Men and Abortion: A Review of Empirical Reports Concerning the Impact of Abortion on Men

C Coyle

Citation

C Coyle. *Men and Abortion: A Review of Empirical Reports Concerning the Impact of Abortion on Men*. The Internet Journal of Mental Health. 2006 Volume 3 Number 2.

Abstract

Research concerning elective abortion has focused on women. However, as men are involved in conception and termination, they may also be affected by abortion. Empirical reports concerning the psychological impact of elective abortion on men are reviewed. Common findings suggest ambivalent reactions including relief, grief, and sadness, a desire on the part of men to support their partners, and a need for counseling programs for the male partners of women undergoing abortion. Avenues for future research are discussed.

INTRODUCTION

The majority of research studies pertaining to post-abortion adjustment have focused on women. Coleman, Reardon, Strahan, and Cougle ([1]) provided a review of that research noting that the volume of such studies has increased substantially in the last three decades. Adler ([2]) found that a common initial reaction to abortion among women was relief. Over time however, more negative reactions were observed including anxiety ([3]) and depression ([4]). Based on their clinical experience, Speckhard and Rue ([5]) proposed that "post-abortion syndrome," a pattern of symptoms observed among women following abortion, may be understood as a type of posttraumatic stress disorder (PTSD). Providing corroboration for this proposal, Gomez and Zapata ([6]) evaluated ten women with post-abortion syndrome and found that all of them met the diagnostic criteria for PTSD. While the debate concerning the potential for harmful effects from abortion continues, there is general agreement that at least some women are negatively affected by abortion ([7], [8]).

In contrast to the growing body of research concerning the psychological impact of abortion on women, relatively few studies have addressed the psychological impact of abortion on men. Likely reasons for this paucity of research include societal, political, and legal factors. Society continues to view abortion as a women's issue. Both the media and politicians portray abortion as being of consequence to women only. Therefore, many people give little thought or attention to male partners' reactions to elective abortion.

Legally, the inclusion of men in the abortion debate would severely complicate the issue. If men were accorded legal rights in abortion decisions (as they currently are in both adoption decisions and those concerning frozen embryos), there would be enormous challenges in deciding between the competing legal claims of fathers and mothers. Furthermore, due to the time apt to be spent in litigation, women may be unable to obtain abortion until later in pregnancy which would significantly increase the risks of the procedure.

Given these challenges, few philosophers or legal scholars have tackled the issue of men's rights in abortion decisions. However, Harris ([9]) writes that "in some cases, it would be morally impermissible for a woman to have an abortion because it would be a wrongful harm to the father and a violation of his autonomy" (p. 594). Also, Brake ([10]) contends that if a man takes preventive measures to avoid pregnancy and it occurs in spite of his efforts, he should not be held responsible for support of the child conceived.

In Planned Parenthood of Missouri versus Danforth, 428 U.S. 52 ([11]), the Supreme Court ruled that the state was not required to notify or obtain permission from the husbands of women seeking abortion. Legal arguments have tended to focus on this inequity between men's lack of legal power regarding termination of pregnancy and their liability for child support ([12], [13]). There have been a few publicized cases in which men attempted to prevent an abortion such as that of John Stachokus ([14]). Mr. Stachokus and his attorney were able to obtain a temporary injunction prohibiting his partner's abortion. However, the injunction was suspended

one week later.

The social, political, and legal constraints noted here have deterred research regarding post-abortion men directly and also indirectly by contributing to difficulties in obtaining funds for such research. In contrast, the effects of other forms of pregnancy loss on men as well as men's responses to impending fatherhood have been investigated. For example, Puddifoot and Johnson ([15]) report that after miscarriage men evidenced higher "difficulty coping" and "despair" scores on the Perinatal Grief Scale than did women. Others have documented hormonal changes in men that occur during pregnancy and soon after birth ([16], [17]). In addition, pregnancy has been recognized and discussed as an important period of men's development ([18], [19], [20]). Still, the topic of "lost fatherhoodR[21] by an abortion has been virtually ignored.

Men are involved in conception, decisions concerning pregnancy outcome, and abortion aftermath. Elective abortion surely involves some sense of loss for many of the men whose partners undergo abortion. Given the inequality between men and women in abortion decisions, one might reasonably expect at least some men to be negatively affected. Yet, men's tendency to comply with society's expectations by repressing their emotions may effectively prevent others from appreciating their suffering. As members of a society which restricts the discussion of abortion as a woman's right, post-abortion men may be confused by their reactions, unsure of their roles or responsibilities, and unlikely to seek help.

While it would seem that this population would be of great interest to psychologists and social scientists, only a small number of empirical reports have been published. This paper offers a review of those reports regarding the psychological impact of elective abortion on men.

SEARCH STRATEGY AND APPROACH

Numerous data sources were searched for publications in peer-reviewed journals as well as for scholarly books and book chapters published between January 1973 (the month and year elective abortion was legalized in the United States) and July 2006. Those sources included: MEDLINE, CINAHL, PsycINFO, PsycARTICLES, and Academic Search Premier. Search terms included "men and abortion or elective abortion," "fathers and abortion," "fatherhood and abortion," "male sexuality and abortion," "homosexuality and abortion," and "relationships and abortion." Searches were first conducted in MEDLINE and CINAHL and then in PsycINFO, PsycARTICLES, and Academic Search Premier via EBSCO. Searches produced the following results as shown in Table 1:

Figure 1

Table 1: Search Strategy Used for Articles Regarding Men and Abortion

Search Terms	MEDLINE & CINAHL **total hits / relevant hits**	PsycINFO/PsycARTICLES & Academic Search Premier **total hits / relevant hits**
men and abortion or elective abortion	734 hits / 16 relevant	683 hits / 7 relevant
fathers and abortion	400 hits / 2 relevant	98 hits / 1 relevant
fatherhood and abortion	7 hits / 0 additions	15 hits / 1 relevant
male sexuality and abortion	11 hits / 0 additions	1 hit / 0 additions
homosexuality and abortion	76 hits / 1 relevant	248 hits / 0 additions
relationships and abortion	424 hits / 0 additions	314 hits / 0 additions

Only those studies regarding the psychological, relational, social, or sexual impact of elective abortion on men were included in this review. Publications concerning men's legal issues, men's general attitudes toward abortion, demographic descriptions of men involved in abortion, contraceptive use prior to abortion, men's influence on the psychological adjustment of their female partners after abortion, philosophical papers, and doctoral dissertations were eliminated as were those articles concerning spontaneous abortion or pregnancy loss via stillbirth. Those papers dealing with abortion decision-making were also eliminated with the exception of one study. This single study was included because it looked at the relationship between decision-making and post-abortion distress. Given the goal of this review (i.e., to summarize findings pertaining to the psychological impact of abortion on men after it has occurred or at least been decided upon), this single study of abortion decision-making was included. As a result of these elimination criteria, only 28 professional publications were found to deal specifically with the effects on male partners of women who undergo elective abortion.

Sample size ranged from one to 2,868 and some of the publications involved the same or overlapping samples. Two of the papers reviewed here used the same sample of 46 men ([21], [22]). Three other papers were found using the same sample, with one including all 75 men in the original sample, one including 11 men from the larger sample, and one focusing on a subsample of 26 men ([23], [24], [25]). Three papers and a book chapter were based on the same sample of 60 men ([26], [27], [28], [29]). Two other studies used an overlapping

sample ([30], [31]). Finally, Myburgh, Gmeiner, and van Wyk ([32], [33]) based both reports on a sample of nine men. As a result, although 28 publications are reviewed, they are based on only 20 completely independent samples. Nevertheless, each paper is reviewed individually as the authors chose to do either a follow-up study with the original sample or more in-depth interviews with their research participants. Six of the samples were recruited in four countries other than the United States. These countries were the UK ([34], [35]), Canada ([36]), Sweden ([23], [24], [25]) and South Africa ([32], [33], [37]).

Pertinent publications are comprised of case studies, clinical observations, intervention studies, qualitative interview studies, and quantitative survey studies. Some of the studies used both quantitative and qualitative methods (see Table 2). Studies tended to be exploratory and descriptive regardless of specific methodology. Only four investigations ([30], [31], [38], [39]) specified hypotheses and used quantitative methods. Others, such as Rothstein ([28], [29]) combined qualitative, clinical, and case study perspectives. Publications are reviewed according to their predominant classification.

{image:2}

REVIEWED STUDIES BY CLASSIFICATION TYPE

CASE STUDIES

Berger ([40]) presented three case studies in an exploration of the etiology of homosexuality. Two of the men were described as having had successful and satisfying heterosexual relationships in the past. In each case, they became exclusively homosexual after impregnating their female partners who then chose to abort. Abortion is postulated as a possible etiology of homosexuality. While Berger does not suggest that all or even much of homosexuality can be attributed to abortion, his suggestion is interesting and logical given the patients' histories. At the very least, this may be a useful explanation for therapists to keep in mind when dealing with men who are not satisfied with their homosexual orientation.

Interpretive phenomenological analysis was used by Robson ([35]) to examine the response of a man who accompanied his female partner during a therapeutic abortion after a diagnosis of fetal abnormality. The man perceived his main role as that of support to his partner and this clearly defined role seemed to aid his coping ability. Nevertheless, he experienced regret and intrusive thoughts about the abortion procedure. Apparently he suffered from periods of re-experiencing the traumatic event and, as he stated, “it's just always there, you know, just constantly there” (p. 189). The author explores this man's role, his grief, and his coping mechanisms in light of both society's expectations for males and current theory concerning grief counseling. Robson concludes by cautioning counselors not to expect or encourage men to grieve as women do. Rather, counselors should consider a man's need to contain emotion and to take on a supportive role as constructive behaviors which may do much to maintain his self-worth. Finally Robson also suggests that the setting in which the termination is performed “needs very careful consideration” (p.189) so that male partners will not be exposed to images of the fetus during the procedure. While this study is obviously limited by the fact that it is based on a single case, Robson has provided two important recommendations. First, advice to counselors concerning the differences in how men and women grieve is crucial if men's needs are to be met. Second, Robson raises the possibility of significant trauma for men who accompany their partners during abortion procedures. Surely such traumatization would only hinder men's ability to support their partners after abortion. On behalf of both men's and women's welfare, it may be wise to reconsider encouraging men to remain with their partners throughout the abortion procedure.

Holmes ([41]) discussed the case of a young man, Mr. R., who sought counseling after learning that his girlfriend had obtained an abortion without informing him. He ended the relationship shortly after finding out about the abortion. Mr. R. complained of feeling lonely, suffering from sleep disturbances, difficulty in meeting the responsibilities of his job, and frequent thoughts about the fetus and the failed relationship. Themes of “worthlessness,” “voicelessness,” and “emasculation” were explored as consequences of the abortion as well as the influence of abortion on the client's faith or belief system. Holmes encourages other clinicians to be aware of the potential for abortion to cause some men to “relive traumatic childhood experiences and struggle with hopes and fears for families of their own” (p.115). The major strength of Holmes' report is that it raises awareness among counselors to consider their male clients' reproductive histories.

CLINICAL OBSERVATIONS

In 1977, Gordon and Kilpatrick ([21]) published a very general description of a group counseling intervention implemented with male clients in an abortion clinic. The program utilized principles from both crisis intervention and group psychotherapy models. Sample size and demographic

information were not noted. Counseling sessions were described as including from 3 to 10 men and lasting from 2 ½ to 3 hours. Basic concerns observed among the men included anxiety, helplessness, guilt, responsibility, and regret. Also, the male clients were observed to be using the following defense mechanisms: denial, projection, intellectualization, rationalization, and withdrawal. “In addition, many clients said they did not express their feelings to their partners and instead felt the need to be a source of support by presenting a strong front” (p. 293). Gordon and Kilpatrick stated that “although the counseling sessions appeared to be effective in helping the men deal with their feelings, the group sessions were not free from problems” (p. 294). Specifically, some men were so defensive that they disrupted the group by diverting attention from the issue at hand and others were so anxious that “they did not appear to benefit from the sessions” (p. 295).

This report was one of the first to identify specific emotional reactions to abortion among men. A serious limitation is the lack of sample description. It is unclear how many men were with their partners for preoperative visits and how many others were waiting for their partners during the abortion. Also, the men were assessed only at the clinic without any follow-up. Whether the men were struggling with the same or different emotions weeks or months later would be valuable information for those attempting to counsel them.

Mattinson ([34]) presented a paper at the Ciba Foundation Symposium concerning the impact of abortion on marriage. Mattinson observed that some couples who sought counseling reported a past abortion. Some consequences of abortion on marriage included inability to conceive in spite of no physical causes, emotional withdrawal, sexual and interpersonal conflicts, and a loss of trust. Mattinson suggests that fathers may be particularly vulnerable to abortion loss as they are neglected by caretakers and expected by society to repress their emotions. Like women, they may suffer from delayed grief reactions after abortion. A major strength of Mattinson's report is her observation that the male partners of women who have abortions tend to be unacknowledged. This is an earlier report of what Holmes ([41]) studied twenty years later, which attempts to draw attention to and advocate for a much neglected population.

In 1993, clinicians Speckhard and Rue ([42]) discussed “complicated mourning” as a potential consequence of emotional repression by women following abortion and observed that male partners of women having abortions may also be negatively affected. “Men who have been involved in an abortion often struggle with their internal self-concept of masculinity, feeling that they have failed to protect and nurture. These feelings of failure and guilt are often generalized into many areas of the marital and familial relationships” (p. 21). Counselors are encouraged to screen both men and women after abortion and to provide early intervention so as to prevent or ameliorate impacted grief and complicated mourning subsequent to abortion. Again, a major strength of this report is the authors' attempt to raise awareness among clinicians concerning the impact of pregnancy loss on men as well as on women. The authors' combined clinical experience adds authority to their observations.

INTERVENTION STUDIES

In a subsequent report concerning his intervention program, Gordon ([22]) provided a more detailed description. Sample size was reported as 46 men who accompanied partners, friends, or daughters to the abortion clinic. Men who were present at the clinic on particular days were invited to participate in a “rap” session. Twenty-three of the men invited to participate agreed to do so while 10% of those invited declined. An equal number of men who were in the clinic on alternate days served as control participants. Dependent measures included the Spielberger State-Trait Anxiety Inventory ([43]), and four single-item measures regarding “this clinic,” “abortion,” “my own feelings,” and “safety of abortion.” These measures were administered before and after the two conditions. As a method of controlling for the potential effect of gaining information within the intervention condition, all men received written information pertaining to the abortion procedure, the physical effects of the procedure, possible complications, and how to cope with such complications. Five group sessions were conducted with each session lasting for two hours and involving from three to seven men.

Findings indicated that men who participated in the counseling sessions demonstrated significantly less state anxiety after treatment than those men who did not participate. However, those men who received counseling rated the concept “my own feelings” more negatively after their participation in the group. Control participants did not show any significant change in their rating of this concept.

Gordon's use of a measure with well-established reliability and validity, as well as a control group adds considerable value to this study. However, given that the Spielberger

Anxiety Inventory manual ([43]) includes norms for patients with depression or anxiety, it would have been of great interest to see how the anxiety scores of these participants compared with the norms. Also, the sample description was inadequate and it is not clear how many of the men were partners vs. friends vs. fathers of the women. No intervention outline or treatment plan is provided so the reader gains no practical advice for working with men whose partners are undergoing abortion. As previously noted, the lack of a follow-up assessment is also of concern.

A second intervention study by Coyle and Enright ([38]) utilized a forgiveness therapy program with 10 men who identified themselves as having been hurt by their partners' decisions to abort. The intervention was based on a process model of forgiveness and was implemented on an individual basis over a 12-week period. Men were randomly assigned to the treatment or wait-list control condition. After the intervention was completed with those assigned to the treatment condition, control participants received the intervention. Measures included the Spielberger State Anxiety Scale, the Spielberger State Anger Scale, the Perinatal Grief Scale (PGS), and the Enright Forgiveness Inventory (EFI). Reliability and validity have been documented for each scale ([43, 44, 45, 46]). Measures were administered pre- and post-intervention and at a 12-week follow-up. Findings supported efficacy of the treatment program with participants demonstrating significant gains in forgiveness and significant reductions in anger, anxiety, and grief following treatment. Strengths of this study include the use of established measures, a control group, and a follow-up assessment. A major limitation is the inability to generalize due to small sample size.

QUALITATIVE STUDIES

The topic of abortion following amniocentesis was examined by Jones and colleagues ([47]). This qualitative study involved structured interviews with 14 women and 12 men who chose therapeutic abortion after learning that their unborn children suffered from genetic defects. Male participants ranged in age from 21 to 51 years. Demographic information regarding education and religious affiliation were provided. The time interval between the abortion and the interview ranged from 4 - 43 months. Results concerning males only were as follows: 75% felt relief after abortion, 80% attempted to put the abortion behind them, 50% reported depressive feelings, 33% expressed guilt, and 50% thought it would be useful to share their experiences with couples who had undergone a similar experience. While a majority (70%) of the men believed that their relationships with partners had become closer following abortion, the authors remarked that “the 9 couples who declined to participate in the study may represent an important subset” (p. 255).

Strengths of this study include the detailed sample description and at least an acknowledgement of those men who refused to participate. In addition, the use of structured interviews allowed for a more detailed and thoughtful exploration of men's experiences as compared to using brief quantitative measures.

Myburgh, Gmeiner and van Wyk ([32]) utilized a phenomenological approach to investigate how pregnancy termination was experienced by nine men. Three themes were identified of: powerlessness related to the abortion decision, emotional turmoil due to the impact of abortion on both inter- and intrapersonal relationships, and the use of defense mechanisms in response to stress.

Based on their phenomenological study ([32]), Myburgh, Gmeiner and van Wyk ([33]) developed guidelines for counseling men during termination of their partners' pregnancies and noted that the men interviewed stated their need for counseling. They conclude by stating “It is clear from the research results that the adult biological fathers require professional help and support in dealing with their experience of the termination of pregnancy and the impact it has on their lives and relationships” (p.47).

These authors' use of interviews allows for an in-depth exploration of men's personal experience with abortion. In addition, Myburgh, Gmeiner and van Wyk ([33]) have attempted to provide practical recommendations for those who counsel men. However, small sample size restricts generalization of their findings.

Poggenpoel and Myburgh ([37]) explored the developmental implications of abortion for adolescent girls and their partners. Adolescent girls who had abortions and their partners were interviewed using the central question, “How did you experience the abortion?” (p. 732). Those adolescents who refused to be interviewed were asked to write their personal stories instead. The authors did not indicate the number of adolescents participating or provide demographic data. However, they noted that some male partners may not have been informed of the abortion until after it occurred.

The adolescent boys were described as experiencing spiritual pain expressed as feelings of guilt and helplessness as well

as social pain due to the loss of relationships with girlfriends and babies. “Exclusion from the decision about the abortion and not being acknowledged as the father” (p. 736) also contributed to their social pain.

Psychological pain among post-abortion adolescent boys was evident in “overwhelming thoughts about the abortion and the future” as well as in “the expressed need to accept responsibility for their actions” (p.738). Poggenpoel and Myburgh suggest that inability to form lasting relationships or to deal with the trials of adulthood may be developmental consequences for these adolescent boys.

These authors raise some specific and interesting consequences of abortion for adolescent boys. Their recognition and discussion of potential developmental consequences of abortion is commendable. Still, the lack of information concerning both size and characteristics of their sample precludes generalization of findings.

Rothstein ($_{26}$) randomly selected and interviewed sixty men who accompanied their partners to an abortion clinic. Forty of these men responded to structured questionnaires lasting from 45-90 minutes. The other twenty men participated in open-ended interviews lasting from 90–135 minutes. Demographic data indicated that a majority of men had a low socioeconomic status and typically a high school education. The average age was 23.5 years with a range of 18-34 years. A majority identified themselves as Catholic with the next largest number identified as Protestant. The men were nearly equally divided among Caucasians, African-Americans, and Puerto Ricans. No totals or percentages were provided regarding these demographic data.

The perceived and anticipated impact of the abortion on the couples' relationships was reported as “generally felt to be inconsequential” (p. 116). When asked specifically about whether the abortion had effects on sexual relationships, there was a higher (though still small) percentage of affirmative responses. Most of those who reported some impact felt it to be negative, ranging from sexual abstention to changes in the quality of the couple's sexual life (p. 116). Only one specific example of such a change in quality of the sexual relationship was noted. That was an “inability to engage in sexual relations due to the man's impotence” (p. 116).

While interviews were valuable in terms of in-depth exploration, they were limited to the ‘clinic day' experience. Follow-up interviews may have revealed considerably different responses from the male participants after they had more time to process their experiences.

In 1978, Rothstein ($_{28}$) published another report concerning clinical observations of 35 adolescents (defined as young men 24 years or younger) who represented a subsample of the 60-men sample referred to in Rothstein's ($_{26}$) original paper. The focus of this report was based mainly on the unstructured interviews. The psychoanalytic literature concerning fatherly development is reviewed and the point is emphasized that aspects of fatherhood begin to develop long before a man actually becomes a father. Therefore, unplanned pregnancy and abortion may raise developmental issues in adolescent boys.

A predominant struggle observed among the adolescents facing abortion was between taking on the parental role and “its concomitant threat to dependency needs” (p. 207). The vast majority of adolescents (30 or 86%) expressed “concerns about caretaking and providing” (p. 208) as well as about issues of autonomy (21 or 60%). These young men wrestled with whether they were competent enough to care for others and whether they could make choices successfully and independently of their parents. In a brief comparison of the adolescents with the adult men, Rothstein notes that the concern for autonomy was a distinguishing characteristic of the adolescents. While 60% of the adolescents were concerned about autonomy, only 32% of the adult men expressed such a concern.

To further illustrate these points, a brief case study of 16-year-old Mr. B is presented for whom “the notion of separating from his family and living an autonomous life was not yet conceivable” (p. 212). Interestingly, Mr. B. is reported to have stated that he was not worried for himself but rather for his pregnant girlfriend. Rothstein suggests that this is symptomatic of Mr. B's denial and notes Mr. B's “fears of loss, and of helplessness in the face of anger” (p. 211). In conclusion, Rothstein asserts that while some claims within the psychoanalytic literature (e.g. regressive desires to be nurtured, attempts to meet paternal ego ideals) were confirmed by the adolescents observed, others (e.g. parturition envy, a desire for immortality through parenthood) were not evident.

Like Poggenpoel and Myburgh ($_{37}$), Rothstein has contributed a good deal to the understanding of how the adolescent may experience his partner's abortion. The use of a case study helps to elucidate the unique experience of the

adolescent as compared to an adult. Additionally, Rothstein has fairly called into question some assertions of psychoanalysis. Yet, sample size is small hampering generalizability and there were no follow-up interviews after abortion.

In a subsequent book chapter, Rothstein ([29]) further discussed the experience of the sixty men discussed in three previous papers. Again the approach is qualitative and clinical and case studies elucidate both adaptation to abortion and psychological issues raised by unplanned pregnancy and abortion. Rothstein found that men tend to be uninformed concerning abortion procedures and expectant of relationship conflicts, as well as struggling with guilt and anxiety.

Rothstein's book chapter adds little to the content published in previous reports, as all publications were based on the same sample. The major limitation remains and that is that men were interviewed only in the clinic without any follow-up after abortion.

QUANTITATIVE STUDIES

Buchanan and Robbins ([30]) investigated the adult consequences for men who experienced pregnancy during adolescence. Data came from a longitudinal study of young men who were initially surveyed in middle-school. Analyses in this study were based on 2,522 men who completed the adult follow-up measures. Of these men, 15% experienced an unplanned pregnancy by the age of 21. This subgroup was divided into three categories of pregnancy resolution: abortion (38.3%), parenthood without marriage or cohabitation (27.8%), and parenthood with marriage or cohabitation (33.9%). Psychological distress was assessed with a 22-item measure of "dysphoric affect, psychophysiological correlates of anxiety or depression, and feelings of inability to cope with day-to-day life" (p. 418).

Mean psychological distress scores were lowest for men who did not experience adolescent pregnancy and highest for those whose partners had abortions. Statistical analyses indicated that "the effects of an abortion or single parenthood are statistically significant, but those who had the child and married or lived together were not significantly more distressed than those who never experienced an adolescent pregnancy" (p. 420). Further analyses revealed that psychological distress due to either abortion or adolescent fatherhood without marriage/cohabitation was limited to white and Hispanic men than among African-American men.

While the observed correlations cannot be interpreted as causal relationships, the attempt to look at abortion reactions long after occurrence is an important contribution to understanding the potential for delayed or enduring effects. The attention given to ethnicity raises interesting questions for future research. The large sample size is an additional asset of this study.

White van-Mourik, Connor, and Ferguson-Smith ([48]) conducted a retrospective study to investigate the psychological sequelae of second-trimester therapeutic abortion for fetal abnormality. Eighty-four women and 68 male spouses were administered questionnaires concerning both psychological adjustment and psychosomatic symptoms approximately two years after pregnancy termination. A majority (72%) of pregnancies were planned and more than 90% of couples stated that the pregnancy was "welcome."

Post-abortion emotions among men included sadness (85%), depression (47%), anger (33%), fear (37%), guilt (22%), failure (26%), relief (32%), isolation (20%), and withdrawn (32%). Somatic symptoms such as crying, irritability, and loss of concentration were reported by 50%, 38%, and 41% of men respectively. Relationship difficulties were most likely to occur between 3 and 6 months post-abortion. Fifty percent of the couples reported a decrease in frequency of sexual intercourse due to sadness, depression, fear of pregnancy, or deterioration of relationship. One case of impotence was noted.

Men exhibited listlessness, difficulty concentrating, and irritability for up to one year post-abortion. Relationship problems were attributed to isolation and communication problems due to confusing and conflicting emotions. While post-abortion difficulty was not correlated with religious beliefs or type of fetal abnormality, it was associated with parental immaturity, inability to communicate, lack of social support, secondary infertility, and low self-esteem prior to pregnancy. The authors write that "58 per cent of the men were potentially at risk of prolonged or unresolved grief" given that they did not "discuss their feelings or complaints with anyone" (p. 200).

Two major strengths of this study are the assessment of specific emotions and symptoms and the time of measurement (two years post-abortion). Another important contribution from these authors is their emphasis on both the inadequacy of and need for post-abortion counseling services.

Robbins and Streetman ([31]) investigated the impact of adolescent pregnancy and pregnancy resolution on educational attainment and financial well-being in adulthood using a sample which overlapped that discussed by Buchanan and Robbins ([30]). They found that although men who experienced an abortion during adolescence completed the same number of years of schooling as men who didn't experience an adolescent pregnancy, these men were significantly less likely to complete college. With regard to financial well-being, no significant differences were observed between men who experienced abortion during adolescence and those who never experienced adolescent pregnancy.

Strong points of this study include large sample size, clearly specified hypotheses, and attention to ethnicity. Also, regression analyses controlled for influential factors other than abortion (e.g., race and family socioeconomic status) that could affect financial and educational attainment. On the other hand, since only financial and educational outcomes of adolescent pregnancy resolution were investigated, one can merely speculate about possible relationships between psychological reactions to abortion during adolescence and achievement in adulthood.

Coleman and Nelson ([39]) surveyed 63 college students, 32 of whom were men, about their attitudes toward abortion, the quality of their abortion decisions, and their emotional reactions to abortion. Demographic information included only age and academic year. Men's abortion experiences occurred from less than one year to more than two years prior to assessment. Nearly half (46.9%) of the men reported that they were not comfortable with the decision to obtain an abortion. Regret, sadness, and depression subsequent to abortion were reported by 51.6%, 45.2%, and 25.8% respectively. Longing for the fetus was expressed by 36% of the men. While only 9.7% of men reported anxiety since abortion, greater emotional connection to the fetus significantly predicted higher anxiety responses.

A primary strength of Coleman's and Nelson's report lies in these authors' thorough and thoughtful discussion of their findings. Specific, constructive suggestions for future research are presented and the need for post-abortion services is noted.

In their initial study concerning men and abortion, Kero, Lalos, Hogberg, and Jacobsson ([23]) recruited 75 male partners of women applying for abortion. The men were asked to respond to 49 questions regarding psychosocial history, current living conditions, relationship with partner, contraceptive use, decision-making process, motives for abortion, and emotions related to pregnancy, current abortion, and previous abortions. Questions concerning emotions allowed respondents to choose more than one response or to respond in their own words. This enabled participants to express ambivalent emotions.

Detailed demographic data related to age, education, employment, income, current relationship, and emotional condition during childhood were presented for both men who were experiencing first abortion (n=56) and those who had experienced abortion prior to the current abortion (n=19). Participants' mean age was 29 (range 18-50). A small minority of men in both the first-abortion group (9%) and the previous-abortion group (5%) stated that their emotional condition during childhood was bad. Of all men, 64% said they supported the abortion decision.

The most frequently chosen words to describe their feelings about the expected abortion were anxiety, responsibility, guilt, relief, and grief. Over half of the men (57%) chose words expressing both positive and negative emotions. Almost 1/3 (29%) of the men chose only words indicative of painful emotions. No differences in feelings toward the upcoming abortion were observed between those men facing a first abortion and those with previous abortion experience. The authors conclude that it is “clearly shown that ambivalence in connection with pregnancy and abortion also exists among men” (p. 2674).

A positive aspect of this study is the method of assessment which allowed participants to identify ambivalent emotions. Abortion is likely to evoke many contradictory emotions and this study confirms the emotional complexity of the experience. Conversely, a shortcoming is related to the time of assessment. Men were asked to respond to questions in terms of the “coming abortion.” A more thorough understanding of the men's emotional experience would require a subsequent post-abortion assessment as well.

A prospective study of emotional distress among both men and women following induced abortion was conducted by Lauzon, Roger-Achim, Achim, and Boyer ([36]). The 29-item Ilfeld Psychiatric Symptom Index (IPSI) was utilized as the measure of psychological distress pre- and post-abortion. High scores on the IPSI are indicative of depression and anxiety ([49]). Prior to abortion, participants were also asked questions about abortion decision-making, anticipated consequences of abortion, and previous suicidal ideation or

gestures. The self-administered questionnaires were completed by 197 women and 113 men during pre-abortion consultations. Participants were asked to respond to follow-up questionnaires at least 1 week and no more than 3 weeks after the abortion. At follow-up, participants were also asked questions concerning their reactions to abortion. These follow-up assessments were completed by 127 (64%) of the women and 69 (61%) of the men. A control sample was obtained from a large Canadian health survey. Ample demographic data were provided and included age, marital status, quality and duration of relationship, abortion and parenting history, education, occupation, perception of own health, and suicidal ideation/gestures.

Prior to abortion, both men and women had significantly greater psychological distress than respective controls. After abortion, 17.6% of the men believed that the abortion had a negative impact on their relationships with their partners and 30.4% said they would have liked to have been offered counseling. Of those 70.6% of men who were present during the abortion procedure, 21.3% thought it was a traumatizing experience. The men were asked few questions related directly to their abortion experience. The questions asked dealt with how informed the men thought they were about the abortion procedure, whether or not they desired counseling, the impact of the abortion on their relationships with their partners, and their evaluation of being present during the actual procedure.

This study has the distinction of being the only prospective investigation of male partners of women undergoing abortion. Other strengths include the use of an appropriate control group and evaluation of men's pre-abortion mental health. Unfortunately, the men were not asked specific questions concerning their psychological response to abortion. Therefore, little information was obtained to explain the male psychological experience in any depth.

QUALITATIVE/QUANTITATIVE STUDIES

The first study to include male partners was published by Blumberg, Golbus, and Hanson ($_{50}$), only two years after the legalization of abortion in the United States. This study involved both psychometric testing and psychiatric interviews of 13 couples following elective abortion. All families made the decision to abort after amniocentesis revealed genetic defects. Demographic data were limited to age, education, and occupation.

Eleven women and ten men were administered the MMPI and each couple jointly completed a questionnaire. In addition, all 13 couples completed a joint interview which consisted of open-ended questions concerning emotional responses to both the amniocentesis and the abortion. These interviews took place from 2 days to 37 months post-abortion. The authors observed that the MMPI “results for the women were very close to the population mean profile, whereas the group profile exhibited by the men shows some elevation in the scales of depression, hysteria, sociopathy, femininity, and hypomania” (p. 803). Moreover, “only two of the 13 women and four of the 11 men... failed to mention depression in describing their emotional reaction to abortion. Of these six nondepressed individuals, one woman and two men exhibited MMPI profiles which reflect a tendency to deny emotional problems” (p. 805). Thus, authors suggest that the incidence of depression may be higher among these individuals and conclude that depression is the most common response to selective abortion affecting 82% of the men studied.

A strength of this study is the use of both psychometric testing and interviews which facilitated objective and subjective evaluation of abortion effects. While administration of the measures after abortion was appropriate, the varying time span (2 days to 37 months post-abortion) hampers interpretation. Psychological reactions may vary considerably over time with post-abortion emotions becoming more intense as they are uncovered or less intense with adaptation. Small sample size also limits generalization. Nonetheless, this early study addressing male partners raised awareness that depression after abortion may be problematic.

Rothstein ($_{27}$) published a paper subsequent to Rothstein ($_{26}$) that used the same sample of 60 men but included more detailed demographic information along with information about participants' responses to several of the individual survey items. For example, 70% thought that both the man and the woman were responsible for the abortion decision, 26.7% expressed concerns about the safety of abortion for their partners, 86.7% believed that they were being helpful to their partners in some way, and 20% expressed interest in a private meeting with a mental health worker. Of particular note here is the author's observation that only 26 of the men were interviewed on the day of abortion; the rest (34 men) were interviewed during their partners' pre-abortion medical screening. Rothstein concludes that the needs of men have been ignored and offers suggestions for including men more fully in the abortion-clinic process.

A serious limitation of this report is the fact that a majority

of men were interviewed prior to actual abortion. Therefore, conclusions concerning the psychological impact of abortion are extremely tenuous. This report's strength lies in its recognition of the need to include men in the abortion process.

Shostak ([51]) utilized a 65-item questionnaire to assess the impact of abortion on 50 white men. The author also refers to "interviews with the young men" but does not indicate the number of men who took part in both surveys and interviews. A majority of men identified themselves as Christian (52% Catholic, 26% Protestant) and they ranged in age from 16 to 28. No other demographic information is given. Some of the participants were men who waited in clinics while the abortion took place and others were college students. All of the men either were experiencing or had experienced their first abortion.

When asked if "males generally have an easy time of it, and have few, if any, lingering disturbing thoughts" about the abortion, 72% stated they disagreed. While the majority of relationships continued, 25% of them failed post-abortion. Many men (40%) reported having thoughts about "the child that might have been" (p. 571) and 76% of them sought counsel but primarily from a male friend. After offering several suggestions for including men in the abortion process, Shostak concludes by stating, "This exploratory research raises the possibility that a sizeable minority of young males find their abortion experience more frustrating, trying, and emotionally costly than public and academic neglect of the subject would suggest" (p. 574).

While the use of both questionnaires and interviews is beneficial to capture the men's experience, the administration of these measures is problematic with some men being interviewed on the day of abortion and others some time after abortion. Also, the questions are too broad to delve into specific emotions or psychological problems that may occur post-abortion. Still, Shostak is to be credited for raising awareness of men's emotional pain following abortion.

In 1983, Shostak ([52]) published another study of 100 men surveyed via a 50-item questionnaire which focused on information concerning abortion experiences and subsequent consequences. Ten of the men were interviewed as well. It is not clear whether there is any overlap between this sample and that discussed in a previous paper ([51]). Demographic information includes age, (range = 17-34), race (77% White, 22 % Black, 1% Asian), religion (40% Catholic, 26% Protestant, 3% Jewish, 31% other or unknown), marital status (90% single, 10% married), occupation (68% student, 18% white-collar, 14% blue-collar), and education (2% less than high school, 20% high school diploma, 70% college, 10% graduate school).

This paper had a heavy philosophical emphasis and the author explored three neglected ethical aspects related to men and abortion. These are: 1) exclusion of men from abortion decisions, 2) neglect of men particularly in terms of abortion counseling, and 3) a lack of attention given to men and abortion in the sociological literature. Within this philosophical discussion, Shostak notes a few of his findings such as that most men (55%) looked to friends for counsel, 21% were still "undecided" concerning their attitudes toward abortion, nearly 75% did not agree that "males generally have an easy time of it and have few if any lingering disturbing thoughts after an abortion," 61% believed that men should have equal power in the abortion decision, and 44% reported having dreams or thoughts about "the infant they might have fathered" (p. 73).

Like Shostak's 1979 publication ([51]), this paper's main strength is in its attempt to draw attention to a population severely neglected by the scientific community. Shostak makes a logical case for including men in abortion decision-making and attending to their psychological needs. Furthermore, he provides specific findings from his interviews with men which add credibility to his argument.

The first book to focus on men and abortion was authored by Shostak and McLouth ([53]) and titled, "Men and Abortion: Lessons, Losses, and Love." Surveys were administered to 1,000 men in thirty abortion clinics across the United States while they waited as their partners underwent elective abortion. Demographic characteristics of the clinic participants are described as "similar to the U.S. population with the exception of the younger age" (p. 4). In general, the questionnaires emphasized opinions and attitudes rather than the psychological aftermath of abortion. Survey questions included those related to demographics, as well as questions about previous abortion experience, current abortion decision-making, quality of relationship prior to and after abortion decision, ideas about fatherhood, thoughts about the fetus, political and moral attitudes regarding abortion, beliefs about the safety of abortion, opinions concerning abortion decision-making, reactions to learning of the pregnancy and to abortion, and finally, questions concerning the value of counseling for men facing abortion.

The questionnaire was also utilized with 75 other men who had experienced abortion “months, and often years earlier” (p. 104). These 75 post-abortion men learned of the research project and volunteered to participate. The authors compared this sample with the clinic-day sample but noted that this smaller sample was not random. Among the larger clinic sample, only 3% believed that the abortion was contributing to the break-up of their relationships, as compared to 25% of the post-abortion sample. When asked if they had occasional thoughts about the fetus, 52% of clinic-day men and 60% of the post-abortion group answered “yes.” Similarly, 47% of the clinic sample and 63% of the post-abortion men agreed that “males involved in an abortion generally have disturbing thoughts about it afterwards” (p. 115). In response to a question as to whether men involved in abortion generally have an easy time of it, 68% of the clinic men and 75% of the post-abortion sample disagreed with that question. In addition to the surveys administered to men facing abortion or having an abortion history, clinic workers were interviewed. Impressions and statements from clinic counselors were shared as a means of shedding further light on the men's experiences.

As in previous studies by this author, the use of both questionnaires and interviews is useful in terms of collecting objective and subjective data. Also, the inclusion of clinical observations is especially informative. However, the limitations of previous studies remain including a lack of questions concerning specific emotional and psychological responses to abortion and an emphasis on reactions during abortion rather than after. Nonetheless, Shostak's large sample adds great weight to his findings, in particular the finding that a large majority of men found abortion to be a very difficult experience.

Kero and Lalos ($_{24}$) published a follow-up study based on a subsample of the sample discussed in Kero et al. ($_{23}$). Eleven men who expressed both positive and negative feelings (i.e., ambivalence) about abortion in the original study (Kero et al., 1999) were interviewed in an attempt to gather data concerning experiences, attitudes, and coping behaviors one year after abortion. Interviews were semi-structured with open-ended questions, conducted via telephone, and lasted from 30 to 45 minutes. Nearly all of the men used the words “responsibility” (10 of 11) and “maturity” (8 of 11) to express their current feelings about the abortions that occurred one year earlier. However, over half (8) expressed grief one year after the abortion occurred. Relief and powerlessness were each reported by 5 of the men. The authors note that the majority of men “experienced conflicts of conscience in connection with the abortion” (p. 89).

The attempt to assess men quite some time after abortion is this report's strength. Too few studies have done so. While sample size is too small to generalize, the fact that more than half of the men still struggled with grief and guilt one year after abortion strongly suggests that further research is necessary.

A recent paper authored by Kero and Lalos ($_{25}$) is based on a sample of 26 men who represent a subsample of that referred to in Kero et al. ($_{23}$). The 26 men were administered questionnaires prior to abortion and were subsequently interviewed by phone at both four months and 12 months post-abortion. Questionnaires contained queries about reasons for abortion, abortion decision-making, and life conditions. The semi-structured interviews focused on feelings, attitudes, and experiences in response to abortion. Interviews also included open-ended questions concerning reactions to abortion. Demographic data are reported as in Kero et al. ($_{23}$) and questionnaire results prior to abortion are reviewed.

At the four-month follow-up, a majority of the men (24 of 26) expressed satisfaction with the abortion decision and 21 of them described their coping as “good” or “very good” and the abortion as “responsible.” In spite of this, 12 of the men stated they still experienced guilt related to the abortion, 6 expressed a sense of powerlessness, and 9 reported feeling grief or emptiness due to the abortion. One year after abortion, all of the men stated that they favored the abortion decision including those who were initially opposed to abortion. Nonetheless, 12 men said they still thought about the abortion at least once or more each month. Participants were observed to express “contradictory feelings in relation to abortion both before, and 4 months and 1 year after” (p. 141). Furthermore, when the men were asked how they thought they would respond to learning of a new pregnancy, seven said they would choose abortion, nine said they would want to see the pregnancy carried to term, and nine were unsure as to what they would decide.

This study is the only one to utilize pre-abortion and multiple follow-up assessments and that is its defining strength. While sample size is too small to generalize findings, the observations over time serve to better illustrate men's experiences and inform future research.

COMMON FINDINGS AMONG STUDIES

Several commonalities are apparent in the findings of the studies reviewed here. Many report that men desire some form of counseling concerning abortion and that the men themselves do not perceive abortion as a benign experience. At the least, these men struggle with ambivalence both before and after abortion. While abortion seems to bring a sense of relief, other emotions including anxiety, grief, guilt, and powerlessness are also reported consequent to abortion. Several authors have noted a tendency among men to defer the abortion decision to their female partners as well as a tendency to repress their own emotions in an attempt to support their partners. The effects of abortion on men over time and on their relationships are less clear as most studies surveyed men at the time of abortion rather than months or years after.

In view of the fact that so little research has been done, few definitive recommendations for professional counselors can be made. Based on the limited research, the most obvious suggestions for clinicians would seem to be: 1) to include questions related to pregnancy loss when taking men's psychosocial or medical history, 2) to keep in mind men's possible need for counseling before, during, and/or after abortion, and 3) to take into account men's preferred coping mechanisms. This last recommendation may be of particular consequence given that traditional masculinity continues to be viewed as a social construct ([54]) and as being associated with psychological distress ([55]). Such beliefs may lead therapists to assume that men need to alter or moderate their ‘masculine' behaviors when, in fact, those behaviors may be crucial to men's self-esteem and coping.

STRENGTHS AND LIMITATIONS OF STUDIES

A shared strength of studies reviewed here is that they draw attention to a much neglected population, the male partners of women undergoing elective abortion. Surely the men involved in abortion are affected in various ways as they struggle to share the abortion decision (or be left out of such decisions) and attempt to cope with perceived losses following abortion. Another strength of these studies is their contribution to understanding how to help men who are facing abortion decisions or dealing with abortion's aftermath. Some of the studies reviewed here have offered suggestions for counseling men, evaluated the effectiveness of programs for them, or raised awareness of men's stated desire for counseling.

In general, these studies are hampered by small samples with the exception of Shostak and McLouth ([53]), Buchanan and Robbins ([30]), and Robbins and Streetman ([31]). Moreover, the majority of studies gathered data at the time of abortion and so cannot shed light on the long-term effects of abortion on men. Those that attempted to survey men after abortion ([25], [30], [31], [36], [37], [38], [39], [47], [53]) did so from two days to many years post-abortion and tended to have small or unreported sample size. Some of the investigators did not report how long after abortion the men were assessed and future research may reveal that responses to abortion vary considerably over time.

Furthermore, the post-abortion surveys utilized in most of the research had few questions concerning specific psychological reactions to abortion thus limiting the representation of the men's post-abortion experience. Only a small minority of studies utilized well-known clinical measures with established validity and reliability such as the MMPI ([50]), the Ilfeld Psychiatric Symptom Index ([36]), Spielberger's State-Trait Anxiety Scale ([22], [38]), Spielberger's State- Anger Scale ([38]), or the Perinatal Grief Scale ([38]), thereby limiting a precise clinical assessment of the men studied.

The lack of control groups for comparison purposes is also of concern. Only five studies ([22], [30], [31], [36], [38]) utilized appropriate control groups and two of these were intervention studies ([22], [38]) whose goal was to determine the effectiveness of the interventions for men rather than to document the effects of abortion on them. Another limitation is the lack of demographic data provided for most of these studies thereby preventing any exploration of relationships between demographic factors and psychological responses to abortion. As a final point, little consideration was given to how those men who refused to participate in the research studies may have differed from participants who did agree to do so.

SUGGESTIONS FOR FUTURE RESEARCH

Clearly, large nationally representative samples as well as appropriate control groups are needed in future research in order to generalize findings. The use of well-established clinical measures across studies would promote a comparison of findings among such studies and more reliably assess for clinical symptomatology. The inclusion of demographic data could shed light on possible relationships between factors such as age, ethnicity, religious beliefs, parental status, marital status, education, occupation, or financial status and post-abortion adjustment.

Many factors such as psychological health prior to abortion ([56]), the abortion decision-making process ([57]), beliefs about the fetus ([58]), meaningfulness of pregnancy ([59]), personality and self-efficacy ([60]), and religious beliefs ([61]) have been implicated in predicting women's reactions to abortion. As these issues are also likely to affect men's responses to abortion, it would be advantageous to incorporate them into future research. Comparisons of men who choose to accompany their partners for the abortion procedure with those who do not may reveal crucial information about the impact of abortion on men. Those men who choose not to come to the clinic with their partners may perceive abortion as a minor medical procedure. Alternatively, they may be more negatively impacted by abortion and so choose to avoid all aspects of the abortion.

Longitudinal studies may do much to elucidate the process of coping with elective abortion over time. An increased understanding of that process may consequently inform the development of intervention programs for men. Also, future research focusing on men and abortion may indirectly lead to an enhancement of relationships between men and women facing unplanned pregnancies as men's roles in conception, abortion decision-making, and abortion's aftermath are better appreciated.

Unlike most of the studies reviewed here, four of them ([35, 47, 48, 50]) involved men whose partners had therapeutic abortions following diagnosis of fetal anomaly. Given that the pregnancies were desired and that the abortions took place later than most elective abortions, samples from these studies may represent an entirely different population than those participating in other studies. Alternatively, the experience of men following abortion of desired pregnancy may prove to be similar to the experience of men following abortion for undesired pregnancy. Future research comparing these groups may do much to further our understanding of both the general and the more specific psychological impact of abortion on men.

In order to achieve these research goals, three approaches are useful including 1) large-scale retrospective studies, 2) prospective longitudinal studies, and 3) qualitative studies involving in-depth interviews. Areas of assessment in all methods should include demographic data, mental health history, history of abuse (both as victim and/or perpetrator), reproductive history, nature and quality of relationship with partner, attitude toward unintended pregnancy, degree of involvement in the abortion decision-making process, reasons for decision concerning pregnancy outcome, general opinions about abortion, perceptions concerning counseling received and opinions regarding need for counseling, religious beliefs, coping mechanisms utilized, and psychological response to abortion. Psychological response to abortion should be evaluated using valid, reliable objective measures and also through the use of subjective reports whenever possible. Objective measures would ideally include tools to assess psychological trauma, depression, anxiety, grief, and self-esteem.

To bring about a large survey investigation, social scientists might consider networking with others as it may be more feasible to obtain small samples across the country than to pursue a single large sample in one geographic area. Using the same methods and measures across small samples would allow for a single analytic approach with the combined sample. Academics employed at colleges and universities could work with abortion clinics to recruit male partners of female clients. They would also have access to college student samples. The college student sample would have the advantage of providing appropriate comparison groups. College men who have never experienced unplanned pregnancy, men whose partners continued an unplanned pregnancy, and those whose partners chose abortion could be effectively compared.

Completing a longitudinal prospective study poses the most difficult challenges and would require recruitment of men prior to actual pregnancy. This may be possible through collaboration with private clinics offering obstetrical services. Male partners of female clients might be recruited and assessed prior to pregnancy, at first knowledge of pregnancy, during and/or after pregnancy outcome decision-making, and post-abortion or post-pregnancy depending on the decision made. A major benefit of such a design is the opportunity for creating an appropriate control group. In addition, this design allows for objective assessment of prior (to pregnancy outcome) mental health and emotional state unlike the retrospective method which is limited to recall reports. Also, those men who choose not to accompany their partners to an abortion facility might be compared with those who do so. Attrition would likely be a serious problem with this approach and therefore samples would tend to be small.

Qualitative studies may best be carried out by cooperation between academics and clinicians. Assuming the clinician has superior interviewing skills and has been able to build a degree of trust with clients, he/she will have the best prospect for obtaining in-depth information from

client/research participants. The great value of this type of study is its ability to probe deeply into the complex emotions that no doubt follow a significant life experience such as abortion. Ideally, interviews should include a structured sequence of questions, as well as open-ended questions to ensure uniformity of data collection but also to allow for individual differences in experience. The concomitant use of standardized objective clinical measures to assess trauma, depression, anxiety, grief, and self-esteem would serve to validate subjective reports and facilitate comparison of findings across studies using various methods.

If several studies were completed using various methods and using similar assessment tools, we could learn much about the impact of abortion on men. Recent research concerning men and other forms of pregnancy loss such as miscarriage or stillbirth ([62], [63], [64], [65]) may offer direction and also serve as a point of comparison. Many studies of men and pregnancy loss have utilized the Perinatal Grief Scale ([66]). Therefore, it would be beneficial for this scale to be used in studies of post-abortion men. This would facilitate comparisons between men who have experienced miscarriage and those who have experienced elective abortion.

Lastly, a useful framework from which to design studies may be that provided by stress and coping theory ([67], [68]. [69]). In particular, Johnson & Baker ([70]) may be a helpful guide in utilizing the stress and coping theoretical perspective with post-abortion men. Consideration of how the socialization of males may influence their means of coping may also be an interesting aspect of future research. The temptation to assume that men and women cope similarly may hinder our appreciation of men's unique appraisals, responses, and choice of coping mechanisms as they deal with the stressors of unplanned pregnancy and elective abortion.

CONCLUSION

Given that 42 million elective abortions were performed in the United States between 1973 and 2002 ([71]), it would seem critical to engage in the scientific study of post-abortion men's experience. Yet, the male partners of women who choose elective abortion remain a neglected and poorly understood population. The papers reviewed here may be informative by providing the background for others to pursue the study of this important topic.

CORRESPONDENCE TO

Catherine T. Coyle, RN, PhD 5886 Tree Line Drive Madison, WI 53711 e-mail: ctcoyle@charter.net

References

1. Coleman PK, Reardon DC, Strahan T, Cougle JR. The psychology of abortion: a review and suggestions for future research. Psychol Health 2005; 20(2): 237-271.
2. Adler NE. Emotional responses of women following therapeutic abortion: how great a problem? Am J Orthopsychiatry 1975; 45(3): 446-454.
3. Broen AN, Moum T, Bodtker AS, Ekeberg O. Predictors of anxiety and depression following pregnancy termination: a longitudinal five-year follow-up study. Acta Obstet Gynecol Scand 2006; 85(3): 317-323.
4. Cougle J, Reardon DC, Coleman PK. Depression associated with abortion and childbirth: long-term analysis of the NLSY cohort. Med Sci Monit 2003; 9(4): CR105-112.
5. Speckhard A, Rue, V. Post abortion syndrome: an emerging public health concern. J Soc Issues 1992; 48(3): 95-119.
6. Gomez C, Zapata R. Diagnostic categorization of post-abortion syndrome. Actas Esp Psiquiatr 2005; 33 (4): 267-272.
7. Rue VM, Coleman PK, Rue JJ, Reardon DC. Induced abortion and traumatic stress: a preliminary comparison of U.S. and Russian women. Med Sci Monit 2004; 10(10): SR5-16.
8. Fergusson DM, Horwood J, Ridder EM. Abortion in young women and subsequent mental health. J Child Psychol Psychiatry 2006; 47(1): 16-24.
9. Harris GW. Fathers and fetuses. Ethics 1986 Apr; 96(3): 594-603.
10. Brake E. Fatherhood and child support: Do men have a right to choose? J Appl Philos 2005; 22(1): 55-73.
11. 428 U.S. 52 - Danforth v. Missouri
12. Sheldon S. Unwilling fathers and abortion: terminating men's child support obligations? Mod Law Rev 2003; 66(2): 175-194.
13. Leib EJ.A man's right to choose. Legal Times 2005; XXVIII (14).
14. Center for Reproductive Rights [homepage on the Internet] Pennsylvania judge removes injunction against woman seeking abortion. August 5, 2002; Available from: http://www.reproductiverights.org/pr_02_0805pa.html Accessed December 20, 2006.
15. Puddifoot JE, Johnson MP. Active grief, despair, and difficulty coping: some measured characteristics of male response following their partner's miscarriage. J Reprod Infant Psychol 1999; 17(1): 89-93.
16. Storey AE, Walsh CJ, Quinton RL, Wynne-Edwards KE. Hormonal correlates of paternal responsiveness in new and expectant fathers. Evol Hum Behav 2000; 21(2): 79-95.
17. Berg SJ, Wynne-Edwards KE. Changes in testosterone, cortisol, and estradiol levels in men becoming fathers. Mayo Clin Proc 2001; 76(6); 582-592.
18. Bozett, F.W. Male development and fathering throughout the life cycle. Am Behav Sci 1985; 29(1): 41-54.
19. Zayas LH. Psychodynamic and developmental aspects of expectant and new fatherhood: clinical derivatives from the literature. Clin Soc Work J 1987; 15(1): 8-21.
20. Sonne JC. The varying behaviors of fathers in the prenatal experience of the unborn: protecting, loving, and "Welcoming with Arms Open," vs. ignoring, unloving, competitive, abusive, abortion minded or aborting. J Prenatal Perinatal Psychol Health 2005; 19(4): 319-340.
21. Gordon RH, Kilpatrick CA. A program of group counseling for men who accompany women seeking legal abortion. Community Ment Health J 1977; 13(4): 291-295.
22. Gordon RH. Efficacy of a group crisis-counseling program for men who accompany women seeking abortion.

Am J Community Psychol 1978; 6(3): 239-246.
23. Kero A, Lalos A, Hogberg U, Jacobsson L. The male partner involved in legal abortion. Hum Reprod 1999; 14(10): 2669-2675.
24. Kero A, Lalos A. Ambivalence - a logical response to legal abortion: a prospective study among women and men. J Psychosom Obstet Gynaecol 2000; 21(2): 81-91.
25. Kero A, Lalos A. Reactions and reflections in men, 4 and 12 months post abortion. J Psychosom Obstet Gynaecol 2004; 25(2): 135-143.
26. Rothstein, A. Abortion: a dyadic perspective. Am J Orthopsychiatry 1977; 47(1): 111-118.
27. Rothstein A. Men's reactions to their partners' elective abortions. Am J Obstet Gynecol 1977; 128(8): 831-837.
28. Rothstein A. Adolescent males: fatherhood and abortion. J Youth Adolesc 1978; 7(2): 203-214.
29. Rothstein A. Male experience of elective abortion: psychoanalytic perspectives. In N. L. Stotland, editor. Psychiatric aspects of abortion Washington, D.C.: American Psychiatric Association; 1991. p. 145-158.
30. Buchanan M, Robbins C. Early adult psychological consequences for males of adolescent pregnancy and its resolution. J Youth Adolesc 1990; 19(4): 413-424.
31. Robbins CA, Streetman LG. Resolution of nonmarital adolescent pregnancy and the transition to adulthood: educational attainment and financial well-being. Policy Stud Rev 1994; 13(1/2): 141-156.
32. Myburgh M, Gmeiner A, van Wyk S. The experience of biological fathers of their partners' termination of pregnancy. Health SA Gesondheid 2001; 6(1): 28-37.
33. Myburgh M, Gmeiner, A, van Wyk S. Support for adult biological fathers during termination of their partners' pregnancies. Health SA Gesondheid 2001; 6(1): 38-48.
34. Mattinson J. The effects of abortion on a marriage. Abortion: medical progress and social implications, Ciba Found Symp 1985; 115: 165-177.
35. Robson FM. "Yes!-A chance to tell my side of the story': a case study of a male partner of a woman undergoing termination of pregnancy for foetal abnormality. J Health Psychol 2002; 7(2): 183-193.
36. Lauzon P, Roger-Achim D, Achim A, Boyer R. Emotional distress among couples involved in first-trimester induced abortions. Can Fam Physician, 2000; (46): 2033-2040.
37. Poggenpoel M, Myburgh CPH. The developmental implications of a termination of pregnancy on adolescents with reference to the girl and her partner. Education 2002; 122 (4): 731-741.
38. Coyle CT, Enright RD. Forgiveness intervention with postabortion men. J Consult Clin Psychol 1997; 65(6): 1042-1046.
39. Coleman PK, Nelson ES. The quality of abortion decisions and college students' reports of post-abortion emotional sequelae and abortion attitudes. J Soc Clin Psychol 1998; 17(4): 425-442.
40. Berger J. The psychotherapeutic treatment of male homosexuality. Am J Psychother 1994; 48(2): 251-261.
41. Holmes MC. Reconsidering a "woman's issue:" psychotherapy and one man's postabortion experiences. Am J Psychother 2004; 58(1): 103-115.
42. Speckhard A, Rue V. Complicated mourning: Dynamics of impacted post abortion grief. J Prenatal Perinatal Psychol Health 1993; 8(1): 5-32.
43. Spielberger CD. Manual for State-Trait Anxiety Inventory (STAI Form Y). Palo Alto, CA: Consulting Psychologists Press; 1983.
44. Spielberger CD, Jacobs G, Russell S, Crane R. Assessment of anger: the State-Trait Anger Scale. In J. N. Butcher & C. D. Spielberger, editors. Advances in personality assessment (Vol. 2). Hillsdale, NJ: Erlbaum; 1983.
45. Potvin L, Lasker J, Toedter L. Measuring grief: a short version of the Perinatal Grief Scale. J Psychopathol Behav 1989; 11(1): 29-45.
46. Subkoviak M J, Enright RD, Wu C, Gassin EA, Freedman S, Olson LM, Sarinopoulos I. Measuring interpersonal forgiveness in late adolescence and middle adulthood. J Adolesc 1995; 18(6): 641-655.
47. Jones OW, Penn NE, Shuchter S, Stafford CA, Richards T, Kernahan, C, Gutierrez J, Cherkin P, Reinsch S, Dixson B. (1984). Parental response to mid-trimester therapeutic abortion following amniocentesis. Prenat Diagn 1984; 4(4): 249-256.
48. White-van Mourik MC, Cooper JM, Ferguson-Smith MA. The psychological sequelae of a second-trimester termination of pregnancy for fetal abnormality. Prenat Diagn 1992; 12(3): 189-204.
49. Ilfeld FW. Further validation of a psychiatric symptom index in a normal population. Psychol Rep 1976; 39(3, Pt 2): 1215-1228.
50. Blumberg BD, Golbus MS, Hanson KH. The psychological sequelae of abortion performed for a genetic indication. Am J Obstet Gynecol 1975; 122(7): 799-808.
51. Shostak A. Abortion as fatherhood lost: problems and reforms. Fam Coord 1979; 28(4): 569-574.
52. Shostak A. Men and abortion: three neglected ethical aspects. Humanity Soc 1983; 7(1): 66-85.
53. Shostak A, McLouth G. Men and abortion: lessons, losses, and love. New York: Praeger; 1984.
54. Tremblay JA, L'Heureux P. Psychosocial intervention with men. Int J Mens Health 2005; 4(1): 55-71.
55. Hayes JA, Mahalik JR. Gender role conflict and psychological distress in male counseling center clients. Psychol Men Masculinity 2000; 1(2):116-125.
56. Major B, Cozzarelli C, Cooper ML, Zubek J, Richards C, Wilhite M, Gramzow RH. Psychological responses of women after first-trimester abortion. Arch Gen Psychiatry 2000; 57(8): 777-784.
57. Friedman CM, Greenspan R, Mittleman F. The decision-making process and the outcome of therapeutic abortion. Am J Psychiatry 1974; 131(12): 1332-1337.
58. Conklin MP, O'Connor BP. Beliefs about the fetus as a moderator of post-abortion psychological well-being. J Soc Clin Psychol 1995; 14(1): 76- 95.
59. Major B, Mueller P, Hildebrandt K. Attributions, expectations, and coping with abortion. J Pers Soc Psychol 1985; 48(3): 585-599.
60. Cozzarelli C. Personality and self-efficacy as predictors of coping with abortion. J Pers Soc Psychol 1993; 65(6): 1224-1236.
61. Congleton G.K. Post-abortion perceptions: A comparison of self-identified distressed and nondistressed populations. Int J Soc Psychiatry 1993; 39(4): 255-265.
62. Stinson KM, Lasker JN, Lohmann J, Toedter LJ. Parents' grief following pregnancy loss: a comparison of mothers and fathers. Fam Relat 1992; 41: 218-223.
63. Johnson MP, Puddifoot JE. The grief response in the partners of women who miscarry. Br J Med Psychol 1996; 69: 313-327.
64. Puddifoot JE, Johnson MP. (1999). Active grief, despair, and difficulty coping: some measured characteristics of male response following their partner's miscarriage. J Reprod Infant Psychol 1999; 17(1): 89-93.
65. Zeanah C, Danis B, Hirshberg L, Dietz L. Initial adaptation in mothers and fathers following perinatal loss. Infant Ment Health J 1995; 16(2): 80-93.

66. Toedter LJ, Lasker JN, Janssen HJ. International comparison of studies using the Perinatal Grief Scale: a decade of research on pregnancy loss. Death Stud 2001; 25: 205-228.
67. Lazarus, RS, Folkman S. Stress, appraisal, and coping. New York: Springer; 1984.
68. Lazarus, RS. Stress and emotion: a new synthesis. London: Free Association Books; 1999.
69. Folkman S. Personal control and stress and coping processes: a theoretical analysis. J Pers Soc Psychol 1984; 46: 839-852.
70. Johnson MP, Baker SR. Implications of coping repertoire as predictors of men's stress, anxiety, and depression following pregnancy, childbirth, and miscarriage: a longitudinal study. J Psychosom Obstet Gynaecol 2004; 25: 87-98.
71. Guttmacher Institute. In Brief: Facts on induced abortion in the United States. May 2006; Available from: http://www.guttmacher.org/pubs/fb_induced_abortion.html Accessed December 20, 2006.

Author Information

Catherine T. Coyle, RN, PhD
Research Consultant