Countertransference, Defense Mechanisms, and Vicarious Trauma in Work With Sexual Offenders

Alcina J. S. Barros, MD, PhD, Stefania P. Teche, MD, Carolina Padoan, MS, Pricilla Laskoski, PhD, Simone Hauck, MD, PhD, and Claudio L. Eizirik, MD, PhD

This study aimed to examine the associations between countertransference induced by sex offenders, defense mechanisms, and manifestations of vicarious trauma in forensic psychiatrists and psychologists. A cross-sectional study using a mixed-methods design was performed with 56 Brazilian forensic psychiatrists and psychologists from October 2016 to May 2017. Countertransference, defense mechanisms, and vicarious trauma were assessed with the Assessment of Countertransference Scale, the Defense Style Questionnaire-40, and the Trauma and Attachment Belief Scale (TABS), respectively. Qualitative data analysis based on grounded theory was also performed to explore the influence of sex-offender assessments on the experts' personal and professional lives. Positive and moderate correlations were found between feelings of indifference and the Other-Safety TABS subscale (rho .43, $P < .01$) and between immature defense mechanisms and TABS total score (rho .45, $P < .01$). Qualitative data revealed changes in the professionals' identity, worldview, and beliefs related to safety and trust. Specific maladaptive coping strategies, such as feelings of indifference and immature defenses, during the assessment of sex offenders were associated with manifestations of vicarious trauma in forensic psychiatrists and psychologists. These findings indicate the need for awareness and care about the forensic expert's mental health.

J Am Acad Psychiatry Law 48(3) online, 2020. DOI:10.29158/JAAPL.003925-20

Forensic psychiatrists and psychologists are intellectually and emotionally challenged during their daily work. They must assess and comprehend complex individuals who have committed a variety of crimes, and some of these individuals have severe psychopathology. The assessment of sex offenders is currently gaining increasing attention from the international media because of the disclosure of many cases involving public figures, exemplified by the Me Too movement.[1] Sexual violence represents profound violations of an individual's body and emotions.[2] When assessing sexual aggressors, experts encounter narratives and records of violence, abuse, and perversion. The emotional hardships associated with working with survivors of rape and violence have been described previously.[3-6] An understanding of emotional hardships experienced in working with perpetrators of sexual violence is starting to gain scientific attention.[7-9] Assessing and treating the offenders, at least in adults, is critical in preventing sexual violence and reducing victimization.[10]

Experts' feelings toward forensic evaluees, for which we use "countertransference" as shorthand, can provide important information during the forensic assessment. Problems of countertransference confront forensic psychiatrists and psychologists at all stages of practice.[11] Usually years of experience are necessary for a forensic psychiatrist to perform the

Published online May 13, 2020

Dr. Barros is a forensic psychiatrist in the Department of Psychiatry and Behavioral Sciences, Federal University of Rio Grande do Sul/Brazil (UFRGS), Porte Alegre, Brazil. Dr. Teche is a clinical psychiatrist at Hospital de Clinicas de Porto Alegre/HCPA, UFRGS, Porto Alegre, Brazil and PhD student at UFRGS. Ms. Padoan is a psychotherapist and PhD student in Psychiatry and Behavioral Sciences at UFRGS. Dr. Laskoski is a clinical psychologist in Psychiatry and Behavioral Sciences at UFRGS. Dr. Hauck is Professor, Department of Psychiatry and Legal Medicine and the Post Graduate Program in Psychiatry and Behavioral Sciences at UFRGS. Dr. Ezirik is Emeritus Professor, Department of Psychiatry and Legal Medicine and the Post Graduate Program in Psychiatry and Behavioral Sciences at UFRGS. Adress correspondence to Dr. Barros. E-mail: alcina.forense@gmail.com.

Disclosures of financial or other potential conflicts of interest: None.

Copyright 2020 by American Academy of Psychiatry and the Law.

work with integrity.[12] A previous study that investigated whether clinicians and researchers differed in their violence risk assessment of the same forensic psychiatric patient showed that clinicians' feelings toward their patients were associated with their risk judgment. Feelings of being controlled and manipulated by the patient were associated with higher Historical Clinical Risk Management-20 (HCR-20) scores, whereas positive feelings (e.g., helpful, happy, and relaxed) were associated with lower risk judgments.[13]

Vicarious trauma (VT) was first described as the profound and unique psychological effect on psychotherapists of working with sexual violence survivors.[14] Empathic engagement with clients' trauma experiences and their sequelae results in a transformation that occurs within the therapist or other trauma worker.[15] Being exposed to graphic descriptions of human cruelty can affect the personal and professional attributes and ethical behavior of the therapist.[16]

McCann and Pearlman[14] make several important observations about the "profound psychological effects . . . that can be disruptive and painful" (Ref. 14, p 133) for therapists. Despite their advanced training and supervision, therapists "are not immune to the painful images, thoughts, and feelings associated with exposure to their clients' traumatic memories" (Ref. 14, p 132). "As a result, therapists may become suspicious of other people's motives, more cynical, pessimistic or distrustful" (Ref. 14, p 138) and "may experience a heightened sense of vulnerability and an enhanced awareness of the fragility of life" (Ref. 14, p 139). They may become concerned about their "own sense of power or efficacy in the world" and "may experience a sense of alienation" (Ref. 14, p 139, 141). Additionally, some therapists who work with perpetrators of sexual abuse have reported that VT can occur as a short-term reaction to working with particular clients or as a long-term alteration in the therapist's own cognitive schemas, or beliefs, expectations, and assumptions about self and others.[14,17]

The term VT is often used interchangeably with other phenomena, such as burnout syndrome, compassion fatigue, and secondary traumatic stress. These terms have identifiable differences in terms of their sources, processes, and manifestations[18,19] Pearlman and Saakvitne[16] have explained that VT and burnout are different constructs. Whereas VT results in profound disruptions in the therapist's frame of reference and is a natural response to a very specialized kind of highly demanding work with trauma material, burnout syndrome represents the emotional exhaustion resulting from the stress of interpersonal contact and the gap between expectations and aspirations, on the one hand, and depleting workplace conditions on the other hand.[16] Compassion fatigue represents deep feelings of suffering, sorrow, or sympathy (to the point of exhaustion) that are associated with a desire to alleviate the suffering of another person. It reduces therapists' capacity or their interest in bearing the suffering of others.[17,20] Secondary traumatic stress is conceptualized as "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person" (Ref. 21, p 10). Burnout and compassion fatigue can occur with any type of client work, whereas secondary traumatic stress and VT are specific to work with trauma survivors or perpetrators.[8,9,18] Although these effects are all occupational hazards and some can occur simultaneously, we focus our investigation on VT.[16,22]

Research on VT among sex-offender treatment providers has reported mixed results; exploratory or qualitative studies have reported high levels of VT, whereas studies using quantitative measurements of VT have reported only mild to moderate levels of VT.[6,23-28] The qualitative analysis from an exploratory study of sex-offender treatment providers across correctional settings in Australia reported that significant minorities of the sample reported heightened concerns for their own or others' safety or increased suspicion of other people's behavior after working with sex offenders, indicating shifts in cognitive schema commonly associated with VT.[14,28] It is still an empirical question whether VT among professionals who work with sexual offenders is similar to or different from VT among those who work with victims of sexual and domestic violence.

Studies have previously indicated that some therapists' countertransference concerns specific to sex offenders, such as sadistic and aggressive fantasies, polarization of the client (i.e., victim versus offender), and barriers to empathic engagement with the client, occur when the therapist focuses on the offense or the offender's denial.[29] Concerning forensic experts, Barros *et al.*[30] identified a predominance

of negative feelings, such as disgust, anger, mistrust, and fear, in 26 Brazilian forensic psychiatrists during the evaluation and care of sex offenders. After this preliminary study, questions emerged concerning the possibility that the nature and intensity of countertransference could be associated with VT in forensic experts. Pearlman and Saakvitne[16] have suggested that the processes involved in the interaction between countertransference and VT in therapists are decreased self-awareness, increased defenses, and challenges to identity and beliefs.[16] In addition, the experts' defense mechanisms were considered important to investigate because impulses, wishes, images, and obscure feelings that are upsetting or associated with conflict enter the consciousness. Awareness of this occurrence induces anxiety, which in turn activates the ego defenses.[31]

The topics of countertransference or bias and VT among forensic mental health professionals is gaining increased attention in the scientific literature; however, it is still a relatively understudied topic. It is important to recognize that countertransference/bias and VT have separate but potentially overlapping dynamics. Recurring challenges for forensic psychologists include disliking or feeling sympathy for the defendant, disgust or anger toward the offense, limited cultural competency, preexisting values, colleagues' influences, level of experience, and the influence of interested others.[32] The findings from a qualitative, exploratory study in Australia indicated that many forensic mental health clinicians felt that they needed to maintain emotional distance from forensic patients, particularly individuals who had killed while experiencing a mental illness, to maintain their own sense of safety and to prevent their own VT.[33] It is interesting to note that, although some therapists who work with sex offenders are negatively affected by their work, a considerable number of these therapists find satisfaction in their work, considering it rewarding precisely because of its challenging nature.[8,9]

Until now, the relationships among countertransference, defense mechanisms, and VT have not been examined in a forensic psychiatry setting. Because VT can lead to a change of beliefs over a longer period of time, this study used a mixed-methods investigation to examine the associations between countertransference reactions induced by the last interview with a sex offender, defense mechanisms, and VT in a sample of Brazilian forensic psychiatrists and psychologists. This study also aimed to describe and better understand the professional and personal effects related to sex-offender assessments on forensic experts.

Methods

Study Design and Ethics

This was a cross-sectional study with a mixed-methods design. The underlying logic of utilizing a mixed-methods approach was that neither quantitative nor qualitative methods were sufficient in themselves to capture the trends and details of the situation. The data were integrated during the research process.[34] The quantitative data collection involved a questionnaire about participants' demographic information and three standardized psychometric scales that described the sample and provided information on the forensic psychiatrists' and psychologists' countertransference, defense mechanisms, and VT. A qualitative analysis was used to gain a deeper understanding of the influence of sex-offender assessments on assessors' personal and professional lives.

According to Charmaz,[35] grounded theory, which is characterized by inductive exploration of a social process and the creation of an explanatory, descriptive theory based on the data collected, is an appropriate methodology for qualitative assessments. In this approach, researchers' assumptions shape their actions during research and affect whether, when, how, and to what extent their standpoints change throughout the research process.[36] Grounded theory allows researchers to develop knowledge in areas where little is known about a phenomenon to capture subtleties, which is precisely the situation regarding countertransference, defense mechanisms, and VT in a forensic setting.[37] The integration of methods called for collecting quantitative and qualitative data concurrently. Informed consent was obtained from all study subjects. The research protocol was approved by the Federal University of Rio Grande do Sul Institutional Research Ethics Board (CAAE: 55151116.4.0000.5347).

Participants

Included in this study were forensic psychiatrists or psychologists and forensic experts listed in all Brazilian Regional Councils of Medicine and Psychology who could be contacted. Professionals who did not allow the disclosure of their contact information

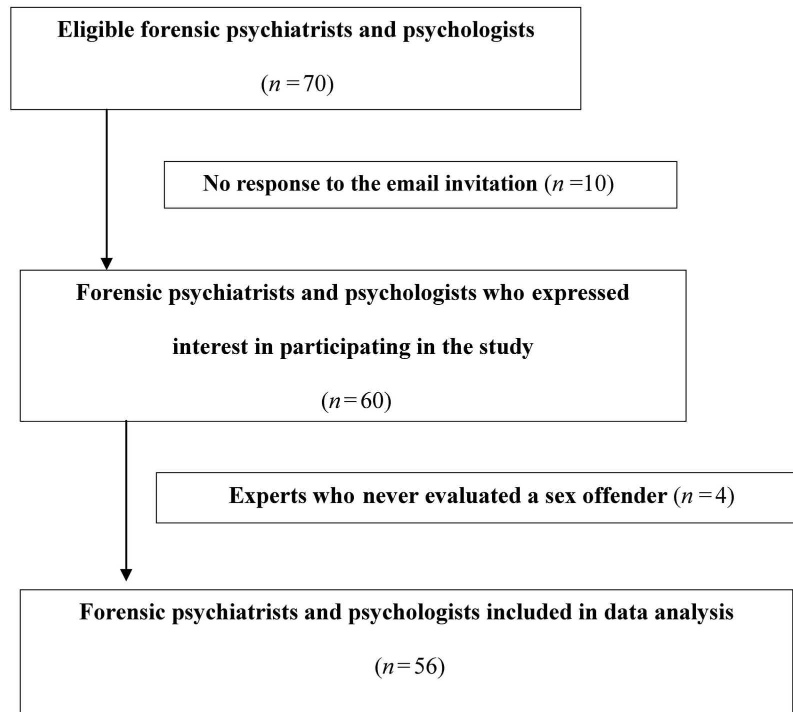

Fig. 1. Flow chart for selection of study participants.

could not be reached. Brazilian forensic psychiatrists and psychologists are the professionals who address questions arising in the interface between mental health and the law (i.e., criminal and civil cases). They can perform evaluations for the court and provide treatment for persons with mental illness in forensic institutions and prisons.

Convenience sampling was used, and participant recruitment occurred between October 2016 and May 2017. All forensic psychiatrists and psychologists with contact information available received an e-mail invitation describing the purpose and content of the study. This e-mail clearly stated that participation was voluntary and that data would be processed anonymously through the work of two different coauthors: one received the materials (each participant got an alphanumeric code), printed them and gave them to the second, who organized the information in Excel tables. Experts had approximately four weeks to consider their potential participation. At the end of this time period, if no answer had been received, the expert was excluded from the study. Forensic experts with no experience assessing sex offenders for the court and treating them in forensic or clinical settings were also excluded (Fig. 1). To standardize the collection of data in relation to the type of forensic assessment, the following transgressions of the law were considered sex crimes: rape, sexual abuse of children, Internet child pornography, and sexual homicide. A review of literature has previously shown the impact of these crimes on therapists and sex offender researchers.[2,17]

Measures

The primary data collection method used for grounded theory assessment was a self-report questionnaire, not an interview, because our participants came from different parts of Brazil, a country of continental proportions. This method also allowed participants the privacy to think about the specific details of their most recent sex offender case and their feelings about and reactions to the case. The questionnaire covered the following topics: gender, age, profession (psychologist or psychiatrist), length of forensic expertise, history of personal psychotherapy treatment, psychotherapeutic training, and the date of the last sex-offender assessment.

We performed a literature review at the beginning of the study to avoid conceptual mistakes, to stimulate questions, and to discover the extent of previous knowledge.[38] Then, based on VT studies,[2,3,17,30,39,40] we developed three comprehensive, open-ended questions with the objective of encour-

aging the participants to assess their specific experiences of work with sexual crimes:

> How do you maintain your professional attitude during the assessment of a sex offender?
>
> Do you continue thinking about the assessment after it has been performed?
>
> What is the influence of this type of assessment on your life?

Countertransference was evaluated with the Assessment of Countertransference Scale (ACS), original version,[41] which is a Brazilian self-report instrument that assesses countertransference through 23 items scored on a Likert-type scale (0 = absent to 3 = highly present). The expert was oriented to recall the last interview with a sex offender and to divide the interview into three sections (i.e., start, midpoint, and end) to determine how feelings varied over the forensic evaluation and produce a mean score among them. Each assessed feeling is part of one of three conceptual categories: closeness (i.e., curiosity, interest, sympathy, solidarity, affection, wish to help, happiness, sadness, pity, and attraction), distance (i.e., discomfort, mistrust, boredom, rejection, despair, reproach, accusation, irritation, fear, and hostility) and indifference (i.e., disinterest, distance, and immobility).

Defense mechanisms were evaluated with the Brazilian-Portuguese version of the Defense Style Questionnaire-40 (DSQ-40), a 40-item self-report questionnaire scored on a Likert-type scale (1 = disagree strongly to 9 = agree strongly) that assesses 20 defenses.[42-44] The 20 defenses are grouped into three defense styles or factors (i.e., immature, mature, and neurotic).

VT was evaluated with the Brazilian-Portuguese version of the Trauma and Attachment Belief Scale (TABS), an instrument based on constructivism self-development theory, which is a theory of personality in which the underlying premise is that human beings construct their own personal realities through the development of complex cognitive structures that are used to interpret events and evolve throughout a life span as individuals interact with their meaningful environment.[14,45,46] The 84-item TABS is used to assess disruptions in cognitive schemas in the following five areas: control, esteem, intimacy, safety, and trust. The TABS uses a Likert-type scale (1 = disagree strongly to 6 = agree strongly) to produce a total score and 10 subscales that measure each area in relation to one's self and others: self-safety, other-safety, self-trust, other-trust, self-esteem, other-esteem, self-intimacy, other-intimacy, self-control, and other-control. The TABS has been used by researchers to assess the effects of VT.[47,48] Higher scores indicate greater belief disturbance.

Procedure

Materials were sent to experts who accepted the invitation.The materials included a brief guideline asking the experts to think about their last forensic assessment of a sex offender when completing the instruments, a questionnaire, and the consent form. The responses were completed by the participants and returned to the research team via e-mail or postal service.

Data Analysis

Analyses were conducted for individual total scores for each instrument, for each countertransference factor in the ACS, for each defensive style in the DSQ-40, and for each VT subscale in the TABS. Spearman's correlation analyses were performed to evaluate the strength and direction of correlations between countertransference and VT and between defensive style mechanisms and VT. A statistical significance level of .05 was adopted for all statistical comparisons. The quantitative analyses were conducted using STATA version 12 (StataCorp, College Station, Texas). Qualitative data were analyzed using the NVivo program (QSR International, Doncaster, Australia).

The analysis of the qualitative data occurred in several simultaneous stages, consistent with grounded theory methodology.[49] Because grounded theory demands reflexivity, we engaged in routine reflection on how our own perspectives might influence our developing analysis. For the purpose of sharing key contextual information with readers, we report that the principal researcher (A.J.S.B.) is a forensic psychiatrist with an interest in psychodynamic psychotherapy, and her co-authors are clinical psychologists and psychiatrists with roles in educational research. The principal researcher was able to gain further diverse subjective input from her co-investigators' viewpoints during the process. NVivo software was used to organize coded data once major themes were identified through the process of manual open coding. Immediately after receiving the

questionnaires, the researchers transcribed the answers in the NVivo software and wrote memos to gain insight into the data. Transcripts were analyzed using a constant and iterative comparative method. Researchers analyzed the answers using line-by-line open coding and assigned a theme to each line of the transcript. When themes frequently reoccurred, the researchers held discussions, and one investigator wrote memos recognizing the emerging themes that could be part of a potential theory. The coding process continued after the identification of several key components by identifying how each line fit into a theme or recognizing a new theme that had not yet arisen in the theory. Themes and the understanding of the relationships between them in the larger theory were continuously improved through memo writing and discussions. When no new data appeared to emerge from the answers from the questionnaires, the research team met and agreed that theoretical saturation had been reached. Subsequently, another researcher who was not included in the previous phases analyzed two randomly selected transcripts to ensure intercoder reliability. A discussion between the researchers revealed agreement on all of the major codes. Finally, the research team met to agree on the final codes, and all of the transcripts were reexamined to ensure that no relevant data had been missed. It should be noted that some grounded theory methods include more steps than this study did.

Results

A total of 56 forensic psychiatrists and psychologists (of 70 eligible subjects) were included in the study. The sample characteristics are presented in Table 1. Individuals had an average forensic practice duration of 10.5 years (interquartile range [IQR] 4.0–22.5), and most (91%) had an extensive prior history of personal psychotherapy treatment in different modalities, such as psychoanalysis, dynamic psychotherapy, and cognitive behavioral therapy. Moreover, the experts answered the instruments and questionnaires while thinking about the most recent sex-offender assessment, which occurred a median of 4.5 months (IQR 2.0–24.5) before the data collection.

Standardized Measures

Investigation of whether countertransference reactions were associated with VT indicated that only the indifference factor was affected (Table 2), which includes feelings such as disinterest, distance, and immobility. The results indicated that these feelings emerged during the experts' recall of their last sex-offender assessment. Indifference was positively and moderately (rho .43, $P = .002$) associated with the other-safety TABS subscale. Subgroup correlational analyses (Table 3) indicated that experts with 10.5 years or less of forensic expertise showed a positive and moderate correlation between indifference and VT scores (rho .43, $P = .02$). Moreover, experts without previous personal psychotherapy treatment showed a very strong correlation between TABS scores and indifference scores (rho .89, $P = .04$), whereas experts with previous treatment showed a significant, positive, but weak correlation (rho .29, $P = .03$). There was a positive correlation between immature and neurotic factors and the TABS total

Table 1 Characteristics of the Study Population

Variable	Statistic
Age, y	45.5 (33.5–56.0)
Female sex	28 (50.0)
Profession	
Forensic psychiatrist	37 (66.0)
Forensic psychologist	19 (34.0)
Length of forensic expertise, years	10.5 (4.0–22.5)
Previous psychotherapy	51 (91.0)
Length of psychotherapy, y	8.0 (4.0–12.0)
Psychotherapy expertise	34 (60.7)
Time between forensic evaluation and study participation, months	4.5 (2.0–24.5)

n = 56 participants. Data are presented as *n* (%) or median (interquartile range).

Table 2 Spearman Correlation Coefficients for the Association Between Countertransference and Vicarious Trauma Scores

	Closeness	Distance	Indifference
Total TABS Score	−.06	.11	.28*
Self-safety	−.03	.23	.25
Other-safety	−.11	.22	.43*
Self-trust	.24	−.02	.07
Other-trust	−.17	.02	.04
Self-esteem	.01	−.05	.09
Other-esteem	−.19	.08	.16
Self-intimacy	.09	.12	.21
Other-intimacy	.10	−.10	.16
Self-control	−.03	.07	.25
Other-control	−.08	.05	.18

n = 56 participants.
Countertransference was evaluated with the Assessment of Countertransference Scale (ACS); vicarious trauma was evaluated with the Trauma and Attachment Belief Scale (TABS). The strength of correlation is classified as follows: .0–.19 = very weak; .20–39 = weak; .40–.59 = moderate; .60–.79 = strong; .8–1.0 = very strong.
* $P < .01$.

Table 3 Subgroup Analysis of Correlations Between Indifference and Vicarious Trauma Scores

	Spearman Coefficient for the Correlation Between TABS and Indifference Scores	*P*
Gender		
Male	.30	.11
Female	.31	.10
Profession		
Psychiatrist	.23	.16
Psychologist	.29	.21
Length of forensic expertise		
> 10.5 y	.32	.08
≤ 10.5 y	.43	.02
Previous psychotherapy		
Yes	.29	.03
No	.89	.04
Psychotherapy expertise		
Yes	.21	.21
No	.39	.06
Time between forensic evaluation and study participation		
> 4.5 months	.35	.06
≤ 4.5 months	.14	.47

n = 56 participants.
Indifference was evaluated with the Assessment of Countertransference Scale (ACS); vicarious trauma was evaluated with the Trauma and Attachment Belief Scale (TABS). The Spearman correlation coefficient is demonstrated in the table. The strength of correlation is classified as follows: .0–.19 = very weak; .20–39 = weak; .40–.59 = moderate; .60–.79 = strong; .8–1.0 = very strong.

Table 4 Spearman Correlation Coefficient for the Association Between Defense Mechanisms and Vicarious Trauma Scores

	Mature	Mature Without Rationalization	Immature	Neurotic
Total TABS Score	−.11	−.05	.45*	.30**
Self-safety	−.11	−.07	.15	.15
Other-safety	−.02	−.00	.26**	.22
Self-trust	−.29**	−.23	.29**	.17
Other-trust	−.00	.06	.26	.06
Self-esteem	−.24	−.17	.31**	.22
Other-esteem	.03	.11	.06	.06
Self-intimacy	−.11	−.09	.16	.10
Other-intimacy	−.09	−.07	.44*	.16
Self-control	−.10	−.03	.50*	.40*
Other-control	.00	.05	.55*	.26**

n = 56 participants.
Defense mechanisms were evaluated with the Defensive Style Questionnaire (DSQ); vicarious trauma was evaluated with the Trauma and Attachment Belief Scale (TABS). The strength of correlation is classified as follows: .0–.19 = very weak; .20–39 = weak; .40–.59 = moderate; .60–.79 = strong; .8–1.0 = very strong.
* $P < .01$; ** $.01 \le P < .05$.

score as well as the other-safety, self-trust, self-esteem, other-intimacy, self-control, and other-control subscales (Table 4). Immature factors were positively and moderately correlated with the TABS total score (rho .45, $P < .001$), other-intimacy subscale score (rho .44, $P < .001$), self-control subscale score (rho .50, $P < .001$) and other-control subscale score (rho .55, $P < .001$). Subgroup correlation analyses (Table 5) indicated that female experts showed a positive and moderate correlation between TABS and neurotic defense mechanisms scores (rho .43, $P = .2$); forensic psychologists showed a positive and strong correlation between TABS and immature defense mechanism scores (rho .62, $P < .01$), as well as a positive and moderate correlation between TABS and neurotic defense mechanism scores (rho .49, $P = .03$); professionals with more than 10.5 years of forensic expertise showed a positive and moderate correlation between TABS and immature defense mechanism scores (rho .50, $P < .01$); and experts without previous personal psychotherapy treatment showed a positive and very strong correlation between TABS scores and immature defense mechanisms scores (rho .90, $P = .03$) and between TABS scores and neurotic defense mechanisms scores (rho .90, $P = .03$). We did not find significant gender differences in ACS scores, TABS scores, or DSQ scores.

Qualitative Data

A total of 56 questionnaires were completely answered; 47 forensic psychologists and psychiatrists (83%) reported that they continued thinking about the case after assessing a sex offender. In our analysis of the content of the responses, we focused on the professional and personal effects related to sex-offender assessments on forensic experts. Our theory of the impact of the sex-offender assessment on forensic experts encompasses three main areas of interest: professional life, personal life, and belief and value systems. Our hypothesis is that all of these areas would require the forensic psychiatrist and psychologist to apply a constant self-monitoring (consisting of self-observation and self-control) of emotions, cognition, and behavior. Experts would use skills from all areas of the theory, verifying them based on the case circumstances and taking the necessary measures to manage inappropriate repercussions. In some cases, these different areas can overlap, blurring the differences between them; activities in one area could be used to facilitate success in another area. Each com-

Table 5 Subgroup Analysis of Correlations Among Immature and Neurotic Defense Mechanisms and Vicarious Traumatization Scores

	Spearman Coefficient for the Correlation Between TABS and Immature Defense Mechanism Scores	*P*	Spearman Coefficient for the Correlation Between TABS and Neurotic Defense Mechanism Scores	*P*
Gender				
Male	.50	< .01	.20	.30
Female	.56	< .01	.43	.02
Profession				
Psychiatrist	.41	.01	.09	.55
Psychologist	.62	< .01	.49	.03
Length of forensic expertise				
> 10.5 y	.50	< .01	.22	.24
≤ 10.5 y	.38	.04	.34	.06
Previous Psychotherapy				
Yes	.44	< .01	.27	.04
No	.90	.03	.90	.03
Psychotherapy expertise				
Yes	.49	< .01	.23	.18
No	.30	.17	.32	.14
Time between forensic evaluation and study participation				
> 4.5 months	.36	.05	.31	.09
≤ 4.5 months	.34	.07	.26	.17

n = 56 participants.
Immature and neurotic defense mechanisms were evaluated with the Defensive Style Questionnaire (DSQ); vicarious trauma was evaluated with the Trauma and Attachment Belief Scale (TABS). The strength of correlation is classified as follows: .0–.19 = very weak; .20–39 = weak; .40–.59 = moderate; .60–.79 = strong; .8–1.0 = very strong.

ponent of this theory is detailed below using illustrative quotations from the study participants.

Professional Life

Professional life describes those activities and reactions that occur when forensic psychiatrists and psychologists specifically evaluate a sex offender case. We identified six core elements of professional life from our data: technical aspects, countertransference, personal treatment and psychotherapeutic training, peer support, knowledge development, and legal role.

Most forensic psychiatrists and psychologists endorsed a focus on technical aspects during the assessment of the sex offenders to maintain their own emotional stability and neutrality. Another strategy described was to avoid paying too much attention to the specifics of the crime and to focus on the person being examined. For instance,

> I try to maintain a neutrality about the sex crime and direct my attention to the diagnosis and if there was any mental disorder when the crime occurred.
>
> — Male forensic psychiatrist

Participants also stressed the importance of work formalities and procedures and tried to collect as much information as possible, either directly from the sex offender or using collateral resources, to maintain their role as forensic expert and to avoid overwhelmingly negative feelings that could disrupt the assessment:

> I perform the anamnesis, physical, and mental examinations, listening with attention to the offender. I try to keep myself neutral, analyzing medical papers and reports and interviewing family members of the offender.
>
> — Male forensic psychiatrist

In terms of countertransference, participants emphasized that the assessment of sex offenders awakens strong feelings that are sometimes persistent and cause them to be worried and alarmed:

> I try to avoid thinking about the victim and focus on the offender, seeking to collect all possible data from his current and past history, with the purpose that maybe knowing him a little better will alleviate my anger.
>
> — Female forensic psychiatrist

Some participants also reported that the feelings induced by the assessment of a sex offender are not different from those induced during the assessments of other serious crimes:

> The evaluation of a sex offender has the same influence on my life as other types of crimes: filicide, murder, etc.
>
> — Male forensic psychologist

Participants reported that their experiences with personal treatment combined with their psychotherapeutic training were helpful in performing better assessments of sex offenders and in feeling confident in their role environment:

> Personal psychotherapy and discussion of the cases in a team setting help me to minimize the burden of assessing sex offenders.
>
> — Female forensic psychologist

Participants also revealed the importance of peer support, not only for the technical aspects of the work but also for a healthier work environment:

> When I assessed the sex offender, I was able to count on the participation of the entire technical team (a forensic psychiatrist and a social worker), which allowed me to prepare the report with composure and confidence.
>
> — Female forensic psychologist

Participants disclosed a belief that the assessment of sex offenders makes them more mature human beings in the sense that they experience a decrease in naivety because they get to know real-life stories to which other people are not exposed and that also inspire scientific curiosity.

> This type of work has shown me a reality that was very different from my life experiences. I can say that it has even helped my personal and professional growth.
>
> — Male forensic psychiatrist

Participants reported that their role in the justice system was sometimes overwhelming. Feelings of responsibility and preoccupation were frequently related to anxiety. Knowledge that the assessment has important repercussions in the lives of the victims and the suspects or offenders is a burdensome aspect of the work. Participants also reported concerns in complying with legal deadlines.

> In general, I am anxious and worried about the consequences and possible implications of the report in judgments or decisions about the lives of the people involved, and I am afraid to make a mistake and not be completely fair.
>
> — Female forensic psychiatrist

Personal Life

Participants described that the impact of sex offender assessments on experts goes beyond the work environment. Participants elaborated on the idea that assessing sexual crimes in particular provided a wider understanding of human nature and reality, which was considered a form of personal growth. This broader knowledge has the potential to change the way they behave in society.

> It expands my closeness with human nature.
>
> — Male forensic psychiatrist

The experts reported that assessing sexual crimes leads to repercussions in their feelings of security. These repercussions are expressed in their personal relationships by adopting a more distrustful attitude with strangers and a more protective attitude with their families. Participants reported that they feel more aware of the possibility that they or someone important to them (i.e., a significant other) could suffer an act of violence, and this awareness makes them more vigilant in avoiding an attack.

> I am more careful about my personal safety in any place. I avoid unsafe locations. My trust in others is relative. In my personal circle, I avoid people who are very sick (emotionally), and I do not have contact with drug users. I am more attentive in social situations to signs of simulation and manipulation.
>
> — Female forensic psychiatrist

Participants revealed that the assessments of sex offenders eventually invade their personal lives through feelings and negative thoughts that arise even outside the work environment. Sex cases can be quite disruptive and violent, making them difficult to ignore or to forget. The feelings reported were discouragement, fatigue, sadness, discomfort, and hopelessness.

> I observe myself thinking about the case outside the work environment since the reports are strong and bring a portrait of significant violence. At many times, I feel powerless.
>
> — Female forensic psychologist

Surprisingly, some participants denied any influence on their personal life after assessing sex offenders, and they reported that they were capable of controlling negative thoughts and feelings when they were not at work.

> No influence. I have learned that we should separate things and avoid acting on emotions and instead act with professionalism and ethics.
>
> — Male forensic psychiatrist

Belief and Value Systems

Participants recognized that the assessment of sex offenders has the power to change the way they see, feel, and experience the world, modifying their belief that the world is a good, benign place. As reported below, it may also enter into education concerns, such as value systems and ethics.

Participants described that they became more pessimist, skeptical, and hopeless about human nature than they were before encountering sexual crimes offenders:

> This type of assessment has a numbing effect on me and has changed how I see the world and human behavior. I recognize the changes to my worldview, which now has more negative nuances, and I am deeply saddened. It is as if I am accessing a different world, where tyranny and monstrosities are so trivial and common. It is necessary to maintain a firm conviction that reality and human acts have as many facets of goodness as violence and that life is not restricted to these two poles, but that there are many possibilities.
>
> — Female forensic psychologist

Participants reported reflecting on specific aspects of education, such as value systems, ethics, prejudices, and the need for a deep understanding of human nature to properly address ethics concerns:

> This type of assessment produces concern about how the educational differences between boys and girls generate or could generate deviant male sexual behavior.
>
> — Male forensic psychiatrist

Discussion

To our knowledge, this research represents the first investigation using a nationwide sample of forensic psychiatrists and psychologists and mixed methods to assess the associations between countertransference reactions, defense mechanisms, and VT in experts who have evaluated sex offenders. The integration of quantitative and qualitative data in a single study allowed the convergence of information to understand better the research topics. The collection of the two forms of data occurred at the same time and involved the same individuals; thus, these forms of data strengthened each other.

Brazil is a large country with a high rate of violent crime. There are a limited number of forensic psychologists and psychiatrists with many years of education and training. Thus, this study presents data from a very particular population whose professional activity has social relevance. In this context, our findings have important clinical and legal implications. The quantitative and qualitative data support existing research on the occurrence of complex countertransference reactions in forensic psychiatrists[30]; expand the findings to forensic psychologists; and identify additional pertinent elements, such as the occurrence of feelings of indifference. Countertransference feelings of indifference after the assessment of a sex offender were associated with VT in forensic experts, especially in those without a history of personal psychotherapy. Even among the forensic experts with previous psychotherapeutic treatment, a weak though significant and positive correlation was found, suggesting that all professionals should pay attention to their own emotional states during the assessment of sex offenders to prevent bias and emotional burden. It is interesting that feelings of disinterest, distance, and immobility were associated with VT, but feelings such as hostility, fear, and irritation were not.

Grounded theory, consistent with criteria for high-quality qualitative research,[35,50] provided a framework for the comprehensive analysis of the research problem[51] and clarified variations in quantitative data. Considering the impact of sex-offender assessment on forensic psychiatrists and psychologists, we described a set of effects that occurs as a result of this specific evaluation. Some forensic psychologists and psychiatrists reported that they focus their attention on technical aspects of the case to suppress difficult feelings. Others reported that the assessment of a sex offender has no influence on their personal or professional lives. This last perception signals the complexity involved in the process of the denial of this content in the expert's personal or professional life. Because some emotional response is natural and expected, the nonrecognition of the repercussions of the content may represent a blind spot in the experts' forensic practice and may affect their mental health. Blind spots can be manifestations of certain countertransference consequences, and forensic experts must determine how to manage their strong and sometimes disturbing emotions.[52] Some experts approach sexual crimes in a manner that is similar to how they approach other serious crimes against life, such as homicide, disregarding the peculiarities presented in sex-crimes cases.

The qualitative data indicated that some experts, even when ignoring the term VT, described the occurrence of VT when reporting their experiences during assessments of sex offenders. They reported detrimental changes in their views of themselves, others, and the world, as well as specific concerns about the safety of their loved ones, particularly children. The impact of working with child abuse and adult violence offenders on the well-being of medical professionals and their staff, with negative effects on emotional, mental, and physical health, is far less frequently discussed in the literature than the trau-

matic nature of child abuse and adult violence on victims/survivors.[53] Because VT can decrease the professional's motivation, efficacy, and empathy, we must discuss this topic in an open and clear way.[54]

It is challenging for experts to be able to recognize their own state of mind and emotions and to manage these aspects during the assessment of a sex offender or while they are involved with a case because some cases take years to resolve, and experts can be requested to provide further explanation to the court. This process requires constant self-observation. Personal psychotherapeutic treatment can provide the opportunity for experts to face their feelings and find relief, thus enabling the proper continuation of their duties.

We also found associations between immature and neurotic defense mechanisms and VT. It is interesting to note that the length of forensic experience and a history of personal psychotherapy may influence these associations. The length of forensic experience has already been noted to play a role in reducing overall distress in trauma workers,[55] but our findings indicate a moderate and positive correlation between TABS and immature defense mechanisms scores in experts with more than one decade of forensic practice. This finding reinforces the idea that the mental health of forensic experts should not be neglected and that the state of their internal emotional resources is more important than the length of their experience. A lack of personal psychotherapy may represent a risk factor for VT among forensic experts who assess sex offenders. Both quantitative and qualitative results indicate the importance of personal psychotherapeutic treatment by providing awareness about how the experts feel when assessing a sex offender and how they can properly manage these feelings. The significant impact of these factors on experts who have never been in personal psychotherapeutic treatment emphasizes the importance of treatment. Therapy allows access to the internal thoughts and feelings engendered and the appropriate management of these emotional states by experts, thus increasing their reflective functioning and healthy defense mechanisms. Indifference was the factor with the strongest association with VT, which signals the consequences of not having adequate tools to address the harmful changes that occur in professionals' views of themselves, others, and the world as a result of exposure to the graphic and traumatic material of their examinees.[54] We did not observe differences between male and female experts in countertransference, VT, or defense mechanisms. This was an interesting finding because a systematic review of gender differences in the distress experienced by sex offenders' therapists indicated that male therapists showed higher levels of VT.[40]

Nevertheless, the theory developed through this research may function as a tool to help guide the development of programs to investigate the occurrence of VT in forensic psychiatrists and psychologists; it may also offer feasible strategies to help experts because this topic currently appears to be ignored or minimized. The importance of support has been cited repeatedly in the literature, as has the negative impact of unsupportive attitudes of other health professionals.[9] Our results, which are in line with previous studies, suggest that psychotherapeutic treatment and supervision of cases and teamwork with other professionals, when possible, could be helpful for forensic psychiatrists, psychologists and residents.[15,26,27,30,56,57]

Many researchers have suggested that indirect exposure to traumatic material through clients is an occupational hazard for therapists.[58] Considering the recent interest in and investigations into VT among forensic experts, if our findings are confirmed in further studies, even with the recognition of the differences between the forensic setting and the clinical environment, VT may be considered an occupational hazard for forensic mental health experts.

The limitations of this study should be considered. First, it is difficult to make causal inferences because this is a cross-sectional study with a mixed-methods design. Our results should be interpreted with caution given the limited number of experts, the retrospective data collection, and the reliance on recall of an interview that occurred months or even years (a median of 4.5 months) prior to data collection. The generalizability of some aspects of the model is limited because of the instruments selected and the qualitative nature of the research. The TABS, for instance, has received some criticism in relation to whether it assesses VT or measures compassion fatigue.[59] The participants were not asked whether they believed that sex offenders could be successfully treated, and there is a lack of detail about whether the participants were actually traumatized after the sex offender assessments.

Additionally, the potential impact of researcher bias and the acknowledgment of the researchers'

epistemological position in qualitative studies must be addressed. We recognize the influence of prior reading and work and life experiences on our perspectives. Researchers' personal experience of VT often emerges in studies and reviews, but the researchers' personal history of trauma, amount of exposure to the traumatic material of cases, and perceived coping ability were not investigated here.[15,54-56,60-66] Professionals from different countries performing the same job may differ in job burnout, and such a difference may also be found for VT.[67] Thus, additional research is needed to confirm these findings in other populations of experts, in different cultures, and for other types of forensic assessments. Future studies should also investigate the role of additional factors that increase the risk for VT in forensic experts, such as individual vulnerabilities (e.g., temperament, identity, character traits, and mental disorders), personal trauma history, coping strategies, and personal stress.

References

1. Lee BH: #MeToo movement; it is time that we all act and participate in transformation. Psychiatry Investig 15:433, 2018
2. Coles J, Astbury J, Dartnall E, Limjerwala S: A qualitative exploration of researcher trauma and researchers' responses to investigating sexual violence. Violence Against Women 20:95–117, 2014
3. Baird S, Jenkins SR: Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. Violence Vict 18:71–86, 2003
4. Slattery SM, Goodman LA: Secondary traumatic stress among domestic violence advocates: workplace risk and protective factors. Violence Against Women 15:1358–79, 2009
5. VanDeusen KM, Way I: Vicarious trauma: an exploratory study of the impact of providing sexual abuse treatment on clinicians' trust and intimacy. J Child Sex Abus 15:69–85, 2006
6. Way I, VanDeusen KM, Martin G, *et al*: Vicarious trauma: a comparison of clinicians who treat survivors of sexual abuse and sexual offenders. J Interpers Violence 19:49–71, 2004
7. Coles J, Dartnall E, Limjerwala S, Astbury J: Briefing paper: researcher trauma, safety and sexual violence research. Pretoria, South Africa: Sexual Violence Research Initiative, 2010
8. Bach M, Demuth C: Therapists' experiences in their work with sex offenders and people with pedophilia: a literature review. Eur J Psychol 14:498–514, 2018
9. Bach HB, Demuth C: Therapists' personal experiences in their work with clients who have sexually offended against children: a phenomenological study. J Child Sex Abuse 28:799–818, 2019
10. Thibaut F, Bradford JMW, Briken P, *et al*: The World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the treatment of adolescent sexual offenders with paraphilic disorders. World J Biol Psychiatry 17:2–38, 2016
11. Sattar SP, Pinals DA, Gutheil T: Countering countertransference: a forensic trainee's dilemma. J Am Acad Psychiatry Law 30:65–9, 2002
12. Dietz PE: The quest for excellence in forensic psychiatry. Bull Am Acad Psychiatry Law 24:153–63, 1996
13. DeVogel V, DeRuiter C: Differences between clinicians and researchers in assessing risk of violence in forensic psychiatric patients. J Forens Psychiatry Psychol 15:145–64, 2004
14. McCann L, Pearlman L: Vicarious traumatization: a framework for understanding the psychological effects of working with victims. J Trauma Stress 3:131–49, 1990
15. Pearlman LA, Mac Ian PS: Vicarious traumatization: an empirical study of the effects of trauma work on trauma therapists. Prof Psychol Res Pr 26:558–65, 1995
16. Pearlman LA, Saakvitne KW: Trauma and the therapist: countertransference and vicarious traumatization in psychotherapy with incest survivors. New York: W.W. Norton, 1995
17. Moulden HM, Firestone P: Vicarious traumatization. Trauma Violence Abuse 8:67–83, 2007
18. Sabin-Farrell R, Turpin G: Vicarious traumatization: implications for the mental health of health workers? Clin Psychol Rev 23:449–80, 2003
19. Severson M, Pettus-Davis C: Parole officers' experiences of the symptoms of secondary trauma in the supervision of sex offenders. Int'l J Offender Therapy & Comp Criminology 57:5–24, 2013
20. Figley CR: Compassion fatigue: psychotherapists' chronic lack of self-care. J Clin Psychol 58:1433–41, 2002
21. Figley CR: Compassion fatigue: toward a new understanding of the costs of caring, in Secondary Traumatic Stress: Self-Care Issues for Clinicians, Researchers, and Educators, First Edition. Edited by Stamm BH. Lutherville, MD: Sidran Press, 1995, pp 3–28
22. Tabor PD: Vicarious traumatization: concept analysis. J Forensic Nurs 7:203–8, 2011
23. Farrenkopf T: What happens to therapists who work with sex offenders? J Offender Rehabil 18:217–24, 1992
24. Jackson KE, Holzman C, Barnard T: Working with sex offenders: the impact on practitioners, in Impact: Working With Sexual Abusers. Edited by Edmunds SB. Brandon, VT: Safer Society Press, 1999, pp 61–74
25. Rich KD: Vicarious traumatization: a preliminary study, in Impact: Working with Sexual Abusers. Edited by Edmunds SB. Brandon, VT: Safer Society Press, 1999, pp 75–88
26. Ennis L, Horne S: Predicting psychological distress in sex offender therapists. Sex Abuse 15:149–57, 2003
27. Kadambi MA, Truscott D: Vicarious traumatization and burnout among therapists working with sex offenders. Traumatology 9:216–30, 2003
28. Hatcher R, Noakes S: Working with sex offenders: the impact on Australian treatment providers. Psychol Crime & L 16:145–67, 2010
29. Mitchell C, Melikian K: The treatment of male sexual offenders. J Child Sex Abus 4:87–94, 1995
30. Barros AJS, Rosa RG, Eizirik CL: Countertransference reactions aroused by sex crimes in a forensic psychiatric environment. Int J Forensic Ment Health 13:363–68, 2014
31. Fitzgerald-Yau N, Egan J: Defense styles mediate the association between empathy and burnout among nurses. J Nerv Ment Dis 206:555–61, 2018
32. Neal TMS, Brodsky SL: Forensic psychologists' perceptions of bias and potential correction strategies in forensic mental health evaluations. Psychol Pub Pol'y & L 22:58–76, 2016
33. Harris DM, Happell B, Manias E: Working with people who have killed: the experience and attitudes of forensic mental health clinicians working with forensic patients. Int J Ment Health Nurs 24:130–38, 2015
34. Creswell JW, Fetters M, Ivankiva N: Designing a mixed methods study in primary care. Ann Fam Med 2:7–12, 2004
35. Charmaz K: Constructing Grounded Theory. Thousand Oaks, CA: Sage Publications, 2006

36. Charmaz K: Special invited paper: continuities, contradictions, and critical inquiry in grounded theory. Int J Qual Methods 16: 1–8, 2017
37. Fassinger RE: Paradigms, praxis, problems, and promise: grounded theory in counseling psychology research. J Couns Psychol 52:156–66, 2005
38. McGhee G, Marland GR, Atkinson J: Grounded theory research: literature reviewing and reflexivity. J Adv Nurs 60:334–42, 2007
39. Munger T, Savage T, Panosky DM: When caring for perpetrators becomes a sentence: recognizing vicarious trauma. J Correct Health Care 21:365–74, 2015
40. Baum N, Moyal S: Impact on therapists working with sex offenders: a systematic review of gender findings. Trauma Violence Abuse 1–13, 2018
41. Silveira Júnior ÉM, Polanczyk GV, Eizirik M, *et al*: Trauma and countertransference: development and validity of the Assessment of Countertransference Scale (ACS). Braz J Psychiatry 34:201–6, 2012
42. Andrews G, Singh M, Bond M: The defense style questionnaire. J Nerv Ment Dis 181:246–56, 1993
43. Blaya C, Kipper L, Heldt E, *et al*: Brazilian-Portuguese version of the Defense Style Questionnaire (DSQ-40) for defense mechanisms measure: a preliminary study. Braz J Psychiatry 26:255–58, 2004
44. Blaya C, Dornelles M, Blaya R, *et al*: Brazilian-Portuguese version of Defensive Style Questionnaire-40 for the assessment of defense mechanisms: Construct validity study. Psychother Res 17:261–70, 2007
45. Pearlman LA: Trauma and attachment belief scale. Los Angeles: Western Psychological Services, 2003
46. Barros AJS, Teche SP, Rodrigues A, *et al*: Brazilian Portuguese translation, cross-cultural adaptation, and apparent validation of the trauma and attachment belief scale. Trends Psychiatry Psychother 40:1–7, 2018
47. Way I, VanDeusen K, Cottrell T: Vicarious trauma: predictors of clinicians' disrupted cognitions about self-esteem and self-intimacy. J Child Sex Abus 16:81–98, 2008
48. Raunick CB, Lindell DF, Morris DL, Backman T: Vicarious trauma among sexual assault nurse examiners. J Forensic Nurs 11:123–8, 2015
49. Charmaz K: Grounded theory in global perspective: reviews by international researchers. Qualitative Inquiry 20:1074–84, 2014
50. Elliott R, Fischer CT, Rennie DL: Evolving guidelines for publication of qualitative research studies in psychology and related fields. Br J Clin Psychol 38:215–29, 1999
51. Creswell JW: Research design: qualitative, quantitative, and mixed methods approaches, Edition 4. Los Angeles: Sage Publications, 2014
52. Greenberg JR: Countertransference and Reality. Psychoanal Dialogues 1:52–73, 1991
53. Coles J, Dartnall E, Astbury J: "Preventing the pain" when working with family and sexual violence in primary care. Int J Family Med 198578:1–7, 2013
54. Baird K, Kracen AC: Vicarious traumatization and secondary traumatic stress: a research synthesis. Couns Psychol Q 19:181–8, 2006
55. Brady JL, Guy JD, Poelstra PL, Brokaw BF: Vicarious traumatization, spirituality, and the treatment of sexual abuse survivors: a national survey of women psychotherapists. Prof Psychol Res Pr 30:386–93, 1999
56. Dickes SJ: Treating sexually abused children versus adults: an exploration of secondary traumatic stress and vicarious traumatization among therapists. Unpublished doctoral dissertation, California School of Professional Psychology, Los Angeles, CA, 1998
57. Reeder DJ, Schatte DJ: Managing negative reactions in forensic trainees. J Am Acad Psychiatry Law 39:217–21, 2011
58. Robinson-Keilig RA: Secondary traumatic stress and disruptions to interpersonal functioning among mental health therapists. J Interpers Violence 29:1477–96, 2014
59. Bride BE, Radey M, Figley CR: Measuring compassion fatigue. Clin Soc Work J 35:155–63, 2007
60. Camerlengo H: The role of coping style, job-related stress, and personal victimization history in the vicarious traumatization of professionals who work with abused youth. Unpublished doctoral dissertation, Rutgers University, New Brunswick, NJ, 2002
61. Schauben LJ, Frazier PA: Vicarious trauma: the effects on female counselors of working with sexual violence survivors. Psychol of Women Q 19:49–64, 1995
62. Trippany RL: Predictors of vicarious traumatization: female therapists for adult survivors versus female therapists for child survivors of sexual victimization. Unpublished doctoral dissertation, University of Alabama, Tuscaloosa, AL, 2000
63. Young CM: Vicarious trauma in psychotherapists who work with physically or sexually abused children. Unpublished doctoral dissertation, California School of Professional Psychology, Los Angeles, CA, 1999
64. Simonds SL: Vicarious traumatization in therapists treating adult survivors of childhood sexual abuse. Unpublished doctoral dissertation, The Fielding Institute, Santa Barbara, CA, 1996
65. Creamer TL: Secondary trauma and coping processes among disaster mental health workers responding to the September 11 attacks. Unpublished doctoral dissertation, Auburn University, Auburn, AL, 2002
66. Weaks KA: Effects of treating trauma survivors: vicarious trauma and style of coping. Unpublished doctoral dissertation, Texas Woman's University, Denton, TX, 1999
67. Cieslak R, Shoji K, Douglas A, *et al*: A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. Psychol Serv 11:75–86, 2014