Who is at Risk for Compassion Fatigue?
An Investigation of Genetic Counselor Characteristics

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Introduction

Background
Compassion fatigue is a state of detachment and isolation experienced when healthcare providers repeatedly engage with patients in distress. Compassion fatigue can hinder empathy and cause extreme tension. Prior research suggests 73.8% of genetic counselors are at moderate to high risk for compassion fatigue and approximately 1 in 4 have considered leaving the field as a result. Empirical data to establish a reliable profile of genetic counselors at risk for compassion fatigue are limited, however.

Purpose
The purpose of this study was to establish a profile of at-risk counselors by assessing relationships between state and trait anxiety, burnout, compassion satisfaction, selected demographics and compassion fatigue risk in practicing genetic counselors.

State anxiety is "subjective feelings of tension, apprehension, nervousness, and worry" at a given moment in time.
Trait anxiety is "individual differences in anxiety-proneness."

Research Questions
1. Do currently practicing genetic counselors have high state and trait anxiety levels, comparable to previous levels found in genetic counseling students?
2. Can state and/or trait anxiety levels predict compassion fatigue risk in genetic counselors?
3. What is the relationship between anxiety, burnout, compassion satisfaction, and compassion fatigue?
4. Do select genetic counselor demographic characteristics predict compassion fatigue?

Methods

Online survey was distributed through the National Society of Genetic Counselors (NSGC; *N*=2,360) and the Canadian Association of Genetic Counselors (CAGC; *N*=266) listservs.

- 467 individuals responded (~response rate=18.3%)
- 402 met inclusion criteria (~ usable rate=86.1%)

The survey consisted of the Professional Quality of Life scale (ProQOL 5; Stamm, 2010), the State-Trait Anxiety Inventory (STAI; Spielberger, 1983), and 13 demographic questions.

Data analysis was conducted in 2 phases:
- Quantitative analyses including descriptive statistics and multiple regression analysis calculated for survey responses
- Interpretive content analysis for tresponses to the open-ended items

Results: Participant Demographics

Gender: 392 females, 8 males

Age: Mean= 34.4 years (*SD*= 9.5; Range= 23-66)

Ethnicity: 380 Caucasians, 8 Asian/Pacific Islander, 5 African American/Black, 5 Hispanic/Latino(a), 1 Multi-racial, 3 Other

Genetic Counseling Experience: Mean=7.8 years (*SD*= 7.8; Range= 1-37)

Number of Genetic Counselor Co-Workers: Mean=4.2 (*SD*= 5.1; Range= 0-30)

Number of Participants Seen Per Week: Mean=10.4 (*SD*= 6.7; Range= 0-50)

Most Prevalent Specialties: Prenatal (33.1%) and Cancer (28.4%)

Results: Compassion Fatigue Familiarity and ProQOL

Genetic Counselors' Familiarity with Compassion Fatigue

Respondents were asked, "How would you rate your familiarity with the concept of compassion fatigue?" The mean compassion fatigue familiarity score was 2.6 (*SD*=0.8; Range= 1-4), which indicates the respondents considered themselves fairly familiar with the concept of compassion fatigue.

ProQOL 5 Means, Standard Deviations, Ranges, and Risk Level Classifications for Participants

Scale	M	SD	Range	Risk Level[a] High	Average	Low
Compassion Satisfaction	41.15	5.42	23-50	181 (45)	204 (51)	17 (4)
Burnout	21.11	5.33	10-40	77 (19)	273 (68)	52 (13)
Compassion Fatigue	19.37	4.87	10-37	245 (61)	157 (39)	0 (0)

Note. N = 402; [a]presented as *n* (%); higher scores on the ProQOL 5 subscales indicate a greater risk for compassion fatigue and burnout, and greater satisfaction or sense of achievement with respect to doing one's work well.

Results: STAI Scores

Comparison of Genetic Counselors' State and Trait Anxiety Scores to Other Published Studies

Group	N	M	SD	t	p	Cohen's d [95% CI]
State anxiety						
Genetic counselors	402	36.75	9.56			
Genetic counseling students[a]	213	45.0	5.0	-14.05	<.001*	-1.00 [-1.17, -0.82]
Working adult females[b]	451	35.2	10.6	2.25	.012*	0.15 [0.02, 0.29]
Trait anxiety						
Genetic counselors	402	37.59	8.55			
Genetic counseling students[a]	213	44.5	4.1	-13.53	<.001*	-0.94 [-1.12, -0.77]
Working adult females[b]	451	34.8	9.2	4.59	<.001*	0.31 [0.18, 0.45]

Note. Scores can range from 20-80 on each subscale; higher scores indicate greater anxiety; [a]Source: Jungbluth et al. (2011); [b]Source: Spielberger et al. (1983); *significant at Bonferroni adjusted α= .0125.

Results: Predictors of Compassion Fatigue

Multiple regression analysis yielded four significant predictors which increase compassion fatigue risk (accounting for 48% of the variance):

- Higher levels of trait anxiety (p<.001), burnout (p<.001), and compassion satisfaction (p<.001)
- Ethnicity other than Caucasian (p= .009)

In contrast, there were no statistically significant associations between compassion fatigue and country of practice, years of experience, compassion fatigue familiarity, or relationship status.

Results: Qualitative Analysis

The final survey item invited additional comments, and 42 individuals (10.4%) responded. Their responses were categorized into four themes:
1. Personal life stressors (*n*=23),
2. Burnout factors (*n*=10),
3. Being new or isolated (*n*=5)
4. Compassion fatigue factors (*n*=4)

Comments pertaining to personal life stressors were further categorized into five categories (general, death, pregnancy, parenting demands, and ABGC certification exam).

Discussion

- Approximately one-third of respondents reported not having received any education about compassion fatigue, suggesting at least some genetic counselors may lack sufficient knowledge about compassion fatigue to recognize its signs and take adequate measures to address their risk

- Genetic counselors with high compassion satisfaction are more motivated to do well professionally since they enjoy their work, which can backfire when these counselors face uncontrolled situations that threaten their sense of adequacy as professionals.

- Genetic counselors who self-identified as other than Caucasian may feel more isolated with respect to support and/or may have experienced racial micro-aggression in the workplace.

Study Limitations
- This study was cross-sectional and correlational, and thus causal connections cannot be made between the variables measured.
- Although this is the largest study yet conducted on compassion fatigue risk among genetic counselors, an estimated response rate of 18.3% raises questions about generalizability of the findings.

Practice Implications
- A need for interventions to address compassion fatigue risk among genetic counselors
- More education and support in the workplace, peer discussion, formal peer supervision, and interventions by professionals from outside the work setting could be implemented.

Research Recommendations
- Further studies to examine state and trait anxiety levels in genetic counselors as this is the only study to examine these variables and their association with compassion fatigue risk.
- Additional studies of the relationship between compassion fatigue and compassion satisfaction as this study found a reverse relationship between the two variables in contrast to previous investigations, which found an inverse relationship.
- Interventions targeting genetic counselors with high state and trait anxiety and burnout risk could be designed to help them recognize and manage these phenomena.

Conclusion

Compassion fatigue is a state of detachment and isolation experienced when healthcare providers repeatedly engage with patients in distress. Compassion fatigue can hinder empathy and cause extreme tension. In this study, genetic counselors were all at moderate or high risk of compassion fatigue. The profile of a genetic counselor at highest risk for compassion fatigue includes tending to have high trait anxiety, high burnout, high compassion satisfaction, and self-identifying as an ethnicity other than Caucasian. There is a need for interventions to address compassion fatigue risk and related factors.

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