

## Cognitive therapy of trauma related guilt in patients with PTSD

Agnieszka Popiel

Faculty of Psychology and Interdisciplinary Center for Behaviour Genetic Research,  
University of Warsaw, Poland  
Head: prof. B. Zawadzki

Department of Neurorehabilitation, University of Social Sciences and Humanities,  
Warsaw, Poland  
Head: prof. dr hab. E. Szeląg

### Summary

Various aspects of guilt are frequent problems of patients suffering from PTSD, though they have been included into the diagnostic criteria for PTSD just in the present version DSM-5. Some studies indicate limitation of effectiveness of exposure therapy in PTSD patients with predominant emotions of anger or guilt. The aim of this paper is to present cognitive conceptualization of guilt in PTSD proposed by Kubany, and a treatment protocol resulting from this conceptualization. The clinical application of the protocol is illustrated with preliminary results of systematic observation of 8 patients with moderate to severe PTSD who were treated with cognitive therapy for guilt followed by a standard prolonged exposure protocol. The cognitive therapy of guilt can be a valuable supplement for treatment of PTSD. This protocol can also be an inspiration for therapists working with patients with dysfunctional guilt as a problem in other than PTSD disorders – like depression or adjustment disorders. In discussion the place of guilt in treatment according to different (PE-Foa et al.; CPT-Resick et al.; CT-Ehlers and Clark ) trauma focused therapy approaches is addressed, and the need for further studies is underlined.

**Key words:** PTSD, guilt, cognitive therapy, prolonged exposure

### Introduction

Since its introduction into DSM – posttraumatic stress disorder (PTSD) was systematically classified as one of anxiety disorders [1, 2]. It can be considered as reflection of clinical knowledge including basic research results, but also of our culture, as indicated by Sullivan in the paper „*From guilt-oriented to uncertainty-oriented culture...*” [3, 4]. Researchers and clinicians underlined variability of symptoms in patients where in addition to overwhelming sense of danger or avoidance strategies anger or guilt were predominant in clinical picture [5-7]. The results of some studies indicate also

the limitations of evidence based therapies in those patients suffering from PTSD who presented high levels of anger and guilt [7]. Self-blaming after traumatic experience is a frequent phenomenon, intuitively obvious and frequently described in clinical literature as „survivors` guilt”[8]. Since PTSD was introduced into DSM-III, guilt was considered as accompanying feature, but not as a diagnostic criterion. However, intense sense of guilt was found to contribute in comorbid depression and suicidal attempts in the course of [9-11]. Important changes in defining PTSD happened in the last years. In the DSM-5 published in 2013 posttraumatic stress disorder does not belong to anxiety disorders any more, but belongs to the trauma and stressor-related group of disorders. The authors distinguished not three, but four groups of symptoms of PTSD [12]. In addition to recurrent, intrusive memories, avoidance and hyperarousal a new criterion appeared. This new criterion includes persistent cognitive and mood changes with onset or exacerbation related to the traumatic experience. Three of 7 symptoms belonging to criterion D („Negative alterations in cognitions and mood associated with the traumatic event(s).”) are defined as following [12, p. 271, 272]:

D2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “My whole nervous system is permanently ruined”).

D3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.

D4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).<sup>1</sup>

The assessment of consequences of this change to clinical practice is a question of time. The results of studies on treatments of PTSD indicate that available methods are effective in majority of treated patients, with mean effect size of 1,49 (studies up to 2005). The results of metaanalysis of Bradley indicate that 67% of treatment completers does not meet the PTSD criteria at posttreatment assessment [13, 14]. Polish studies showed approx. 80% of remission of PTSD in treatment completers [15]. Empirically validated forms of treatment are mainly cognitive-behavioural therapies [16]. Common characteristic of is quite stable, across studies, number of patients (20-30%) for whom available methods (psycho or pharmacotherapy) are insufficient [14, 16]. One of the best examined treatment methods for PTSD, both for its efficacy and dissemination is prolonged exposure (PE) [4, 17]. PE was studied mostly in rape victims, war veterans, car accident participants. Its efficacy is up to 70%-80%, so the question about factors negatively influencing the outcome is natural. First suggestions about elevated guilt feelings being a contraindication to PE, have not been confirmed in later studies [18,19]. Elevated level of guilt does not have to be a contraindication then, but still it can set limits to efficacy of prolonged exposure, or require longer treatment or other interventions. In a study, that can be an example of this phenomenon – 630 subjects – victims of industrial incidents with PTSD were treated with prolonged exposure treatment was successful for 65% of patients (full recovery, they came back to work), but of the remaining 35% of a sample – 85% of subjects expressed other than fear predominant emotions (guilt, anger) [4, 7].

<sup>1</sup> Translation of criteria and the author’s underlines for the purpose of this article.

These results direct attention to the need of modification of evidence based protocols. Car accidents are specific as traumatic events. As opposite to natural disasters or acts of violence victims of car accident are frequently, at the same time considered “perpetrators”, or causes remain unresolved, and litigation unsettled for years. It is frequently an unintentional behaviour (speed, transient concentration difficulties) that contributes to the accident resulting in death, disability, financial losses and litigation. Months after the accident guilt is frequently predominant emotional condition that blocks recovery from posttraumatic symptoms.

The goal of this paper is to present a conceptualization and a protocol for treatment focused on guilt, and to illustrate it with data of few patients suffering from PTSD.

### Guilt and PTSD

Guilt is a frequent phenomenon in PTSD. It results from dysfunctional information processing, and taking responsibility for actions and behaviors that the person was not responsible for [20, 21]. Guilt can be conceptualized as an unpleasant feeling – distress, that is accompanied by many thoughts about the individual’s own role in a negative event, that the person should feel, act or think differently [20]. Kubany suggests conceptualizing guilt as a multidimensional phenomenon with emotional and cognitive components, not only emotional – as might result from the most frequent collocation “*guilt feelings*”. In Polish however the word „*poczucie*”(sense), different than „*uczucie*”(feeling)” in the collocation „*poczucie winy*” reflects well this complexity. According to Kubany *guilt* consists of distress/emotional pain and a set of dysfunctional beliefs (Figure 1).

Dysfunctional beliefs may be understood as „information structures that result from perception, learning, memory and reasoning and that include representations of stimuli responses and their meaning” [22]. Dysfunctional beliefs typical for guilt include (1) **hindsight bias** – possibility to **forsee and prevent** of what happened (a belief that the outcome was foreseeable and this knowledge should be used to prevent it (a result of cognitive distortion „hindsight bias”), (2) **insufficient justification** for own behaviours (3) **full responsibility** for *causing* negative, frequently tragic event; (4) violating personal values during the course of the trauma **wrongdoing** [19]. Dysfunctionality of beliefs results from biases in interpretation of stimuli/events. Kubany lists several typical cognitive distortions like a belief that experiencing an emotion when thinking certain things verifies this thought (emotional reasoning), a tendency to dismiss the advantages of actions taken or a tendency to overestimate the role of subtle indicators and intuition (minimalizing, maximizing), or focusing only on possible positive consequences of actions that were not taken (selective attention). The empirical support for such an understanding of guilt has been provided by the studies on Trauma Related Guilt Inventory <sup>2</sup>[19].

Figure 1. Cognitive and emotional aspects of guilt. Adapted from Kubany 2004



### **Cognitive therapy**

The main assumption of cognitive therapy is that cognitive variables – information processing and ascribing meaning to stimuli are the mediators of onset and maintenance of psychopathological symptoms, in case of PTSD it refers to symptoms after the traumatic stressor. Cognitive and cognitive-behavioural models of PTSD are based on cognitive or informational theories of emotion [5, 6, 23]. The Kubany's approach to guilt is coherent with assumptions of cognitive psychopathology. A natural consequence is developing therapeutic interventions that might decrease patients' distress by modification of dysfunctional beliefs [19-21]. The general assumptions and rules of each cognitive therapy treatment are described more in details in therapy handbooks [24, 25]. Accordingly each cognitive-behavioural therapy should be problem focused, goal oriented (with monitoring of effects), time limited with collaborative empiricism as main therapeutic stance.

### Cognitive therapy of guilt – treatment protocol

Treatment protocol of up to 5 sessions of cognitive therapy focused on guilt has been developed as a separate module [26]. Theoretical and practical foundations for the protocol were available publications by Kubany on cognitive therapy for trauma related guilt and the experiences with therapeutic work with PTSD in car accident victims in the studies conducted at Interdisciplinary Center for Behaviour Genetic Research at Warsaw University. [20, 27]. The module was developed within a research program conducted at Interdisciplinary Center of Behavior Genetics Research at University of Warsaw. The main focus of the work with guilt is psychoeducation about guilt and its cognitive and emotional components, the role of cognitive distortions in information processing resulting in dysfunctional beliefs about one's causal responsibility for traumatic event. The main strategy is cognitive restructuring of dysfunctional beliefs, done by use of variety of cognitive interventions, mainly Socratic dialogue [19-21, 24, 25]. According to the idea of „trauma-focused therapies” the frame of reference for the work with guilt is a specific traumatic event that resulted in PTSD – the “index trauma”. The module consists of 5 parts – in typical out-patient setting reflecting five 45 minutes sessions.

The first step in any cognitive therapy is setting the goal for treatment. If self-blame, guilt is a prominent problem within PTSD symptoms the goal for the next sessions will be decrease of the patient's distress by obtaining adequate view of her/his role in the traumatic event. The main steps of treatment for guilt thou are: (I) detailed assessment of guilt (II) detailed description of the event, (III) education about guilt, (IV) cognitive therapy of guilt, (V) summary.

Phase I (session 1). Detailed assessment of guilt is based on the structured interview and questionnaire (*AAGS – Attitudes About Guilt Survey*)<sup>2</sup> [14]. During an interview therapist is trying to assess in what degree the patient's guilt is related to her/his thoughts about what he has done or something that he should have done but didn't do during the accident (traumatic event). Therapists asks about the **emotions** during the traumatic event that the patient feels guilty about having, and the **thoughts** that went through the patient's mind when the trauma was happening. The therapist is also inquiring about the ways in which guilt is influencing the patient's present functioning. There is also a motivational aspect of the first session – an analysis of what would the change of the sense of guilt bring to the patients functioning (including potential „disadvantages”).

The next step, during the same session is also the initiation of the second phase, and covers detailed **description of the event**. The therapist focuses on reconstruction of the event. There is an aspect of processing, but as opposite to prolonged imaginal exposure – emotional engagement is not the goal of the intervention.

The third phase is education about guilt. Having the data from the interview (AAGS) in mind, the therapists uses the drawing presented on Figure 1. The therapist explains the various aspects of guilt – as emotional pain but also as a way of thinking including

<sup>2</sup> Polish version used in research available on request from the author.

ascribing full responsibility for the event, lack of justification for own behaviours, violation of rules and values and a belief that one could know what would happen before it actually happened. First session ends with presenting the plan for the next steps, and homework. According to the rules of cognitive-behavioural therapy homework is an important factor influencing therapy results. It stimulates self-reflection and acquisition of new experiences. After the first session, focused on specific guilt related cognitions the patient is asked to identify and write down these situations in the next few days when automatic, connected with distress thoughts „I should have”, “how could I not foresee it?” occur. The brochure about guilt and characteristic cognitive distortions is also given to the patient, with a request to read the introduction and mark doubts and questions before the next session. Because (if) the session is audiotaped the patient also receives a record to listen at home.

The next 2-4 sessions (phase IV) are focused on discussion of four aspects of guilt. The main technique, except psychoeducation is Socratic dialogue (described in details in handbooks about cognitive-behavioural therapy) [24, 25]). Each of dysfunctional beliefs and cognitive distortions is consecutively discussed:

1. **Foreseeability/Preventability** analysis, work with „hindsight bias”;
2. **Justification analysis** (refers to an idea that the most justified way of acting at certain point of time is the one the patient had chosen based on available information at the time of the trauma);
3. **Responsibility analysis** (discussion with the main role of reattribution, about the idea that considering the influence of other people, factors, forces the trauma survivor had minimal role in the event);
4. **Wrongdoing analysis** analysis of beliefs of the trauma survivors that they had violated important values, rules. During the discussion few aspects are addressed – whether it is really about violation of rules if intentions were good and the result unexpectedly tragic, but also that sometimes guilt is a moral choice – people chose to feel guilty instead of feeling immoral.

Following the spirit of the „Socratic method” aimed at modification of beliefs resulting from cognitive distortions, the therapist uses many metaphors, examples and in very interactive way refers to the experiences of the patient. Addressing the next aspect of guilt happens after completing and summarizing the discussion about the previous one, but also if the timeframe of the session allows it (i. e at least 20-30 minutes left are needed to start and complete a new item during the session). Homework after each session is similar: listening to a session record and reading the relevant part of the patient’s workbook, making notes about questions, doubts.

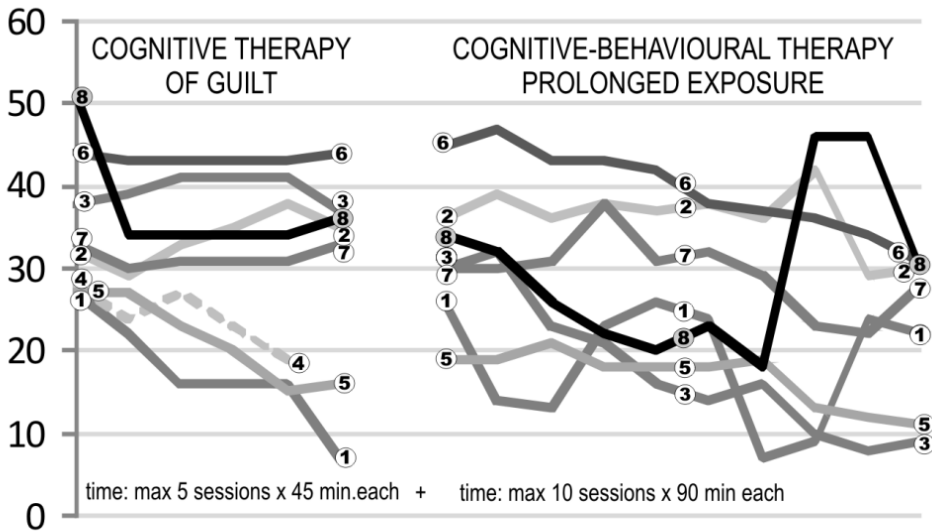
Summary (the V-th phase) reflects the last part of each cognitive therapy (regardless of its length). Consolidation of conclusions happens at this phase. The major changes are discussed and the basis can be again the AAGS interview and questionnaire.

### Clinical illustration

The treatment protocol for cognitive therapy of guilt was developed with an aim to enrich therapeutic possibilities of prolonged exposure. as an adjunct of prolonged

exposure not as a unique treatment for PTSD – what is the main difference with treatment described and studied by Kubany [30]. To illustrate this we present the change in PTSD symptoms [28] and the results of treatment of 8 patients with elevated guilt levels (AAGS) [20], included based on a blind psychiatric assessment of PTSD based on SCID-I [29] (Figure 2)

Figure 2. Intensity of PTSD symptoms for each patient, measured by PDS during cognitive therapy of guilt followed by prolonged exposure therapy.



**PATIENTS:**

- 1 F, 35 y.o. Driver.  
Before therapy: PTSD (moderate). St.post brain injury (TBI). After therapy: PTSD criteria not met (partial remission)
- 2 F, 18 y.o. Pedestrian hit by a car.  
Before therapy: PTSD (moderate) St.post brain injury (TBI). After therapy: PTSD criteria not met (partial remission)
- 3 M, 40 y.o. Driver, hitting a pedestrian  
Before therapy: PTSD (severe). After therapy: PTSD criteria not met (partial remission)
- 4 F, 31 y.o. Bus passenger  
Before therapy: PTSD (moderate). Drop-out after completing the guilt treatment module.
- 5 M, 23 y.o. Driver, severely injured passenger in the accident.  
Before therapy: PTSD (moderate). After therapy: PTSD criteria not met (partial remission)
- 6 M, 43. y.o. Driver, hitting a pedestrian.  
Before therapy: PTSD (severe) After therapy: PTSD criteria not met (partial remission)
- 7 M, 31 y.o. Motorcycle rider.  
Before therapy: PTSD (moderate). After therapy: PTSD criteria not met (full remission).
- 8 M, 31 y.o. Passenger  
Before therapy: PTSD (severe). After therapy: criteria for PTSD (mild) still met (traffic collision after 7th session).



Six patients (85,7%) completed treatment with some PTSD symptoms, but not meeting the diagnostic criteria for PTSD. The preliminary effect size for general guilt (AAGS) ( $d=0.84$ ) reflects, in Cohen terms a large effect ( $d>0.8$ ).

### Discussion

The goal of the paper was to present of a proposal of treatment protocol of cognitive therapy of guilt and an illustration of this protocol with cases of 8 patients with PTSD. The conceptualization of guilt as proposed by Kubany and adapted into Polish refers to guilt resulting from (but not exclusively) traumatic experiences, and is a basis of the set of therapeutic interventions called “Cognitive-behavioural treatment of trauma related guilt”. It needs to be underlined that this is not a model of posttraumatic stress disorder, but a detailed analysis of the phenomenon of guilt one of the symptoms of PTSD. Current research data does not provide clear evidence of a role of guilt itself in PTSD symptoms onset and maintenance. Sense of guilt is also present in cognitive models of trauma-focused psychotherapy. The assumption of *prolonged exposure* (PE) treatment is that dysfunctional beliefs (including the subject’s own role and responsibility for the event itself and for the emotions and behaviours experienced) are a part of the pathological fear structure created after trauma happened. While the mechanism blocking the pathological fear structure from modification is avoidance. The main treatment assumption of PE is activation of the fear structure. Its modification happens during the process of learning based on new experiences gained in exposure. Guilt is approached in PE during *processing* of the traumatic event in *prolonged exposure* and right after exposure [6, 31]. In *cognitive processing therapy* (CPT) developed by Resick et al. – beliefs related to guilt and responsibility for the traumatic event are analysed and challenged as other dysfunctional beliefs maintained by trauma. There are studies showing the reduction of guilt as a result of standard CPT [32]. In *cognitive therapy* developed by Ehlers and Clark current and generalized sense of threat is a central mechanism maintaining chronic PTSD. The appraisal of trauma and the person’s role in traumatic event is a „fuel” for a sense of threat and following behavioural strategies [5]. Therefore work with guilt (if indicated according to case conceptualization) in cognitive therapy is embedded in set of cognitive interventions. Questions that still remain unanswered would require dismantling studies to approach them. What is the role of treatment focused on guilt in final result of PTSD treatment? According to primary results and observations presented in this paper cognitive work with guilt fits the rule *primum non nocere* (although treatment is few sessions longer), can influence the decrease of beliefs specific for guilt (including responsibility), assessed by AAGS. The percentage of treatments completed with remission of PTSD seems optimistic, but it would also need to be verified empirically. A graph illustrating the trajectory of PTSD symptoms indicates the beginning of the process of decrease of PTSD symptomatology. This result is not statistically significant. A question appears – what would happen if purely cognitive work was continued, if there was no integration of the two methods – “cognitive” and “prolonged exposure”? Is it justified – the modification of existing treatment



protocols by adding some interventions (as we have done in the presented study)? Or implementing another treatment protocol based on other assumptions, referring to the diagnosis and conceptualization, would be more reasonable? These questions only underline the need for further studies on the impact of specific interventions on final effect of treatment.

### Conclusions

The treatment protocol of cognitive therapy of guilt is an interesting proposal for patients in whom this specific symptom as elevated guilt is prominent in clinical picture of PTSD. The reason for specific consideration of this group of patients has been reflected in DSM-5, where symptoms related to guilt have been added as a diagnostic criterion for PTSD. Cognitive conceptualization of guilt and interventions resulting from it may also serve as an inspiration for therapists working with patients in whom guilt is related to distress, low mood (i.e. in the course of depression or adjustment disorders) not related to traumatic but to negative life events.

### References

1. *Diagnostic and statistical manual of mental disorders*. Fourth edition. Text revision (DSM-IV-TR). Washington, DC: American Psychiatric Association; 2000.
2. *Diagnostic and statistical manual of mental disorders*. Third edition (DSM-III). Washington, DC: American Psychiatric Association; 1980.
3. Landowski J. *Biologiczne mechanizmy stresu*. W: Bilikiewicz A, Pużyński S, Rybakowski J, Wciórka J. red. *Psychiatria*. T. 1. Wrocław: Urban & Partner; 2002. p. 179–191.
4. Sullivan D. *From guilt-oriented to uncertainty-oriented culture: Nietzsche and Weber on the history of theodicy*. *J. Theoret. Phil. Psychol.* 2013; 33(2): 107–124.
5. Ehlers A, Clark DM. *A cognitive model of posttraumatic stress disorder*. *Behav. Res. Ther.* 2000; 38: 319–345.
6. Foa EB, Hembree EA, Olasov Rothbaum B. *Przedłużona ekspozycja w terapii PTSD. Emocjonalne przetwarzania traumatycznych doświadczeń*. Sopot: Gdańskie Wydawnictwo Psychologiczne; 2014.
7. Grunert BK, Weis JM, Smucker MR, Christianson HF. *Imagery rescripting and reprocessing therapy after failed prolonged exposure for post-traumatic stress disorder following industrial injury*. *J. Behav. Ther. Exp. Psychiatry* 2007; 38: 317–328.
8. Prot K. *Badania nad skutkami Holokaustu*. *Psychoterapia* 2009; 4: 65–76.
9. Ferrada-Noli M, Asberg M, Ormstad K, Lundin T, Sundbom E. *Suicidal behavior after severe trauma, part 1: PTSD diagnoses, psychiatric comorbidity, and assessments of suicidal behavior*. *J. Trauma. Stress* 1998; 11: 103–112.
10. Hendin H, Haas AP. *Suicide and guilt as manifestations of PTSD in Vietnam combat veterans*. *Am. J. Psychiatry* 1991; 148: 586–591.
11. Marx BP, Foley KM, Feinstein BA, Wolf EJ, Kaloupek DG, Keane TM. *Combat-related guilt mediates the relations between exposure to combat-related abusive violence and psychiatric diagnoses*. *Depress. Anxiety* 2004; 27: 287–293.

12. *Diagnostic and statistical manual of mental disorders*. Fifth edition (DSM-5). Washington, DC: American Psychiatric Association; 2013.
13. Bradley R, Greene J, Russ E, Dutra L, Westen D. *A multidimensional meta-analysis of psychotherapy for PTSD*. *Am. J. Psychiatry* 2005; 162: 214–227.
14. Popiel A, Pragłowska E. *Terapia zaburzeń potraumatycznych*. W: Strelau J, Zawadzki B, Kaczmarek M. red. *Konsekwencje psychiczne traumy: uwarunkowania i terapia*. Warszawa: Wydawnictwo Naukowe Scholar; 2009. P. 334–365.
15. Popiel A, Zawadzki B, Pragłowska E, Teichman Y. (w recenzji). *A randomized controlled trial of prolonged exposure, paroxetine and combined treatment for PTSD following a motor vehicle accident – The “TRAKT” Study*.
16. National Institute of Clinical Excellence. *Post-Traumatic Stress Disorder: The management of PTSD in adults and children in primary and secondary care*. London: National Collaborating Centre for Mental Health; 2005. (<http://guidance.nice.org/CG26>)
17. Foa EB, Gillihan SJ, Bryant RA. *Challenges and successes in dissemination of evidence-based treatments for posttraumatic stress: Lessons learned from prolonged exposure therapy for PTSD*. *Psychol. Sci. Public Interest* 2013; 14(2; supl.): 65–111.
18. Pitman RK, Altman B, Greenwald E, Longpre RE, Macklin ML, Poire RE i wsp. *Psychiatric complications during flooding therapy for posttraumatic stress disorder*. *J. Clin. Psychiatry* 1991; 52: 17–20.
19. Van Minnen A, Harned M, Zoellner L, Mills K. *Examining potential contraindications for prolonged exposure therapy for PTSD*. *Eur. J. Psychotraumatol.* 2012; 3.
20. Kubany ES. *The Trauma Related Guilt Inventory (TRGI). Assessing and treating PTSD manual*. Los Angeles: Western Psychological Services; 2004.
21. Kubany ES, Manke FP. *Cognitive therapy for Trauma-Related Guilt: Conceptual bases and treatment outlines*. *Cogn. Behav. Pract.* 1995; 2: 27–61.
22. Huppert JD, Foa EB, Mc Nally RJ, Cahil SP. *Role of cognition in stress induced and fear circuitry disorders*. W: Andrews G, Charney DS, Sirovatka PJ, Regier DA. red. *Stress induced and fear circuitry disorders. Refining the research agenda for DSM-V*. Arlington, VA: American Psychiatric Association; 2013. p. 175–194.
23. Lang PJ. *A bio-informational theory of information processing analysis of fear*. *Behav. Ther.* 1979; 8: 862–886.
24. Beck J. *Terapia poznawczo-behawioralna. Podstawy i zagadnienia szczegółowe*. Wydanie II. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego; 2012.
25. Popiel A, Pragłowska E. *Psychoterapia poznawczo-behawioralna. Teoria i praktyka*. Warszawa: Wydawnictwo Paradygmat; 2008.
26. Popiel A, Pragłowska E. *Psychoterapia poznawcza poczucia winy – protokół modułu*. Broszura terapeuty i broszura pacjenta. Niepublikowany manuskrypt. Warszawa; 2013.
27. Popiel A, Zawadzki B. *Przedłużona ekspozycja w Polsce. Wstęp do polskiego wydania*. W: Foa EB, Hembree EA, Olasov Rothbaum B. *Przedłużona ekspozycja w terapii PTSD. Emocjonalne przetwarzania traumatycznych doświadczeń*. Sopot: Gdańskie Wydawnictwo Psychologiczne; 2014. p. 9–11.
28. Kubany ES, Hill EE, Owens JA, Iannce-Spencer C, McCaig MA, Tremayne KJ. *Cognitive trauma therapy for battered women with PTSD (CTT-BW)*. *J. Consult. Clin. Psychol.* 2004; 72: 3–18.
29. Dragan M, Lis-Turlejska M, Popiel A, Szumiał S, Dragan W. *The validation of the Polish version of the Posttraumatic Diagnostic Scale and its factor structure*. *Eur. J. Psychotraumatol.* 2012; 3.

30. First MB, Spitzer RL, Gibbon M, Williams JBW. *Structured Clinical Interview for DSM-IV-TR Axis I Disorders*. Research version. Patient edition (SCID-I/P). New York: Biometrics Research, New York State Psychiatric Institute; 2002. Wersja polska. Popiel A, Zawadzki B, Prąglowska E. Warszawa: Pracownia Testów Psychologicznych PTP; 2013.
31. Foa EB, Rauch SAM. *Cognitive changes during prolonged exposure versus prolonged exposure plus cognitive restructuring in female assault survivors with posttraumatic stress disorder*. J. Consult. Clin. Psychol. 2004; 72: 879–884.
32. Nishith P, Nixon RD, Resick PA. *Resolution of trauma-related guilt following treatment of PTSD in female rape victims: a result of cognitive processing therapy targeting comorbid depression?* J. Affect. Disord. 2005; 86(2–3): 259–265.

**Acknowledgements:**

The paper was prepared within the study sponsored by Ministry of Science and Higher Education – grant N N106360937 „Czynniki warunkujące skuteczność psychoterapii poznawczo-behavioralnej zaburzeń potraumatycznych” (Factors influencing the effectiveness of cognitive-behavioural therapy for PTSD)

*The author wishes to thank prof Bogdan Zawadzki and dr Ewa Prąglowska without whom the study and the treatment would not take place.*