to their peers, who decide to deliver, may be:
  - More liberal
  - Inclined to take risks
  - or tend to be involved in difficult or violent partner relationships.

Various factors alone or in combination, as opposed to the abortion itself, may be the critical elements related to differences in psychological health post-dating an abortion.

Disentangling the many possible explanations for mental health discrepancies between women with and without a history of abortion requires two phases:
1st, data should be collected pertaining to numerous personal, relationship, and contextual factors prior to pregnancy resolution through abortion or delivery. (In study #12 on the yellow handout, I made an attempt to do this.)

2nd, psychological and behavioral comparisons should be made among women who have never been pregnant, aborted, and delivered an unintended pregnancy after the effects of potentially confounding variables are statistically removed.

The ideal control group has been suggested to consist of women who wanted an abortion and did not obtain one for personal reasons (such as guilt, anxiety, fear, etc.) or due to external pressures (such as from others like a partner or parents).

Following this line of reasoning, the ideal “treatment” group would consist of women who really wanted an abortion and were not behaving against their primary desire or personal belief system.

In reality, however, abortion decisions are often not easily made and are likely to represent the culmination of many mixed emotions and external circumstances that are not well understood.

Abortion “wantedness” is probably best conceptualized on a continuum rather than as a discrete variable, with most women falling between the two extremes.

If researchers did restrict their samples to women who wanted an abortion (avoided and obtained), sample sizes would undoubtedly be reduced considerably and the results would lack generalizability.

From a practical and conceptual standpoint, women who simply carry an unintended pregnancy to term seem to represent a more logical comparison group.

Applications/Conclusions

- Researchers need to move away from a deficit model - which suggests negative reactions are aberrant

  & related to preexisting psychological problems in women, insufficient coping,

  - low self-esteem
  - or some other personal weakness.

  We need to be asking – are there women – defined in terms of social and personal characteristics for whom post-abortion psychological distress represents a normative response?

- Our findings indicate that it is false and misleading to suggest to women that abortion has no significant mental health risks,

  - Much less is “psychologically safer” than carrying to term.
- Women have a right to full disclosure of known or suspected risks.

- We have advocated for more sensitive pre-abortion counseling

  For example, pre-abortion counseling might focus on insuring that the abortion decision

  1) Is not made in a hurried manner and the woman has sufficient time for consultation in a private/confidential setting.

  2) The decision is voluntary and free from unwanted pressure or coercion, including from economic circumstances, significant others, or fear of violence.

  3) The decision is informed - sufficient, unbiased, and accurate information is shared and comprehended about the procedure and its risks as well as about alternatives to abortion.

  4) The decision is made in accordance with the woman’s personal beliefs, religious orientation, and individual values.

    - with consideration given to the degree of decision ambivalence, a strong predictor of problems afterwards.

In conclusion, the message from our work – that abortion poses significantly higher risks to women’s well-being when compared to childbirth - even when resulting from unintended pregnancies - is not one that many in academia and the general public want to hear.

- However, as the data accumulates in the medicine and psychology professional literatures, it will become harder and harder to ignore.

- In the years ahead, it will be interesting to see if political decisions supporting the well-being of women will take this information into consideration.

*Thank you very much. Are there any questions?*