Post-Abortion Survivor Syndrome: Signs and Symptoms Revisited

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Notes:
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ABSTRACT

Background: Clinical observations indicated that those psychiatric patients who survived when a preborn sibling died were adversely affected by being allowed to live. It seemed being a survivor of a pregnancy loss, particularly abortion, contributed to psychiatric illnesses.

Methods: Data was collected from a sample of 293 adults - - 98 patients and 195 counseling trainees. A self-report questionnaire with visual analogue, rating and descriptive questions was used to ascertain the extent of common psychiatric symptoms. These were analyzed to determine if there were any significant associations with various types of pregnancy outcome.

Results: Correlations and stepwise regression analyses demonstrated a cluster of existential symptoms for those surviving when their preborn siblings were aborted. The symptom that most closely associated with the "total number of abortions in the mothers' first pregnancy" was, "I feel I don't deserve to be alive." There were different and more loosely clustered symptoms found in patients whose mother miscarried and those who had an abortion themselves and those who had been mistreated as children.

Conclusion: there is a reasonably definable syndrome of symptoms in patients associated with the abortion of their sibling, which we have termed, the Post Abortion Survivor Syndrome.

Introduction

Observations of psychiatric patients led me [PGN] to believe that some people were deeply affected by surviving when someone near and dear to them, usually a sibling, died from a pregnancy loss. The symptoms appeared to be most pronounced if the loss was as a result of

abortion. Statistically analyzed data showed the most frequent and intense symptom was a feeling they did not deserve to be alive. That was closely correlated to: a sense of impending doom, guilt about surviving, pessimism about the future, not trusting caregivers and other existential symptoms all of which form a fairly closely circumscribed syndrome. These were significantly associated with: recurrent depression, intense obsessions, suicidal risk taking, and frequent hospitalizations.

There appears to be a paradoxical response when, for reasons over which they have no control, a person's life is spared when those who are near and are dear to them die. You might think that people who survive should be glad to be alive and greet every dawn with gladness. Instead, studies have shown many survivors of: torture, concentration camps, disasters, accidents and illnesses have a pervasive sense of guilt, morbid thoughts, suicidal ideation and difficulty grappling with the exigencies of life. What was first known as the "concentration camp syndrome"[1] later became the "survivor syndrome".[2] Symptoms included cognitive and memory disturbances, depression and survivor guilt, chronic anxiety related to the fear of renewed persecution and phobic fears. Frequently there are sleep disturbances including insomnia, nightmares and anxiety dreams related to persecution) as well as somatic manifestations. Dr. Wanda Poltawska wrote And I am Afraid of my Dreams [3] in which she describes terrifying night visions which persisted for many years until she was able to record and talk about her gruesome experience as a "guinea pig" in so-called medical experiments by the Nazis in Ravensbruk.

Holocaust survivors have indicated loss of childhood memories, distorted perceptions of personal identity and difficulties with interpersonal relationships.[4] It soon became apparent that these symptoms not only affected the survivors, but also their children.[5] [6] [7] [8] [9] The survivors' children had symptoms resembling those of their parents, including depression, anxiety, phobias, guilt and separation problems, frightening dreams and environmental misperceptions. The children's depression was attributed to anger turned inwards. Those children were raised to view the world as a dangerous place, but no expression of aggression was tolerated at home.

According to Krell,[6] the terrifying experiences are inevitably transmitted to offspring whether these are discussed openly or as veiled references or mysterious outbursts of grief. The parent's lack of communication might contribute to the child's increased depression because of his/her preoccupation with fantasies about what his/her parent may have experienced. These fantasies may be more frightening and pathogenic than the actual events. Miller believes that children unconsciously re-enact their parents' fate all the more intensely the less precise their knowledge of it.[10] Wardi believes children of Holocaust survivors may be discharging their parents' unresolved, unconscious conflicts.[11] I have hypothesized that the trans-generational re-enactment of unresolved conflicts arising from trauma is an adaptive mechanism whereby the mind is forcing the individual to confront the subconscious problem so that, once resolved, the

brain can function more efficiently and allow the individual to be successful in communication and work.[12] [13]

Holocaust survivors were found to be vulnerable to a reactivation of this "survivor syndrome" when there was subsequent trauma, even though they appeared to be asymptomatic at the time.[14] Vulnerability to psychological distress also affected second-generation Holocaust survivors when faced with trauma such as breast cancer.[15] It was found that, although there were some differences, most of these symptoms could be found in the survivors of torture,[16] those living in a war torn country,[17] those surviving planned explosions,[18] and those surviving unplanned sinking.[19]

Since the description of the Post-Traumatic Stress Disorder, many authors have attempted to determine whether survivor symptoms fit that particular diagnosis. There seemed to be less interest in the symptoms that were found early in the studies of survivors, namely existential symptoms, survivor guilt, not wishing to be alive, etc. North et al., in their study of the Oklahoma City bombing survivors,[20] found 45% exhibited symptoms of the Post-Disaster Psychiatric Disorder (PDPD) and 34.3% of PTSD. They suggested that the best way to screen for those who would later show evidence of psychiatric distress was by identifying the symptoms of avoidance and numbing. Intrusive re-experience and hyper arousal were symptoms so universal they were not seen to be associated with psychopathology or impairment of function.

Clinical impressions of Holocaust survivors seem to indicate that, although there were symptoms of high anxiety and deep depression, there were more existential type symptoms that could not easily be used in determining an ICD10 or DSM IVR diagnosis. These symptoms appeared to arise from conflicts that the person had been struggling with for long periods. Although patients referred to me for consultation had received various combinations of medication and psychotherapy, most felt that their deeper dilemmas had not been understood. The question herein addressed is, are there characteristic symptoms and is there a constellation of signs and symptoms sufficiently specific to constitute a syndrome for those who survived abortion?

Although the term survivor has frequently been used in a very broad context to include anybody that might have died for any reason, it is used in this paper to indicate those who remain alive after some force over which they had no control prematurely ended the life of somebody near and dear to them, namely a preborn sibling.

Approximately 30 years ago, an eight year old girl, referred to me for evaluation forced me to consider the impact of being a pregnancy loss survivor. The mother, who brought this, her only child, was worried because she was not sleeping well, was irritable, could not concentrate, frequently burst into tears, and often seemed to be preoccupied. This all began with a recurrent

nightmare. The child clearly described her very frightening dream to me. With three siblings, she had gone to play in a bank of sand. They tunnelled into the sand and her three siblings had crawled in. The sand had collapsed and buried them alive. She could tell me very little about these children, except that she was absolutely convinced that they were her brothers and sisters. Later, the mother told me she had three early miscarriages that her daughter could never have known about. It seemed that somehow the little girl knew or suspected the deaths of her siblings and was now worried something might happen to her. When I voiced these thoughts, the child indicated she felt she was being understood. With her mother's reassurance and an unconditional commitment to love and protect her, the child's fears and her symptoms rapidly subsided.

Having been alerted to the effects in children surviving a pregnancy loss, I found others who knew or guessed they had lost a sibling by stillbirth, miscarriage, or abortion. When I questioned their parents it appeared that these children had a surprisingly accurate knowledge of their mother's pregnancy outcome.

METHOD

The present study is an extension of a research project whose protocol and procedures were approved by the UBC medical ethics.[21] The sample was composed of 293 adults, 85% women and 13% men. Of these, 56.4 % were married, 23.4 % single, 11.1% divorced. The rest were separated, widowed, remarried, or in some other type of relationship. The age range was 22 to 75 years, mean 40.63 years. The average number of children=2.07. The average number of hospitalisations which include giving birth= 3.61. According to Statistics Canada, this sample is reasonably representative of the population. Ninety-eight in the sample were outpatients without major psychiatric aberrations. The other 195 were relatively healthy adults training to be group counsellors.

An 86-item self-report questionnaire was filled out by the subjects, following a brief explanation by the research assistant There were 10 questions regarding demographics, 12 short answer descriptive questions, 2 blank tables regarding all the pregnancy outcomes of the subject's mother's and the subject, 10 questions that required check marks, and 51 questions with visual analogue scales. The visual analogue scale is an 8 cm. line across which the subject is asked to draw a mark indicating his/her estimation of their position between two extremes, e.g. 'always' and 'never'. The responses were coded on an 8 point scale with additional codes for not applicable and no response. The internal reliability of the questionnaire was determined by parallel form questions. Many visual analogue questions were the same as those used in our study of the effects of pregnancy outcome on health, where the reliability and validity were determined to be adequate. [21]

To determine the validity of the subject's perception of outcome of their mother's pregnancies we asked them how they found out (Table I). Most indicated they were told what happened by their mothers. We also asked the subjects how their children found out about the outcome of their own pregnancies. There is spread similar to the subject's mother, with the most frequent response being, "I (subject) told them" (Table II).

The hypotheses we tested were: 1) There is a characteristic constellation of signs symptoms sufficiently specific to constitute a syndrome for those who survived and abortion-people whose mother have a pregnancy loss are significantly affected by it. 2) The symptoms of those whose sibling died by abortion are significantly different from those survive a siblings miscarriage. 3) The existential dilemmas that arise from being an abortion survivor create unique symptoms.

RESULTS

The questionnaire made it possible to analyse the data as one of three variables for each pregnancy outcome. For example for miscarriages: a) the total number of miscarriages of the mother of the subject's first or second, third etc. pregnancy, b) the total number of miscarriages for the subject's mother for any pregnancy up to 9, c) the total number of people whose mother had at least one miscarriage. These correlated with significance $p< 000$ in all instances. Because of these highly significant correlations, it was possible to use any of them as dependent variables for the same analysis.

A stepwise regression analysis of the visual analogue scores to the 16 questions regarding common psychiatric symptoms indicated that the closest association to the dependent variable "The total number of abortions in the first pregnancy of my mother" was "I feel I don't deserve to be alive" (Unstandardized Coefficient B 1.171, $t= 2.047$, $p= 0.042$. If the dependent variable was the total number of subjects whose mother had at least one abortion, the most prominent symptom was "I feel that life is not worth living" ($t = -2.177$, Sig. $p< .030$). Using the symptom "I feel I don't deserve to be alive" as a dependent variable, a stepwise regression analysis showed that the other symptoms most closely associated to it were those arising from conflicts regarding life, death and violence (Table III). This sense of not deserving life appears not to be associated with any other pregnancy outcome of the subjects' mothers' first pregnancy (Table IV). There are predominately negative associations to existential conflicts with other types of pregnancy losses.

When the 16 symptoms are cross-correlated, controlling for age, sex, marital status, and number of children, the symptom "I don't feel I deserve to be alive" significantly correlates with the other symptoms hypothesised as being part of the Post Abortion Survivor Syndrome (Table V). This analysis shows those symptoms which most closely correlate with existential guilt ("I feel I don't deserve to be alive) are similar to the results of the stepwise regression analysis,

namely “I am not glad to be alive”, I am not pleased with who I am”, “I sense something terrible is going to happen to me”, and “I have thoughts I can’t control”. The symptom that most closely correlates with “I feel life is worth living” is “I feel sad”. The other symptoms correlate with each other, as one would expect clinically. “I hear or see or feel things that appear from nowhere” (hallucinations) correlates most highly with “I have feelings that things are unreal” (derealisation), and “I fear I am losing my mind” (pre-psychotic panic).

Depending on how the question about the mother’s abortion is asked, there are somewhat different symptoms closely associated, but all are part off what could be called the Post Abortion Survivor Syndrome, (Table VI As a comparison, we did an analysis to determine the most prominent symptoms of those who survived when unborn siblings were miscarried. We found a different cluster of symptoms, (Table VII). The most prominent symptom is a feeling that “life is worth living”. It should be noted that the symptom is stated in the negative but the correlation is also negative.

In the four groups under consideration, (post abortion survivor (PASS) post abortion, (PAS), post miscarriage, (PMSS) and child abuse and neglect, (CAN), subjects were found to have different problems in the past (Table X). Past psychiatric hospitalisations in the subjects were significantly correlated with the total number of abortions in her mother’s first pregnancy.

We analysed the data for possible underlying factors contributing to depression and abortion (Table XI). If the dependent variable is the subject’s repeated depressions, the most closely associated possible contributors were the impact of mistreatment on the life of the subject and the total number of persons who had at least one abortion. When the dependent variable is “The total number of abortions in my or my partner’s first pregnancy” the most prominent factors are emotional or intellectual neglect in childhood, and the total number of persons whose mother had at least one abortion.

Why women choose to terminate a pregnancy is a complex and hotly debated subject. The amount they want to have a child is a notoriously poor indicator because “wantedness” fluctuates widely from day to day depending on mood, turmoil in a relationship, finances etc. We used a matched samples t- test on those subjects whose mother had a full term pregnancy or miscarriage or abortion in her first pregnancy and those who had no full term pregnancy, miscarriage or abortion. Assuming equal variance (confirmed by Levene’s Test for Equality of Variance) we found no significant differences in the background and demographic variables. In these three groups in their age, sex , marital status, number of hospitalisations and highest level of education there was no significant difference.. To determine whether or not there was a difference in the early experience of subjects in these three groups, we included “my parents were happily married”, “we had a happy family life” and “my brothers and sisters are doing well” as variables. There was no significant t test difference. The only significant difference in that analysis was the

symptom “I feel I don’t deserve to be alive”. (Std Error Difference .572, Sig. (2 tailed) .042, 95% Confidence Interval –2.297 to .045 If a separate t test is done on the two groups, those whose mother aborted her first pregnancy and those who did not, there were significant differences in the symptoms “I feel I don’t deserve to bed alive” and “I have injured myself.”

Using two quite different measures of being a survivor: a) a statistically high chance of being aborted b) the total number of abortions of mother’s, we found different, but not unrelated problems in the subject’s present life (Table XII). The inability to trust others is significantly often found in persons living in areas with high rates of abortion.

To check on the validity of the symptoms chosen for this study, we did a stepwise regression analysis of various problems that the subject had in the present. The responses to the questions, “Have you had suicidal thoughts?” and “Do you have repeated depression?” shows choices from the symptoms’ list that are appropriate to those problems (Table XIII)

There are significant correlations between the subject’s abortions and various types of his/her mistreatment as a child (Table XIV). Emotional and intellectual neglect correlate to abortions more closely than other types of abuse and neglect.

To determine whether there was a trans-generational component to abortion, we calculated the number of abortions for the subject’s mother in three ways: 1) the total number of abortions in the mothers’ first pregnancy, 2) the total number of abortions in any pregnancy for all the mothers, 3) the total number of women who had one or more abortions. These three correlate closely and tend to indicate the subject had a reasonably accurate awareness of their mother’s pregnancy outcomes (Table XV). There is a significant correlation between the subject and the subject’s partner aborting her first pregnancy and his/her mother aborting her first pregnancy. There are significant correlations between a subject and a subject’s partner aborting her first and second pregnancies and his/her mother aborting her first and second pregnancies.

Although subjects are affected by other kinds of pregnancy loss, they currently feel more affected by their mother’s abortion, (Table XVI). Though there is greater variability, the unstandardized coefficient indicates that subjects are next more deeply affected by their mother’s stillbirth. Other regression analyses show that subjects were less inclined to talk to their mother about her abortion than about other losses. They also indicated they were less likely to have completed grieving the loss of a sibling through abortion.

It appears that for men, the symptoms associated with their mother’s abortions are different from those of the whole group (Table XVII). These symptoms appear to be more frequently violent, self-destructive tendencies and fears of impending doom.

The frequency of full term normal birth weight pregnancies and pregnancies that end in abortion in our sample, as indicated in Tables XVIII. XIX appear to approximate those of the general Canadian population.

Factors, as they are calculated by standard statistical techniques, derived from visual analogue scales are here represented as a combination of the frequency and the severity of the impact on the individual. When this is done the most prominent symptoms of PASS are of an existential type: (Table XX)

There are significant differences between the symptoms of those who survive an abortion compared to those whose mothers had a miscarriage or those who experienced trauma as a child or had an abortion themselves (Table XXI).

DISCUSSION

From these results it appears that those who are affected by the loss of their unborn siblings to pregnancy termination have predominantly existential type symptoms. The sense that they do not deserve to be alive correlates closely with other symptoms of life and death conflicts: a sense of impending doom, self-destructiveness and a high level of anxiety that would make them feel that they are losing their mind. Although some people appeared to cope with their existential conflicts, a significant number of others indicated repeated depression and psychiatric hospitalisation in the past. One would have to wonder whether the need for repeated psychiatric treatment would have occurred had the existential conflicts been addressed earlier.

There are symptoms associated with the subject's mother having had one or more miscarriages, but that may be the result of the fact that 98 of 293 where clinical subjects. However there is a marked difference in the symptoms of abortion survivors. These seem to be more likely to arise from existential conflicts regarding life, living and the meaning of existence which are not often detected by some clinicians who leave questions regarding them from their usual patient evaluation.

The question whether the abortion survivors come from a different demographic and family background seems to have been answered by the data for those whose mother's had full term babies or miscarriages or abortion survivors. According to the independent samples t there appears to be no detectable difference. This would mean that it was not their genetic predisposition or quality of family life but that their mother had an abortion rather then a full term baby or a miscarriage. The next study will include more information from the mother and father of the subjects.

Whichever way we analysed the data, the finding that miscarriage survivors feel glad to be alive while abortion survivors feel they don't deserve to be alive, stands out. This is not easy to explain but this inadequate analogy might help. A little family of good parents and two children were taking a seaside holiday. One day while playing along the top of an unguarded cliff, one of the children tripped and fell to her death on the rocks far below. The parents berated themselves for their carelessness. However after a period of grieving, the surviving sibling rebounded to good health and vigour. She was heard to remark in an unguarded moment, "I'm very sad she is gone but now I can play with her toys." Another family not far from them were walking along a path at the top of the cliff. The mother and father after a quiet discussion about never wanting two children, pushed one child to his death. The remaining sibling did not see them do it but heard the child cry out as he fell. This survivor was morose for a very long time and grew up never enjoying life.

When the dependent variable is a variety of other questions regarding the subject's fear that he/she might have also been terminated or that his/her parents considered aborting him/her, there are feelings of unreality and a tendency to suicide. Whether the analysis is a stepwise regression analysis or a partial correlation, there is reasonable uniformity in the constellation of symptoms.

As a comparison, symptoms of those who lost siblings through miscarriage are quite different. Interestingly, although they feel angry, they feel that life is worth living and they have no trouble with interpersonal relationships. One of the more prominent symptoms of the abortion survivors is that they are not glad to be alive whereas those who are survivors when their mothers had miscarriages indicate they are glad to be alive. Why abortion survivors should have more difficult symptoms than miscarriage survivors may be related to the fact that their unborn siblings died quite differently. Abortion survivors have more reason to believe they may have contributed to the death of a sibling since this death was determined by a conscious choice of their parents. Those who survive situations where there has been a miscarriage of a sibling survive an unplanned incident. They can, without self-recrimination, be glad that they are alive. .

As a further comparison to the symptoms of PASS, we found the most prominent symptoms of those who had been mistreated as children correspond to those found in our earlier studies.[22 23] We found 94% of the children we studied, had been mistreated in more than one way. There was a definite tendency for sexual abuse to occur in situations where children were deprived of emotional comfort and intellectual stimulation. Verbal and physical abuse tended to go together. It is not surprising that there were some similarities between the symptoms of children who were mistreated in one of the five ways analysed in our study.

The symptoms of those women who had an abortion or those men, whose partner had an abortion, seem to indicate mostly poor relationships and guilt. An earlier study showed that a

prominent factor associated with the woman's decision to have an abortion is lack of partner support.[24]

In addition to determining symptoms, we asked the subjects to respond to questions regarding their past and present interpersonal and psychological problems. Depending on how the question regarding subjects' mothers' abortion is asked, the current problems varied somewhat. Those subjects who are abortion survivors indicate their mother's abortion lowers their self-esteem and inclines them to feel that they are being haunted; conceivably this sensation maybe an image or a fantasy of the aborted child.

We found there was a tendency on the part of women whose mother had an abortion to have an abortion themselves. The total number of abortions for the subject or the subject's partner best correlates with the neglect during childhood and the abortions of their mothers. Kent, Greenwood and Nicholls [24] found that women who aborted were often carrying out their parents' unconscious wish to abort them. Abortion survivors not only survive the loss of one or more of their siblings, but may also live through the trauma of their parent's distress following an abortion and possibly childhood mistreatment. One patient described this very succinctly, "How could you, (parents), be loving to me and yet have killed one of my siblings. You still might do something to me. I do not trust you. I do not trust the anger I feel towards you. I sometimes want to kill you. Yet I need you. It is safer if I can see and observe you all the time. I will do that until I am old enough to run away."[25]

Subjects who had past problems with repeated depression indicate that possible causes were mistreatment as a child and the abortions of their mothers. The mother's abortion was also a prominent possible contributor to the subject or the subject's partner having an abortion.

It appears that the symptoms and problems of abortion survivors have a number of distinctions from those of other types of survivors. This is not surprising when it is understood that the children feel threatened by those that are supposed to care for them in any situation. Most children have probably heard many stories of parents sacrificing themselves for their children. When children realize that their parents were prepared to sacrifice one of their own children, it is understandable these subjects may have deep fears of those who are close to them and wish to care for them.

There are bound to be some similar symptoms in PTSD and PASS because the ethology has common features. The DSM IV TR notes that PTSD symptoms arise following exposure to an "extreme stressor" including "witnessing a dead body or body parts". This could occur in the life of an abortion survivor on seeing for the first time a picture of an aborted foetus and realizing her/his sibling could have looked like that. However the same could be true of a person whose twin was miscarried. The evidence presented here seems to indicate that miscarried survivors

are not so adversely affected by such an event that they develop symptoms anything like those of an abortion survivor. In clinical practice, miscarriage survivors on learning of a sibling lost in utero, tend to show interest rather than horror or disgust. When they see a picture of an aborted foetus, they express distress but this tends no to last like the symptoms of PTSD.

The discovery of being an abortion survivor seems to be a gradual dawning of awareness rather than a sudden extreme stressor in PTSD. Both PASS and PTSD patients have a sense of "impending doom" or "foreshortening future". They both have nightmares but PTSD sufferers tend to visually re-experience the trauma while PASS people tend to see very abstract scenes which symbolically represent their intense conflicts. Both groups have guilt on surviving when others did not, but post abortion survivors have usually grown up with this sense. It almost feels natural to them. Whereas PTSD is generally symptom free before being traumatized, PASS sufferers have symptoms starting in their childhood.

In both groups there is a general tendency to avoid any encounter with the traumatic stressors. For PASS, this is often their parents. Yet abortion survivors have such a fear of being abandoned when and if they become unwanted, they also show great care for parents, especially elderly mothers. At the same time they feel a deep resentment they can hardly hide. PASS people often think of death and usually dance with death in some form but they are not genuinely suicidal like PTSD. Both groups find discussing the basic issues very painful, but PTSD sufferers seem to understand it is necessary while PASS patients find their key conflicts so complex, they give up easily.

Both groups tend to be easily irritated and unnecessarily angry. Abortion survivors may become enraged at any one whom in casual conversation or in therapy broaches the subject of their mother's abortion. PTSD affected people seem to be most angry at whoever should have protected them from the traumas but for weak reasons did not.

It is estimated that about 15% of multiples grow up as singleton survivors. There is extensive literature on the outcome for the surviving twin when there has been twin-twin transfusion syndrome in terms of neurological difficulties [26] but little on the psychological impact. The impact of the "vanishing twin" the possibility or increased suicides has been considered in some scientific writings [27,28] but this subject is much more extensively dealt with in web sites and blogs.[29] where Hayton comments about abortion survivors, "I'm pretty sure my mother aborted my twin"

It is not possible to make direct comparisons to similar studies because there appear to be none. However, we can compare these results with our own data; the symptoms of those who might be affected by their mothers' miscarriage, those who were mistreated as children, and those who had an abortion or those whose partner had abortion. There is obviously an overlap of

symptoms with those who are suffering from child abuse and neglect and those who are suffering the symptoms of having had an abortion, for both groups felt very exposed when they were most vulnerable.

It appears that our questions which allowed subjects to mark their past or present situation or reaction on a visual analogue scale, is a useful way of collecting data. There were few who did not understand the nature of the question and appreciate not having to categorize themselves. The analogue data, converted to an 8-point scale, lends itself well to statistical analysis.

Using data regarding the spectrum of marital status in our sample compared to STATISTICS CANADA, these subjects can be considered to represent the general population. This was an unselected sample of patients and the findings can be generalized to a psychiatric practice. There were asymptomatic abortion survivors who were not experiencing significant de-compensation but in the future they might under added stress. The validity of the symptoms seems to be established by the higher correlation with the history of high psychiatric disorder, repeated depression etc.

The overlap in symptoms between the different experiences of loss or mistreatment probably indicates that in many instances there were common contributing factors. Other research of ours in progress indicates the lack of partner support is both cause and effect of a woman's abortion. In the near future we hope to determine whether there is a difference in the symptom constellation of those who were born before as opposed to those who were born after their mother's abortion.

Whichever way we analysed the data, the finding that miscarriage survivors feel glad to be alive while abortion survivors feel they don't deserve to be alive, stands out. This is not easy to explain but this inadequate analogy might help. A little family of good parents and two children were taking a seaside holiday. One day while playing along the top of an unguarded cliff, one of the children tripped and fell to her death on the rocks far below. The parents berated themselves for their carelessness. However after a period of grieving, the surviving sibling rebounded to health and vigour. She was heard to remark in an unguarded moment, "I'm very sad she is gone but now I can play with her toys." Another family not far from them were walking along a path at the top of the cliff. The mother and father after a quiet discussion about never wanting two children pushed one child to his death. The remaining sibling did not see them do it but heard the child cry out as he fell. This survivor was morose for a very long time and grew up never enjoying life.

We also need to redo this type of study controlling for the impact of abortion on the subject's ability to bond and nurture her babies following an abortion. The pain [30] and the prolonged grief of an abortion for fetal abnormality may not have a qualitatively different impact

than that of other elective abortions. In previous research we found that there was a higher incidence of post-partum depression in woman who previously had and abortion. It appeared the depression interfered with their ability to bond to her newborn infant. The lack of a strong, resilient bond and the new mother's health problems may have contributed to the subsequent higher incidence of abuse and neglect in children [31, 32]

The hypotheses written in the methodology appear to be supported by our findings as explained above. This study is the unabridged version of the one well published in a courageous little journal [33] when the usual official journals found the topic too hot but did not have the good manners to say so. Earlier clinical observations of abortion survivors first published three decades ago [34] repeated in other journals and scientific meetings [35-42] have not resulted in the interest and study it warrants. Now being an abortion survivor (failed attempt) is gaining attention in the public media which sadly misses many important aspects of this phenomenum. Still being an abortion survivor of any type will be discussed mainly because the people who are directly affected will demand that their complaint is heard.

CONCLUSION

If the data and clinical impressions contained in this article and the deductions are correct, there appears to be a definable and diagnosable constellation of symptoms and problems comprising a syndrome, (Post Abortion Survivor Syndrome, PASS) that occurs in people whose parents have chosen to terminate other pregnancies. This constellation appears distinct from any combination of symptoms that might arise when a person survives the loss of a sibling by miscarriage. Since many of the major symptoms arise from existential dilemmas, anyone attempting to diagnose this syndrome would need to make the appropriate inquiries. I taught my medical students to always determine what became of all a woman's pregnancies. When they did the usual conversation ran something like this.

> Mrs or Miss or Ms or Mister P, "Please tell me the outcome of all your (or your partner's) pregnancies"
>
> Mrs P. "I have two children"
>
> Young Doc. "Thank you but I would like to know about all your pregnancies"
>
> Mrs P "Well I had one early miscarriage but it wasn't important"
>
> Young Doc. "I believe all pregnancy losses are important. Please tell me about all your pregnancy losses."
>
> Mrs P Pause with mixture of tears and anger on her face, "Do I have too?"
>
> Young Doc. "Of course you don't have to but I believe it will be good for your health if you do"

At this point Mrs P breaks into tears. It is the first time anyone has shown any interest in her abortion.

Young Doc. “Mrs P. it must have been a really hard time for you. I am also wondering about your mother’s pregnancy outcomes”

Mrs P. drying her eyes, “It’s interesting you should bring that up. I have been wondering if she also had an abortion. She never told me but I keep thinking I should have an older sister.”

Young Doc. “It wouldn’t hurt to ask. In my experience, when mothers and daughters can share honestly about all their pregnancies, it greatly improves their relationship and often answers many unspoken questions. Let me know what happens when you come back for your thyroid check-up.”

Unless the conflicts behind these dilemmas are addressed it is unlikely that the expression of these conflicts, eg. Difficult to treat depressions or the need for psychiatric readmission, will subside. This study needs to be replicated with a larger sample. In the meantime, it behoves the practising clinician to make it possible for people to speak of all their pregnancy losses and those of their mothers in an effort to determine whether a patient who presents with “depression” might be suffering from causes that are not biochemical or situational but rather from unresolved conflicts about life and living arising because a sibling was terminated.

Sadly most physicians avoid this very important health issue because they think: it is too sensitive or a moral issue that is none of their business or woman have a right to choose or because they have little idea how to deal with the problem if being an abortion survivor does come up. Treatment with good counselling is available but it is an area full of hurdles and pitfalls. It should not be attempted except by the well trained and widely experienced. Hope Alive group counselling works 43 but experience shows PASS patients often requires a repeat of this group psychotherapy program. Even then the existential doubts and fears may last a life time. Some counsellees find through prayer that God answers with much life sustaining reassurance by providing a commitment to provide eternal life through His Son Jesus.

Table I

How I found out about my mother's pregnancy loss

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no resp, N/A	152	40.5	40.5	40.5
	mother told me	126	33.6	33.6	74.1
	father told me	6	1.6	1.6	75.7
	sibling told me	9	2.4	2.4	78.1
	I asked	18	4.8	4.8	82.9
	still not sure	30	8.0	8.0	90.9
	fam. or friend told me	6	1.6	1.6	92.5
	other way	8	2.1	2.1	94.7
	discovered evidence	6	1.6	1.6	96.3
	Overheard conversation.	14	3.7	3.7	100.0
	Total	375	100.0	100.0	

Table II

How my children found out about my pregnancy loss

	Freq	**Percent**	**Cumulative %**
I told them	**107**	**28.5**	**71.5**
My spouse told them	**22**	**5.9**	**94.1**
Sibling told them	**3**	**0.8**	**99.2**
My parent told them	**1**	**0.3**	**99.7**
A friend told them	**1**	**0.3**	**99.7**
A family member told them	**2**	**0.5**	**99.5**
They asked	**7**	**1.9**	**98.1**
They overheard conversation	**5**	**1.3**	**98.7**
They discovered evidence	**2**	**0.5**	**99.5**
They don't know	**54**	**14.4**	**99.7**

Table III

Symptoms most closely associated with "I feel I don't deserve to be alive"

	Unstandardized Coefficients B.	T	Sig
a) I am not glad to be alive	.428	7.117	.000
b) I feel something terrible is going to happen to me	.141	4.772	.000
c) I have injured myself	.172	3.521	.000
d) I fear I am losing my mind	.128	3.481	.001
e) I have tied to kill myself		2.403	.017

Step wise regression with cut off $p < .05$

Table IV

Existential guilt and all pregnancy outcomes of subjects' mother's first pregnancy
Included variables

Dependent variable: I feel I don't deserve to be alive	Unstandardized Coefficient, B	t	Sig
Total number of abortions in mothers' first pregnancy	.013	2.254	.025

Excluded Variables:

	Beta In	t	Sig.
Total number of full term, normal weight in first pregnancy of mother	-.042	-.673	.501
Total number of full term, low birth weight in first pregnancy of mother	.065	1.111	.268
Total number of premature in first pregnancy of mother	.074	1.257	.210
Total number of miscarriage in first pregnancy of mother	-.051	-.875	.383
Total number of stillbirth in first pregnancy of mother	-.018	-.314	.754
Early infant death in first pregnancy of mother	-.061	-1.040	.299

Step wise regression with cut off p. <.05

Table V

Partial correlation coefficients of 16 Symptoms

Controlling for: Age, Sex, Marital Status, Number of children

	Glad	Know	Pleased	Ability	Relation	Worth	Injured	Kill	Terrible	Deserve	Sad	Angry	Unreal	Mind	Hear
Know	.583**														
Pleased	.612**	.764**													
Ability	.447**	.562**	.646**												
Relation	.525**	.565**	.620**	.555**											
Worth	.569**	.414**	.482**	.301**	.404**										
Injured	.246**	.199*	.224**	.207**	.217**	.220**									
Kill	.121	.111	.126	.111	.177*	.185*	.470**								
Terrible	.308**	.338**	.439**	.400**	.389**	.364**	.275**	.238**							
Deserve	.575**	.382**	.467**	.431**	.456**	.415**	.392**	.331**	.485**						
Sad	.549**	.490**	.566**	.467**	.599**	.423**	.285**	.189*	.459**	.454**					
Angry	.501**	.517**	.541**	.460**	.535**	.361**	.256**	.206**	.346**	.424**	.688**				
Unreal	.322**	.309**	.356**	.364**	.418**	.293**	.382**	.233**	.464**	.422**	.453**	.462**			
Mind	.538**	.464**	.570**	.421**	.501**	.414**	.255**	.238**	.435**	.538**	.554**	.550**	.585**		
Hear	.169**	.104	.098	.143	.148	.098	.248**	.181*	.227**	.225**	.162*	.168**	.371**	.325**	
Control	.416**	.449**	.471**	.431**	.474**	.354**	.233**	.201*	.424**	.400**	.490**	.466**	.521**	.617**	.356**

* $p < 0.01$
** $p < 0.001$ (Pam please finish these abbreviations)

Glad = I am **not glad** to be alive, Know = I **don't know** who I am, I am **not pleased** with who I am, I am not using my **abilities,** My human **relationships** are insecure, I feel life is not **worth** living, I have **injured** myself, I have tried to **kill** myself, I sense something **terrible** is going to happen to me, I feel I don't **deserve** to be alive, I feel **sad,** I feel **angry,** I have feelings that things are **unreal,** I fear I am losing my **mind,** I **hear** or see or feel things that appear from nowhere. I am bothered by thoughts I can't **control**

TABLE VI

Most prominent symptoms associated with subject's mother's abortions

Dependent variable in response to the following questions	**Unstandardized Coefficient B**	**t**	**Sig.**
Did your parents consider aborting you? Yes, Maybe, No			
a) I have feelings that things are unreal	.065	2.377	.018
b) I have tried to kill myself	.076	2.183	.030
Poor chances of survival before I was born (0 - 8)			
a) I have feelings that things are unreal	.355	3.210	.001
b) I am not pleased with who I am	.213	2.078	.039
Very upset when found out about pregnancy loss (0 - 8)			
a) I know who I am	-.251	-2.935	.004
b) I have feelings things are unreal	.202	2.301	.022
c) I feel I don't deserve to be alive	.182	2.076	.039
Very upset about mother's pregnancy loss now (0 - 8)			
a) I feel I don't deserve to be alive	.214	2.715	.007
Statistically my chance of being aborted were very high (0-8)			
a) I have tried to kill myself	.337	5.414	.000
Total # of abortions in preg. 1-9 of subject's mother			
a) I am bothered by thoughts I can't control.	.145	2.486	.013

Step wise regression; cut off set at p. < .05

Table VII

Most prominent symptoms associated with subject's mother's miscarriage (PMSS)

Dependent variables are:	**Unstandardized coefficient**	**t**	**Sig**
Total # miscarriages in first pregnancy			
a) I feel angry	.004	3.389	.001
b) I feel life is not worth living	-.017	-2.723	.007
Total # persons whose mother had at least one miscarriage			
a) I feel life is not worth living	-.024	-2.177	.030
Total # miscarriages, 1-9			
a) I feel life is not worth living	-.046	-2.090	.037

Step wise regression with cut off at p. < .05

Note: There were no significant associations of symptoms for premature births, still births or early infant deaths.

TABLE VIII

Most prominent Symptoms associated with childhood mistreatment (CAN)

Dependent variable: Visual Analogue responses to questions 1-5

Dependent variables are:	**Standardized coefficient**	**T**	**Sig**
Were you sexually abused?			
a) I have tried to kill myself	.329	5.895	.000
Were you verbally abused?			
a) I am not using my abilities	.233	4.101	.000
b) I have tried to kill myself	.166	2.914	.004
Were you physically abused?			
a) I have tried to kill myself	.235	4.157	.000
b) I am not using my abilities	.180	3.174	.002
Were you physically neglected?			
a) My human relationships are poor	.243	4.346	.000
b) I have tried to kill myself	.235	4.202	.000
Were you emotionally or intellectually neglected?			
a) I am not using my abilities	.244	3.968	.000
b) I am bothered by thoughts I can't control	.156	2.499	.013
c) I have tried to kill myself	.122	2.186	.030

Step wise regression with cut off at p. < .05

TABLE IX

Most prominent symptoms associated with abortions of me or my partner (PAS)

Dependent variables are:	**Standardized coefficient**	**T**	**Sig**
Total number of abortions for pregnancies of me or my partner			
a) I am not using my abilities	.206	3.526	.000
b) I have injured myself	.135	2.298	.022
Total number of persons who had at least one abortion			
a) My human relationships are poor	.185	3.140	.002
b) I have injured myself	.156	2.646	.009
Total number of abortion in my or my partner's first pregnancy			
a) I am not using my abilities	.167	2.869	.004
b) I have tried to kill myself	.129	2.226	.027

Step wise regression with cut off at p. < .05

Table X

Past Problems and Abortions of Subject's Mother

Dependent variables are:	Untandardized coefficient B	T	Sig
# abortions in first pregnancy			
a) Psychiatric hospitalization	.095	2.012	.045
# person's whose mother had at least one abortion			
a) Difficulty being a good parent	.136	3.037	.003
b) Suicidal thoughts	.123	2.798	.005
# abortions in pregnancy 1-9 of subject's mother			
a) Suicidal thoughts	.186	2.517	.012
b) Difficulty being a good parent	.188	2.505	.013
Feel poorly about mother's pregnancy loss now			
a) Poor physical health	.971	2.553	.011
High statistical chance of being aborted.			
a) Substance abuse	.688	2.885	.004
b) Psychiatric hospitalization	.931	2.292	.023
c) Suicidal thoughts	.463	2.012	.045

Step wise regression with cut off at p. < .05

There were no significant problems in the subject's past associated with miscarriages in the subject's mother's first pregnancy. There were no significantly associate past problems for those whose mother never had an abortion but had some other pregnancy loss.

Table XI

Most prominent symptoms associated with abortions of me or my partner

	Standardized coefficient	T	Sig
Past problems, repeated depression			
a) Impact of the mistreatment on your life	.377	7.249	.000
b) Total number of persons who had at least one abortion	.277	5.335	.000
Total number of abortion in my or my partner's first pregnancy			
a) Were you emotionally or intellectually neglected?	.237	4.242	.000
b) Total number of persons whose mother had at least one abortion	.218	3.897	.000

Step wise regression with cut off at $p < .05$

Table XII

The subjects' present problems associated with her mother's abortions or miscarriage

Dependent Variables	Standardized Coefficient	T	Sig
Statistically my chances of being aborted were high			
a) Inability to trust others	.209	3.518	.000
b) Troubling or frightening dreams	.194	3.252	.001
Total number of abortion for 1-8 pregnancies of my mother			
a) Low self esteem	.147	2.520	.012
b) Feelings of being haunted	.131	2.234	.026

Step wise regression cut off at p.<.05

Table XIII

Subjects' Present Problems and Symptoms

Dependent Variables	Standardized Coefficient	T	Sig
Suicidal thoughts			
a) I am not glad to be alive	.357	5.552	.000
b) I feel life is not worth living	.259	4.355	.000
c) I hear or see or feel things that appear from nowhere	.213	4.269	.000
Repeated depression			
a) I am bothered by thoughts I can't control	.282	4.742	.000
b) I feel sad	.218	3.312	.001
c) My human relationships are poor	.167	2.561	.011

Step wise regression with cut off at p.<.05

Table XIV

Number of subjects' abortions and type of her childhood mistreatment

	Ph_Abus 1	Ver_Abus 2	Sex_Abus 3	Ph_Negl 4	Em_Neg 5	My_Ab _1 6	My_A bo-1,7
Ver_Abus	.595**						
Sex_Abus	.354**	.282**					
Ph_Negl	.446**	.443**	.324**				
Em_Negl	.384**	.554**	.276**	.466**			
My_Abo_1	.104	.142	.093	.110	.210**		
My_Abo-T	.108	.151*	.103	.127	.203**	.655**	
T_My_Abo 8	.145	.143	.138	.158*	.215**	.781**	.785**

*<p.01, **p.<.001

Partial correlations controlling for: age, sex, marital status
1. Physical Abuse (Ph_Abus)
2. Verbal Abuse (Ver_Abus)
3. Sexual Abuse (Sex_Abus)
4. Physical Neglect (Ph_Negl)
5. Emotional neglect (Em_Negl)
6. Total number of abortions in the first pregnancy of the subject (My_Abo_1)
7. Total number of abortions in any pregnancy of the subject (My_Abo_T)
8. Total number of subjects who had one or more abortions (T_My_Abo)

TABLE XV

Trans-generational aspects of abortion; subject and her mother.

Controlling for: Age, Sex, Marital Status

	M_Abo_1 1.	M_Abo_2 2.	M_Abo_T 3.	T_M_Abo 4.	My_Abo_1 5.	My_Abo_ 6.
M_Abo_2	.157*					
M_Abo_T	.474**	.450**				
T_M_Abo	.514*	.381**	.820**			
My_Abo_1	.174*	-.054	.142*	.193*		
My_Abo_2	.028	.013	.108	.104	.286**	
T_My_Abo	.110	.059	.147	.173*	.777**	.478**

* p.<.05 **p<.01 Partial corrélation coefficients

1) Total number of abortions in the first pregnancy of subjects' mothers (M_Abo_1)
2) Total number of abortions in the second pregnancy of subjects' mothers (M_Abo_2)
3) Total numbers of abortions in any pregnancy for all subject's mothers (T_M_Abo)
4) Total numbers of mothers of subjects who had one or more abortions (M_Abo_T)
5) Total number of abortions in the first pregnancy of the subject (My_Abo_1)
6) Total number of abortions in the second pregnancy of the subject (My_Abo_2)
7) Total number of subjects who had one or more abortions (T_My_Abo)

Table XVI

Impact of Pregnancy Losses

	Unstandardized coefficients B	Unstandardized coefficients Std. Error	Standardized Coefficients Beta	T	Sig
T_M_Abor a)	3.540	.389	.444	9.095	.000
T_M_Mis b)	2.090	.323	.316	6.464	.000
T_M_Stil c)	2.694	.678	.198	3.973	.000
T_M_Ear d)	1.252	.523	.118	2.395	.000

a) Total number of persons whose mother had one or more abortions
b) Total number of persons whose mother had one or more miscarriage
c) Total number of persons whose mother had one or more stillbirths
d) Total number of persons whose mother had one or more early infant death

Table XVII

Symptoms of men whose mothers had abortions

Dependent variable: Total number of abortions in mothers' first pregnancy

	Standardized coefficient	T	Sig
I have tried to kill myself	.891	19.338	.000
I have injured myself	.154	3.365	.002
I feel something terrible is going to happen to me	.156	3.199	.003
I fear I am losing my mind	-.118	2.385	.023

Step wise regression cut off at $p<.05$

Table XVIII

Marital status and total number of persons who had at least one FULL TERM, NORMAL WEIGHT pregnancy

		0	1	Total
Marital status: 0 - 9	no response, N/A	3	5	8
	Married	19	138	157
	Single	57	14	71
	Divorced	8	27	35
	Separated	1	9	10
	Common-law	2	2	4
	Widowed	2	3	5
	Remarried	1	--	1
	Combination	1	1	2
Total		94	199	293

Table XIX

Marital status and total number of persons whose mother had at least one abortion

		0	1	Total
Marital status: 0 - 9	No response, N/A	4	4	8
	Married	144	13	157
	Single	50	21	71
	Divorced	31	4	35
	Separated	10	--	10
	Common-law	2	2	4
	Widowed	4	1	5
	Remarried	--	1	1
	Combination	2	--	2
Total		247	46	293

Table XX

Most prominent symptoms in descending order of impact for PASS.

1. I feel I don't deserve to be alive	Existential guilt
2. I am not glad to be alive	Existential sorrow
3. Something terrible is going to happen to me	Sense of impending doom
4. I have tried to kill myself	Self destructive
5. I fear I am losing my mind	Tenuous grasp of reality
6. I have injured myself	Self injurious

7. I feel sad	Sorrow
8. I am not pleased with who I am	Low self esteem

9. I have feelings that things are unreal	Dissociation
10. I am bothered by thoughts I cannot control	Obsession
11. I do not know who I am	Poor self identity
12. I feel life is not worth living	Depression

9 - 12 from a step wise regression of answers to questions regarding statistical chance of being aborted.

Table XXI

Most Prominent Symptoms of 4 constellations considered

Post Miscarriage Survivor Syndrome (PMSS)

1. I feel life is worth living	Joie de vie
2. I feel angry	Rage

Child Abuse and Neglect (CAN)

1. I have tried to kill myself	Self destructive
2. I am not using my abilities	Ontological guilt
3. My human relationships are poor	Difficulty relating

Post Abortion Syndrome (PAS)

1. I am not using my abilities	Ontological guilt
2. I have tried to kill myself	Self destructive

Post Abortion Survivor Syndrome (PASS)

1. I feel I don't deserve to be alive	Existential guilt
2. I am not glad to be alive	Existential sorrow
3. I feel something terrible is going to happen to me	Sense of impending doom

Stepwise regression with $p < .05$ cut off.

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