

Post-Abortion Survivor Syndrome: Signs And Symptoms

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Abstract: Clinical observations indicated that those psychiatric patients who survived when a preborn sibling died were adversely affected by the experience. It seemed that being a survivor of a pregnancy loss, particularly abortion, contributed to psychiatric illnesses. 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. Correlations and stepwise regression analyses demonstrated a cluster of existential symptoms for those surviving when their preborn siblings were aborted. The symptom expressed by the subjects in the study that was most closely associated with abortions in the first pregnancy of their mothers was, "I feel I don't deserve to be alive." There were different and more loosely clustered symptoms found in patients whose mother miscarried. 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.

Key Words: Post-Abortion Survivor Syndrome, pregnancy loss, abortion, siblings, suicide, existential guilt, impending doom.

Introduction

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 dear to them die. You might think that persons who survive should be glad to be alive and greet every dawn with gladness. Instead, studies have shown that many survivors of torture,

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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" (Chodoff, 1963) later became the "survivor syndrome" (Niederland, 1968). 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 (1989) wrote *And I am Afraid of my Dreams* 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 Ravensbrück.

Holocaust survivors have indicated loss of childhood memories, distorted perceptions of personal identity, and difficulties with interpersonal relationships (Kaminer & Lavie, 1994). It soon became apparent that these symptoms not only affected the survivors, but also their children (Barocos & Barocos, 1973; Danieli, 1981; Krell, 1979; Kestenberg, 1990; Roland-Klien & Dunlop, 1998). 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 (1979) the terrifying experiences are inevitably transmitted to offspring whether these are discussed openly or as veiled references and/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 (1995) believes that children unconsciously re-enact their parents' fate all the more intensely the less precise their knowledge of it. Wardi (1992) believes children of Holocaust survivors may be discharging their parents' unresolved, unconscious conflicts. I (Ney) 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 (1988, 1989).

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 (Robinson, Hemmendinger, Netanel, et al, 1994). Vulnerability to psychological distress also affected second-generation Holocaust survivors when faced with trauma such as breast cancer (Baider, Peretz, Hadani, et al, 1994). It was found that, although there were some differences, most of these symptoms could be found in the survivors of torture (Wenzel, Griengl, Stompe, Mirzaei, & Kiefer, 2000), those living in a war torn country (Bramsen & van der Ploeg, 1999), those surviving bombings (North, Nikon, Shariat, et al, 1999), and those surviving maritime disasters (Bolton, O’Ryan, Udwin, Boyle, & York, 2000)..

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 ICD or DSM 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 term survivor has frequently been used in a very broad context to include a loss of someone who might have died for any reason. However, 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. The specific question addressed in this paper 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?

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 the child 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 tunneled 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 brother and sisters. Later, the mother told me she had three early miscarriages that her daughter could never have known about. It

seemed to me 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 effect in children of surviving a pregnancy loss, I found others who knew or guessed they had lost a sibling by stillbirth, miscarriage, or abortion. When questioned it appeared that these children had a surprisingly accurate knowledge of their mother's pregnancy outcome(s).

Since the description of the Post-Traumatic Stress Disorder was first devised, 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. (1999), in their study of the Oklahoma City bombing survivors, found 45% exhibited symptoms of the Post-Disaster Psychiatric Disorder (PDPD) and 34.3% of exhibited symptoms 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.

Method

The present study is an extension of a research project whose protocol and procedures were approved by the UBC medical ethics. The sample was composed of 293 adults, 85% women and 13% men. Of these, 56.4% were married, 23.4% single, and 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 of these subjects was 2.07. The average number of hospitalisations, which included giving birth, was 3.61. According to Statistics Canada, this sample is reasonably representative of the general population. Ninety-eight in the clinical 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 as 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 (Ney, Fung, Wickett, & Beaman-Dodd, 1994).

The hypotheses we tested were: 1) There is a characteristic constellation of signs and symptoms sufficiently specific to constitute a syndrome for those who survived an abortion, 2a) The symptoms of those whose sibling died by abortion are significantly different from those who survive a sibling's miscarriage and 2b) The existential dilemmas that arise from being an abortion survivor create unique symptoms.

Results

The questionnaire made it possible to analyze 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, 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. The frequency of full term normal birth weight pregnancies and pregnancies that end in abortion in our sample approximate those of the general Canadian population.

To determine the validity of the subject's perception of outcome of their mother's pregnancies we asked them how they found out. Most indicated they were told what happened by their mothers.

Table 1

How I Found Out About My Mother's Pregnancy Loss

	Frequency	Percent	Cumulative Percent
No response, N/A	120	41.4	41.4
Mother told me	97	33.4	74.8
Father told me	5	1.7	76.6
Sibling told me	7	2.4	79.0
I asked	12	4.1	83.1
Still not sure	30	8.0	90.9
Family or friend told me	4	1.4	92.1
Other way	7	2.4	94.5
Discovered evidence	5	1.7	96.2
Overheard conversation	11	3.7	100.0
TOTAL	290	100.0	

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 2

How My Children Found Out About My Pregnancy Loss

	Frequency	Percent	Cumulative Percent
I told them	84	29	29
My spouse told them	17	5.9	34.9
Sibling told them	3	0.1	35.9
Parent told them	1	0.3	36.2
Friend told them	1	0.3	36.5
Family member told them	2	0.7	39.2
They asked	6	2.1	41.3
Overheard conversation	5	1.7	43
They discovered evidence	2	0.7	45.7
They don't know	40	13.8	69.9
No response	85	85	100

To help establish the validity of our questionnaire we analysed the symptoms that one would expect clinically to be associated with the presence of suicidal thoughts and repeated depressions. The significant associations are appropriate and are mainly those of the hypothesized post abortion syndrome.

Table 3
Subjects' Present Problems and Symptoms

	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

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 "Abortion 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 to one's self.

Table 4
Symptoms Most Closely Associated with "I Feel As Though I Don't Deserve To Be Alive" (PASS)

	Unstandardized Coefficients B	T	Sig
I am not glad to be alive	.428	7.117	.000
I feel something terrible is going to happen to me	.202	4.772	.000
I have injured myself	.141	3.521	.000
I fear I am losing my mind	.172	3.481	.001
I have tried to kill myself	.128	2.403	.017

The sense of not deserving life appears to be associated with abortion rather than other pregnancy outcomes of the subjects' mothers' first pregnancy. There are predominately negative associations to existential conflicts with other types of pregnancy losses (Table 5).

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 6).

In Table 7, 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 not worth living" is sadness. 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).

When questions about the mother's abortion or the chance of being aborted are asked separately there are somewhat different closely associated symptoms but all are part off what could be called the Post Abortion Survivor Syndrome (PASS).

Table 5
Existential Guilt and All Pregnancy Outcomes of Subjects' Mother's First Pregnancy

Included Variables	Unstandardized Coefficient B	T	Sig
Dependent Variable "I feel I don't deserve to be alive"			
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

Stepwise regression with cut off p. <0.05

Table 6
Partial Correlation Coefficients of 16 Symptoms

	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 Controlling for age, sex, marital status and number of children.

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 7

Most Prominent Symptoms Associated with Abortions of the Mothers of the Subjects

Dependent variable in response to following questions	Unstandardized Coefficient B	T	Sig
1. 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
2. Poor chances of survival before I was born (0 - 8)			
a) I have feelings that things are unreal	.353	3.210	.001
b) I am not pleased with who I am	.213	2.078	.039
3. 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
4. Very upset about mother's pregnancy loss now (0 - 8)			
a) I feel I don't deserve to be alive	.214	2.715	.007
5. Statistically my chance of being aborted were very high (0-8)			
a) I have tried to kill myself	.337	5.414	.000
6. Total # of abortions in pregnancy. 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 $p < .05$

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

We did an analysis to determine the most prominent symptoms of those who survived when unborn siblings were miscarried. We found that the only two symptoms of statistical significance, whichever way we asked the questions were: "I feel life is worth living" ($p < 0.000$ to 0.037) and I feel angry ($p < 0.001$). There were no significant associations of any of the 16 symptoms for premature births, still births, or early infant deaths.

There were 3 t tests on matched pairs of the subject's mothers: a) those who in their first pregnancy had a full term pregnancy compared to those who did not. B) those who had a miscarriage in their first pregnancy compared to those who did not and c) those who had an abortion in their first pregnancy compared with those who did not.

There was no significant difference in these three groups with regard to 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 just the two groups, a) those whose mother aborted her first pregnancy, b) those who did not, the significant differences in the symptoms were "I feel I don't deserve to be alive" and "I have injured myself" as the response for group a.

We determined the problems in the abortion survivor's present life when there had been a high chance of being aborted, based on the subject's mothers' total number of abortions. We found there were statistically significant associations with an inability to trust others and troubling dreams. We also found low self esteem and feelings of being haunted were significantly associated with this circumstance.

The past problems the abortions survivors reported included: frequent psychiatric hospitalisations, difficulty being a good parent, and suicidal thoughts. 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 associated past problems for those whose mother never had an abortion, but had had some other pregnancy loss.

Table 8
Most Prominent Symptoms Associated with Abortions of the Mothers of the Subjects

Dependent Variables	Unstandardized Coefficient B	T	Sig
1. # abortions in first pregnancy			
a) Psychiatric hospitalization	.095	2.012	.045
2. # 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
3. # 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
4. Feel poorly about mother's pregnancy loss now			
a) Poor physical health	.971	2.553	.011
5. 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 associated past problems for those whose mother never had an abortion but had some other pregnancy loss.

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 reported in the first pregnancy of all subject's mothers, 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. They tend to indicate the subject had a reasonably accurate awareness of their mother's pregnancy outcomes.

Table 9

Transgenerational 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 correlation coefficients controlling for age, sex and marital status.

- 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)

Although subjects are affected by other kinds of pregnancy loss, they currently feel more affected by their mother's abortion. Though there is greater variability, the unstandardized coefficient indicates that subjects are next more deeply affected by their mother's having experienced a 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. These symptoms appear to be more frequently violent, self-destructive tendencies and fears of impending doom.

Factors, as they are calculated by standard statistical techniques, derived from visual analogue scales are represented here 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 10

Most Prominent Symptoms in Descending Order of Impact for PASS

Response	Symptom
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	Obsessive thinking
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.

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 live 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. 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 detected by clinicians who leave questions regarding them from their usual patient evaluation.

The question of 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, those who had miscarriages, or those who had abortions. According to the independent t samples, there appears to be no detectable difference. This suggests that their symptoms were not the result of genetic predisposition or quality of family life but that their mother had an abortion rather than a full term baby or a miscarriage.

The next planned study will include more information from the mother and father of the subjects. When the dependent variable is responses to 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 survived 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. This is especially the case if the survivor was a "difficult child," for then the parents may have decided they don't want any more children lest they have another "like this one." Those who survive where there has been a miscarriage of a sibling survive an unplanned incident. They can, without self-recrimination, be glad that they are alive.

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 lowered self-esteem and an inclination to feel that they are being haunted; conceivably this sensation may be an image or a fantasy of the aborted child.

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 from day to day depending on mood, turmoil in a relationship, finances, etc. 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 (1978) speculated 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." (Ney & Peeters, 1996)

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 sacrificed 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 etiologies have 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 extreme stress could occur in the life of an abortion survivor on seeing for the first time a picture of an aborted fetus 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 fetus, they express distress but this tends not to last like the symptoms of PTSD.

The discovery of being an abortion survivor seems to be a gradual dawning of awareness rather than the sudden extreme stressor as 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 the guilt of surviving when others did not, but post abortion survivors have usually grown up with this sense. It almost feels familiar if not natural to them. Whereas PTSD sufferers are generally symptom free before being traumatized, PASS sufferers have symptoms starting in 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 who, in casual conversation or in therapy, broaches the subject of their mother's

abortion. PTSD sufferers seem to be most angry at whoever should have protected them from the traumas but for insufficient reasons did not.

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, also lends itself well to statistical analysis.

Using data from the range 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 this does not preclude such symptoms in the future when the subjects find themselves under added stress. The validity of the symptoms seems to be established by the higher correlation with high levels of anxiety, repeated depression, etc.

The overlap in symptoms between the different experiences of loss or mistreatment may indicate that, in many instances, there were common contributing factors. Other research in progress seems to indicate that 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.

The constellation of symptoms arising from the knowledge of, or strong suspicion of, their mother's aborting a child, especially it seems in the first pregnancy, seems logical in the light of the very difficult conflicts that arise. The abortion survivor feels guilty for existing and, therefore, can't enjoy life or fully use their opportunities and abilities. They may not have been told by their mother about her abortion, but there is often much circumstantial support for their suspicion and intuitive awareness. To be more certain, they may want to ask their mother but at the same time don't want to know for it is a most discomfoting revelation. Most survivors seem to "keep a ear open" even when their mind rejects the possibility. When they do find out for sure, they are both relieved and angry; relieved because it explains so well their inner turmoil and conflicted experience and angry because they have been deprived of a sibling with whom they could have shared their joys and sorrows.

Their existential conflicts may be so intense they begin to fear they are losing their mind, particularly because there doesn't seem to be any reason they should feel so torn. They may feel guilty not having done something to rescue their sibling, or by their very existence, or by their obnoxious behaviour that might have created a feeling in their parents of not wanting another child. Although they are afraid to die, they flirt with death, doing extreme sports or overdosing with drugs or alcohol. To reassure themselves they are alive, they may wish to see and taste their blood flowing from a self inflicted wound. They may sense they have lost a sibling and don't know how it may have happened. It is not surprising they have a sense of impending doom, "Whatever happened to my brother could also happen to me." Unlike the miscarriage survivors they are not glad to be alive, mainly it seems because life is so confused and painful. Over time we have developed a treatment program that seems to help abortion survivors (Ney, Ball, Shells, 2010). But, even with intensive psychotherapy resulting in symptomatic improvement, their key conflicts continue.

Miscarriage survivors feel glad to live and do not have the existential dilemmas of abortion survivors, yet there are some symptom similarities. The data for this may be explained by the sample having 98 outpatients. Why they are angry, we can't explain except for the possibility of their having lost a sibling they could have loved.

The transgenerational tendency of mothers to have an abortion may arise from a desire to understand why the subject's mother would choose to terminate her child by re-enacting that conflict (Ney, 1983; Ney, 1989; Ney, Fung, & Wickett, 1993). There is also evidence that unresolved conflicts of surviving parents are felt by their children (Krell, 1979). We need to redo this type of study controlling for the impact of abortion on the subject's ability to bond and nurture her subsequent babies following an abortion. In previous research we found that there was a higher incidence of post-partum depression in women who previously had an abortion. It appeared that the depression interfered with their ability to bond to her newborn infant. The lack of a strong, resilient bond may contribute to the subsequent higher incidence of abuse and neglect (Kersting & Ohrmann, 2009, Ney, Fung, Wickett 1993).

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 family of parents and two children were taking a seaside holiday. One day while playing along the top of

an unfenced 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 vigor. 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 seldom enjoying life.

This study collected a great deal of information that still needs to be analysed. As with our study on the effects of pregnancy losses on a woman's health (Ney, 2010), we need to collect data from a sample of patients, men and women, who are waiting to see their family physician. We need to collect data from couples in order to assess the reliability of the information supplied by men regarding their partner's pregnancy outcomes. We also need to include questions that address the concerns of men regarding their mothers and their partners.

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 (refer back to Table 10) 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 ask appropriate questions.

Unless the conflicts behind these dilemmas are addressed, it is unlikely that the expression of these conflicts, i.e., difficult to treat depressions or the repeated need for psychiatric admission, will subside. This study needs to be replicated with a larger sample. In the meantime, it behoves the practising clinician to ask appropriate questions 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 conflicts about life and living when a sibling was terminated.

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