The Person and the Challenges
Volume 11 (2021) Number 1, p. 249–270
DOI: http://dx.doi.org/10.15633/pch.3894

Meta Košir, ORCID: https://orcid.org/0000-0002-5729-8413
Barbara Simonič, ORCID: https://orcid.org/0000-0002-5842-2017
Christian Gostečnik, ORCID: https://orcid.org/0000-0001-5973-0145
Marko Noč, ORCID: https://orcid.org/0000-0003-3303-4306
Špela Tadel Kocjančič, ORCID: https://orcid.org/0000-0002-6119-4852
Anja Jazbec, ORCID: https://orcid.org/0000-0002-3135-9986
Klementina Dovečar, ORCID: https://orcid.org/0000-0002-2159-670X
Anja Kotnik, ORCID: https://orcid.org/0000-0003-2851-2107
Polona Kotnik, ORCID: https://orcid.org/0000-0002-5511-7308
Špela Kropivnik, ORCID: https://orcid.org/0000-0002-5190-1576
Helena Smonkar, ORCID: https://orcid.org/0000-0002-3350-1851
Julija Vačovnik, ORCID: https://orcid.org/0000-0002-2927-2128
Karmen Vehovar, ORCID: https://orcid.org/0000-0001-8925-0986
Tanja Pate, ORCID: https://orcid.org/0000-0001-9570-5617
Faculty of Theology, University of Ljubljana, Slovenia
Franciscan Family Institute, Ljubljana, Slovenia
Ljubljana University Medical Center, Slovenia

Relational Family Therapy in the Treatment of Sudden Cardiac Arrest Survivors and their Relatives*

Abstract

Sudden cardiac arrest is the most common single cause of death in the contemporary world, but the proportion of survivors is increasing thanks to modern intensive meth-

* The results are derived from the project „Development and research of psychotherapeutic treatment for families of survivors of sudden cardiac arrest" within the call „Project work with the economy and non-economy in the local and regional environment – Creative path to knowledge 2017–2020." The investment is co-financed by the Republic of Slovenia and the European Union under the European Social Fund.

ods of hospital treatment. However, data show that survivors experience high rates of neurological and cognitive deficits and poorer emotional well-being, which is a major challenge in treating these individuals and encouraging their integration in everyday life. These issues range from a number of emotional problems, such as anxiety and depression, to lower levels of participation in social life and a low rate of return to their workplace. The need for security and support increases because of the feelings of insecurity, vulnerability and fear of the recurrence of symptoms. Relatives/caregivers who report emotional problems and a higher level of post-traumatic stress are physically and mentally burdened, too. Hence, sudden cardiac arrest is a life-threatening event which is traumatic for survivors and their close relatives. It triggers strong emotional responses that are characteristic of all types of trauma (reliving the trauma, avoidance, negative thoughts and mood, increased agitation). People who have survived trauma thus suffer long-term effects, which are reflected in various dysfunctional behaviours and activities due to inadequate regulation of affective states. Because of these issues, there is a need for effective interventions that can psychologically help patients and relatives after surviving sudden cardiac arrest. In this paper, we will present the model of Relational Family Therapy, which can enable survivors and their relatives to appropriately emotionally-affectively process this experience and thus more appropriately integrate into a new way of life. With the qualitative research method of task analysis, we will show the process of change, which is based on the establishment of a new regulation of affect and allows in-depth processing of difficult emotional states after this event.

Keywords

Family, psychotherapy, sudden cardiac arrest, trauma, task analysis.

1. Introduction

Surviving sudden cardiac arrest is a life-changing event for the survivor and their family members. Due to modern intensive hospital treatment methods, the rate of survivors is increasing, as is the rate of survivors who are able to live independently; data show, however, that these individuals experience high levels of neurological deficits, cognitive deficits and poorer emotional well-being,[1] which in a broader context presents a major challenge in the

[1] V. R. Moulaert, J. A. Verbunt, C. M. van Heugten, D. T. Wade, *Cognitive impairments in survivors of out-of-hospital cardiac arrest: A systematic review*, "Resuscitation" 80 (2009), p. 303.

medical and psychosocial treatment of these persons. Survival success can not only be defined by survival itself, but also by looking at the whole picture of the later quality of life of survivors and their closest relatives, where various forms of psychosocial support can contribute to faster and better integration into everyday life.

2. Sudden cardiac arrest and psychosocial effects

About half of patients who survive sudden cardiac arrest suffer from cognitive deficits (e.g. memory problems, attention problems, and impaired performing of daily activities), and their overall quality of life is affected.[2] This causes a number of emotional problems, such as anxiety and depression, as well as a lower rate of social inclusion and a low rate of return to work.[3] Research[4] on the lives of survivors of sudden cardiac arrest shows that there is an increased need for security and support, with the feelings of insecurity, a tendency to re-establish a previous lifestyle, emotional challenges and vulnerability, responses to physical symptoms (preoccupation or denial) and lifestyle changes. Especially after discharge from the hospital, survivors experience a period of uncertainty, vulnerability, and fear of the recurrence of symptoms.

The effects are not only felt by the survivors of sudden cardiac arrest but also by their relatives. That being said, one year after this event, both patients and

[2] R. de Vos R., H. C. de Haes, R. W. Koster, R. J. de Haan, *Quality of survival after cardiopulmonary resuscitation*, "Archives of Internal Medicine" 159 (1999), pp. 249–250; H. Saner, E. Borner Rodriguez, A. Kummer Bangerter, R. Schuppel, M. von Planta, *Quality of life in long-term survivors of out-of-hospital cardiac arrest*, "Resuscitation" 53 (2002), pp. 11–12; J. van't Wount Hofland, V. Moulaert, C. van Heugten, J. Verbunt, *Long-term quality of life of caregivers of cardiac arrest survivors and the impact of witnessing a cardiac event of a close relative*, "Resuscitation" 128 (2018), pp. 198–199.

[3] A. Lundgren-Nilsson, H. Rosen, C. Hofgren, K. S. Sunnerhagen, *The first year after successful cardiac resuscitation: function, activity, participation and quality of life*, "Resuscitation" 66 (2005), pp. 288–289; R. O. Roine, S. Kajaste, M. Kaste, *Neuropsychological sequelae of cardiac arrest*, "JAMA" 269 (1993), p. 237.

[4] A. Ketilsdottir, H. R. Albertsdottir, S. H. Akadottir, T. J. Gunnarsdottir, H. Jonsdottir, *The experience of sudden cardiacarrest: Becoming reawakened to life*, "European Journal of Cardiovascular Nursing" 13 (2014), pp. 431–432.

relatives report an improvement in overall well-being.[5] However, after one year, 40% of relatives still experience intense effects of this event. Survivors' intimate partners may experience long-term symptoms such as mood disorders, post-traumatic stress, and anxiety,[6] and even more so than patients themselves. Even 25 months later, relatives still find it difficult to face and cope with major lifestyle changes. 60% of relatives experience psychosomatic problems such as a lack of interest, sleep disturbances, fatigue, decreased sexual desire, decreased responsiveness, and weight and appetite loss. 50% report a lack of social support.[7] It can be said that the degree of symptomatology in relatives is at least as high as that of persons who have survived sudden cardiac arrest.

3. Sudden cardiac arrest as a traumatic event

Sudden cardiac arrest is a life-threatening event, which means that it is a traumatic experience for survivors and their relatives, as it is sudden, potentially lethal event accompanied by an intense feeling of the loss of control and helplessness during the event.[8] In addition, the level of life threat is still increased after the event. This causes strong emotional responses such as fear (of death or recurrence) or anxiety, anger, sadness and regret[9], therefore at best an increased rate of experienc-

[5] H. G. van Wijnen, S. M. Rasquin, C. M. van Heugten, J. A. Verbunt, V. R. Moulaert, *The impact of cardiac arrest on the long-term wellbeing and caregiver burden of family caregivers: a prospective cohort study*, "Clinical Rehabilitation" 31 (2017), pp. 1267–1268.

[6] W. Middelkamp, V. R. Moulaert, J. A. Verbunt, C. M. van Heugten, W. G. Bakx, D. T. Wade, *Life after survival: long-term daily life functioning and quality of life of patients with hypoxic brain injury as a result of a cardiac arrest*, "Clinical Rehabilitation" 21 (2007), pp. 425–426; E. M. Wachelder, V. R. Moulaert, C. van Heugten, J. A. Verbunt, S. C. Bekkers, D. T. Wade, *Life after survival: long-term daily functioning and quality of life after an out-of hospital cardiac arrest*, "Resuscitation" 80 (2009), pp. 521–522.

[7] G. Pusswald, E. Fertl, M. Faltl, E. Auff, *Neurological rehabilitation of severely disabled cardiac arrest survivors. Part II. Life situation of patients and families after treatment*, "Resuscitation" 47 (2000), pp. 244–247.

[8] I. Kutz, H. Shabtai, Z. Solomon, M. Neumann, D. David, *Posttraumatic Stress Disorder in Myocardial Infarction patients: Prevalence study,* "The Israel Journal of Psychiatry and Related Sciences" 31 (1994), pp. 48–49.

[9] J. Fisher, D. Collins, *Psychocardiac disorders*, in: R. Allan, J. Fisher (eds.), *Heart & mind: The practice of cardiac psychology*, Washington 2012, American Psychological Association, pp. 55–57.

ing post-traumatic stress, and at worst post-traumatic stress disorder (PTSD)[10], both in survivors and relatives.[11] A traumatic life-threatening medical condition, such as sudden cardiac arrest, and life after it is often an acute manifestation of a permanent disorder of the physical system, the effects of which can last for years and pose a constant threat to the survivor's body where there is no safe haven any more. This condition is a constant threat that, compared to the trauma that comes from outside, constantly threatens the individual from within, so that they can never move away from that threat and find refuge and protection from the threat, as they used to in the case of external hazards. The context for recovery from this trauma is therefore quite different, as the source of the threat to life is in the body and is thus always present. All of this also means an increased risk of developing PTSD, which is expected to occur in 12–25% of survivors of an acute health risk.[12] A systematic review of research[13] in the field of PTSD in cardiac conditions has shown that the rate of PTSD in survivors of sudden cardiac arrest is highest compared to other diagnoses and heart-related conditions. Given the fact that individuals who survived sudden cardiac arrest were actually very close to death, this finding is not surprising, but very little research focuses on this aspect in these patients. In any case, even if PTSD does not occur, after an event such as the survival of sudden cardiac arrest, psychological stress occurs in a form that mimics the symptoms of PTSD, an important phenomenon for treatment and further research.[14]

---

[10] N. Vilchinsky, K. Ginzburg, K. Fait, E. B. Foa, *Cardiac-disease-induced PTSD (CDI-PTSD): A systematic review*, "Clinical Psychology Review" 55 (2017), pp. 99–100.

[11] V. R. Moulaert, C. M. van Heugten, B. Winkens, W. G. M. Bakx, M. C. F. T. M. de Krom, T. P. M. Gorgels, D. T. Wade, J. A. Verbunt, *Early neurologically-focused follow-up after cardiac arrest improves quality of life at one year: A randomised controlled trial*, "International Journal of Cardiology" 193 (2015), p. 8.

[12] D. Edmondson, *An enduring somatic threat model of Posttraumatic Stress Disorder due to acute life-threatening medical events*, "Social and Personality Psychology Compass" 8 (2014), p. 119.

[13] G. Randall, G. J. Molloy, A. Steptoe, *The impact of an acute cardiac event on the partners of patients: A systematic review*, "Health Psychology Review" 3 (2009), p. 37; N. Vilchinsky, K. Ginzburg, K. Fait, E. B. Foa, *Cardiac-disease-induced PTSD (CDI-PTSD): A systematic review*, "Clinical Psychology Review" 55 (2017), p. 100.

[14] J. L. Birk, J. A. Sumner, M. Haerizadeh, R. Heyman-Kantor, L. Falzon, C. Gonzales, L. Gershengoren, P. Shapiro, D. Edmondson, I. M. Kronish, *Early interventions to prevent posttraumatic stress disorder symptoms in survivors of life-threatening medical events: A systematic review*, "Journal of Anxiety Disorders" 64 (2019), pp. 25–26.

Research finds that traumatic experiences, unlike others (where the psyche is not able to accurately reproduce impressions and which usually fade over time), are encoded in memory in such a way that traumatic impressions are relived without major change, years and decades after the event[15], which causes stronger maladaptive reliving when stimulated and what we consider a blockade of proper processing.[16] Such experiences remain "locked" or "frozen" in so-called neurobiological stagnation, in which no neurological connections are established that would normally allow for resolution or recovery.[17] According to some researchers[18], in such a case, due to inappropriate memory processing, which is partly manifested by prolonged and inappropriate predominance of episodic memory (instead of semantic memory) of traumatic event, the connection between the memory of the traumatic event and other memories and information does not develop. When traumatic memory is stimulated, individuals do not react according to the present, but according to a past traumatic experience that has not been transformed over time (i.e. it contains thoughts, bodily reactions, and feelings from the time of the experience). Effects can manifest as inadequate affect regulation, depression, anxiety disorders, substance abuse, and destructiveness; research also reveals trauma as the etiology of many relational disorders.[19]

[15] B. A. van der Kolk, J. W. Hopper, J. A. Osterman, *Exploring the nature of traumatic memory: Combining clinical knowledge and laboratory methods*, "Journal of Aggression, Maltreatment, and Trauma" 4 (2001), p. 12.

[16] F. Shapiro, *Eye movement desensitization and reprocessing: Basic principles, protocols and procedures*, New York 2001, Guilford Press, pp. 26–29.

[17] B. A. van der Kolk, J. W. Hopper, J. A. Osterman, *Exploring the nature of traumatic memory: Combining clinical knowledge and laboratory methods*, "Journal of Aggression, Maltreatment, and Trauma" 4 (2001), pp. 16–18.

[18] R. Stickgold, *EMDR: A putative neurobiological mechanism of action*, "Journal of Clinical Psychology" 58 (2002), pp. 62–64.

[19] J. C. Ballenger, J. R. T. Davidson, Y. Lecrubier, D. J. Nutt, R. D. Marshall, C. B. Nemeroff, A. Y. Shalev, R. Yehuda, *Consensus statement update on posttraumatic stress disorder from the international consensus group on depression and anxiety*, "Journal of Clinical Psychiatry" 65 (2004), pp. 55–56.

4. Psychotherapy as a psychological intervention after sudden cardiac arrest

Sudden cardiac arrest therefore affects patients and relatives in many key areas, and effective interventions are needed to help patients and relatives after this event.[20] Since the event is traumatic, the need for various forms of assistance for survivors and their relatives is all the more urgent. Those who experience an acute life-threatening medical event may develop clinically significant reactions such as PTSD, anxiety, depression, complex grief, and somatic problems. There are also secondary effects in developmental, physical, existential, relational, professional and spiritual spheres, which can lead people to seek advice for support, growth, and healing.[21] Given that complications and the occurrence of PTSD are possible after surviving an acute life-threatening medical event, it makes sense to consider interventions that would prevent exacerbation of these effects and other complications.[22]

In the case of sudden cardiac arrest, approaches can be simple psychological-educational interventions (e.g. information on the challenges of sudden cardiac arrest and how to deal with them, referral to a specialist in cases of depression or PTSD, the possibility of a direct telephone connection to talk to a specialist about health or mental challenges during recovery, and the opportunity to monitor and assess physical and mental health in the clinic).[23] Guidelines to be followed by post-discharge treatment approaches are: promoting safety and support by providing opportunities to talk about the experience and feelings

[20] V. R. M. Moulaert, C. M. van Heugten, T. P. M. Gorgels, D. T. Wade, J. A. Verbunt, *Long-term outcome after survival of a cardiac arrest: A prospective longitudinal cohort study*, "Neurorehabilitation and Neural Repair" 31 (2017), p. 37; G. Pusswald, E. Fertl, M. Faltl, E. Auff, *Neurological rehabilitation of severely disabled cardiac arrest survivors. Part II. Life situation of patients and families after treatment*, "Resuscitation" 47 (2000), p. 247.

[21] M. Flaum Hall, S. E. Hall, *When Treatment Becomes Trauma: Defining, Preventing, and Transforming Medical Trauma*, "VISTAS" 2013, pp. 5–6. Retrieved from https://www.counseling.org/docs/default-source/vistas/when-treatment-becomes-trauma-defining-preventing-.pdf (28.07.2020).

[22] J. L. Birk, J. A. Sumner, M. Haerizadeh, R. Heyman-Kantor, L. Falzon, C. Gonzales, L. Gershengoren, P. Shapiro, D. Edmondson, I. M. Kronish, *Early interventions to prevent posttraumatic stress disorder symptoms in survivors of life-threatening medical events: A systematic review*, "Journal of Anxiety Disorders" 64 (2019), pp. 26–27.

[23] S. Islam, *Therapeutic hypothermia in cardiovascular disease [doctoral thesis]*, Cambridge 2017, Anglia Ruskin University, Faculty of Medical Science, pp. 25–26.

associated with the event and changes in life after it, providing guidance in relation to limitations in daily activities; addressing emotional challenges and finding appropriate ways to deal with them, evaluating cognitive and physical functionality to optimize recovery in daily life, including family members, and addressing the need for comprehensive support and assistance. Therefore, support should not be merely informative: it should also enable addressing and processing deeper emotional complications and challenges.[24] Not only patients but also close family members should be included in the treatment, as such experiences have a significant impact on the entire family system; at the same time, the characteristics of the family system have a significant impact on the processing of such experience. However, this family (systemic) aspect has not yet been sufficiently explored. Therefore, it makes sense to design help after sudden cardiac arrest by involving not only survivors but also their relatives (the survivor's partner, children and other members of the family system), and to address the characteristics of the family system which are significantly involved in the processing of the traumatic experience in the participant.[25]

Due to the traumatic nature of experiencing sudden cardiac arrest, the need for deeper psychotherapeutic treatment is justified, which enables survivors and their relatives to appropriately emotionally-affectively process this experience and thus properly integrate into a new way of life. There are practically no specific psychotherapeutic interventions recommended or research conducted in this area. Some studies report a combination of cognitive-behavioural therapy with other elements (e.g. stress and pain management techniques, physical training, and offering information about consequences).[26] Nevertheless, based on other findings we can conclude that psychotherapeutic interventions may help prevent the long-term adverse effects of the traumatic experience of sudden cardiac

[24] A. Ketilsdottir, H. R. Albertsdottir, S. H. Akadottir, T. J. Gunnarsdottir, H. Jonsdottir, *The experience of sudden cardiacarrest: Becoming reawakened to life*, "European Journal of Cardiovascular Nursing" 13 (2014), pp. 433–34.

[25] Moulaert V. R., C. M. van Heugten, B. Winkens, W. G. M. Bakx, M. C. F. T. M. de Krom, T. P. M. Gorgels, D. T. Wade, J. A. Verbunt, *Early neurologically-focused follow-up after cardiac arrest improves quality of life at one year: A randomised controlled trial*, "International Journal of Cardiology" 193 (2015), p. 14.

[26] J. L. Birk, J. A. Sumner, M. Haerizadeh, R. Heyman-Kantor, L. Falzon, C. Gonzales, L. Gershengoren, P. Shapiro, D. Edmondson, I. M. Kronish, *Early interventions to prevent posttraumatic stress disorder symptoms in survivors of life-threatening medical events: A systematic review*, "Journal of Anxiety Disorders" 64 (2019), p. 33.

arrest. Approaches that are based on affect regulation, such as the Relational Family Therapy model, are very promising in dealing with the effects of trauma.

5. Relational Family Therapy

Research shows that trauma is embedded and stored in the implicit, somatic memory of the right cerebral hemisphere, in emotional communication dynamics, and is therefore inaccessible to conscious memory.[27] The modern relational psychotherapeutic paradigm, which also includes the model of Relational Family Therapy[28], emphasizes just that: unresolved psychic content, which is also neurobiologically inscribed in our body, comes to light in various symptomatic and often dysfunctional forms of behaviour.[29] Relational Family Therapy penetrates the unconscious memory through the mechanisms of projective and introjective identification (transference and countertransference) and by raising awareness of it in a safe therapeutic relationship helps to regulate the individual's psychobiological states and the affects arising from these states. Affect regulation brings understanding the recurring dysfunctional ways in which participants relate to themselves and others, which arise again in the therapeutic relationship. Therapeutic intervention opens the possibility of transforming an ineffective and painful way of affect regulation, which was built as a defence mechanism in the face of trauma, while its blueprint had been embedded in the individual's body throughout his development from the first day of life. Individuals who had shown dysfunctional affect regulation before the onset of a traumatic experience, such as sudden cardiac arrest (in patients and relatives), are burdened by a legacy that poses an additional vulnerability to difficulty coping with trauma, worsening symptoms, and overall well-being even after the event.

---

[27] B. Rothschild, *The body remembers volume 2: Revolutionizing trauma treatment,* New York 2017, W. W. Norton & Company, pp. 74–96.

[28] C. Gostečnik C., *Relacijska družinska terapija*, Ljubljana 2004, Brat Frančišek and Franciscan Family Institute; C. Gostečnik, *Inovativna relacijska družinska terapija,* Ljubljana 2011, Brat Frančišek, Faculty of Theology and Franciscan Family Institute; C. Gostečnik, *Relacijska paradigma in klinična praksa*, Ljubljana 2013, Brat Frančišek and Franciscan Family Institute; C. Gostečnik, *Relational family therapy,* New York 2017, Routledge.

[29] R. Cvetek, C. Gostečnik, T. Pate, B. Simonič, T. Valenta, T. Repič Slavič, *Spirituality and psycho-organic regulation*, "The Person and the Challenges" 8 (2018), pp. 148–155.

Relational Family Therapy sees the individual as a part of the whole family system to which he belongs. Here he is involved in a system of relationships that, through their dynamics, shape his psychic structure. Within the family system, transactions of various internal contents, which can be positive as well as pathological, take place constantly in interpersonal relationships. As an individual, a member of the family system unconsciously accepts and identifies with this content on the basis of the relational mechanism of projection identification. There is another fundamental mechanism at work here, the mechanism of compulsive repetition, which creates a dynamic in which the individual compulsively repeats the basic patterns of relationships and thus stimulates the emergence of core affects that are known to him and are part of his mental structure, driving the patterns of his perception of himself and others, creating relationships and maintaining them, and coping with stressful events, such as the survival of life-threatening health conditions.[30]

Relational Family Therapy approaches the revealing of painful core affects that guide the dynamics of experience, at three levels: systemic, interpersonal, and intrapsychic. This affects pervades the experience at all levels, and inappropriate regulation of affect is reflected in symptomatology in various forms. Therefore, it is necessary to find the core affects in therapy and then change the basic system of affect regulation and find a way to make affect regulation more functional.[31]

Relational Family Therapy is also effective in helping survivors of sudden cardiac arrest and their relatives, as it allows for the recovery of traumatic experiences and more functional resolution of patterns and dynamics in which they are involved due to traumatic experiences as well as other challenges. Successful therapeutic processing also requires in-depth insight into the system of relationships which the individual is part of[32], so from this point of view, not only

[30] C. Gostečnik, *Relacijska družinska terapija*, Ljubljana 2004, Brat Frančišek and Franciscan Family Institute, pp. 15–48; C. Gostečnik, *Relational family therapy,* New York 2017, Routledge, pp. 39–50; C. Gostečnik, R. Cvetek, T. Repič Slavič, T. Pate, *Nove dimenzije analize*, "Bogoslovni vestnik" 74 (2014), pp. 508–511.

[31] C. Gostečnik, *Inovativna relacijska družinska terapija,* Ljubljana 2011, Brat Frančišek, Faculty of Theology and Franciscan Family Institute, pp. 9–62; R. Cvetek, M. Cvetek, *The Concept of Respect in the Bible and in Modern Sciences: A Descriptive Model of Respect in Interpersonal Relations*, „Bogoslovni vestnik" Vol. 78 (2018), No. 3, pp. 855–869.

[32] C. Gostečnik, *Relacijska družinska terapija*, Ljubljana 2004, Brat Frančišek and Franciscan Family Institute, pp. 73–81; C. Gostečnik, *Inovativna relacijska družinska terapija,* Ljubljana 2011,

survivors but also their closest relatives are invited to enter therapy. In treating individuals and relatives after sudden cardiac arrest, Relational Family Therapy focuses on establishing appropriate emotional processing (affect regulation) by looking at and processing responses to this traumatic event in relation to past experiences on which emotional regulation problems may be based. In this way, painful events such as surviving and living after sudden cardiac arrest can be more deeply understood, processed, and more functionally integrated into later life.

In the following section, we will use the task analysis method to present the process of change in Relational Family Therapy in dealing with severe emotional complications in the therapeutic treatment of clients after sudden cardiac arrest.

6. Empirical verification of the process of change in Relational Family Therapy in the treatment of persons after sudden cardiac arrest

6.1. Method

6.1.1. Task analysis

Task analysis is a method of researching important events in psychotherapy. It is used to analyse processes and outcomes in psychotherapy, especially to explore the resolving of problems within therapy itself. Namely, the research of psychotherapy can not only be reduced to identifying its effectiveness: it is also necessary to pay attention to the process in order to understand how to achieve effectiveness.[33] It is a methodology of process research that seeks to discover how changes occur during various "events" in therapy. The therapeutic process explores this method as a set of events (a process) leading to a change in therapy, observing the sequence of events through the participant's process and the

Brat Frančišek, Faculty of Theology and Franciscan Family Institute, pp. 5–14; C. Gostečnik, *Relational family therapy,* New York 2017, Routledge, pp. 45–50.

[33] L. S. Greenberg, *A guide to conducting a task analysis of psychotherapeutic change*, "Psychotherapy Research" 17 (2007), p. 16.

sequence of therapeutic interventions.[34] The purpose of the task analysis method is to 1) determine whether a specific intervention successfully resolves a specific in-session event; 2) define the fundamental aspects and the process that makes this intervention effective; and 3) assess the contribution of the resolution of the event to the overall success of treatment. Interventions explored by task analysis are described at the level of a repeatable micro process to ensure change in the psychotherapeutic process.[35]

Task analysis is a method that cannot be performed on a single case. It involves several studies in order to perform the full sequence of steps required by the analysis. These steps are divided into two major phases: the discovery-oriented phase based on a rational-empirical model, and the validation-oriented phase based on hypotheses testing. Both phases consist of several steps where an event in therapy is defined in advance, which is a task that needs to be solved. Usually, these are perceived barriers and blockages in the therapeutic process which needed special interventions to be resolved, and a change occurred in the therapeutic process. Based on this, the researcher-therapist, within the specific theoretical conceptualization of the therapeutic modality, creates an initial map of tasks, where they define the process of change and identifies the components of the event of change. The map is a model that shows how change occurs. The researcher then follows the therapeutic interventions and responses of the client in order to define a series of events that lead to the successful resolution of the task in therapy. By repeating the analysis of all events in therapy, the researcher verifies the initial model of change.[36]

6.1.2. Participants and procedure

Data for the primary rational and empirical analysis were collected in a therapeutic process with a couple where the husband survived sudden cardiac arrest 8 months before, and the results were subsequently verified and confirmed in an additional empirical analysis of three therapeutic cases where one client was a survivor of a life-threatening medical condition, and in two cases the

[34] B. Bradley, J. L. Furrow, *Toward a mini-theory of the blamer softening event: Tracking the moment-by-moment process*, "Journal of Marital and Family Therapy" 30(2004), p. 236.

[35] J. Benítez-Ortega, M. Garrido-Fernández, *Review of task analysis research of significant events in psychotherapy*, "Revista de Psicoterapia" 27 (2016), p. 101.

[36] L. S. Greenberg, *A guide to conducting a task analysis of psychotherapeutic change*, "Psychotherapy Research" 17 (2007), pp. 16–25.

relatives (father and daughter, respectively) of a life-threatening medical condition survivors were included in treatment. In all cases, therapeutic treatment was conducted according to the model of Relational Family Therapy, which means 12 weekly meetings of one hour each. The analysis was conducted on the basis of literal transcriptions of therapeutic sessions which had been audio recorded. Ethical research principles were taken into account in data collection and analysis.

The analysis was conducted according to the principles of the methodology of task analysis in five steps: 1. formulation of the initial map of tasks, 2. identification of components of the change event, 3. rational analysis: delineation of the process (drawing a map) of the client and therapist process, 4. empirical analysis: creation of a mini-theory, 5. verification.

The primary analysis, which consisted of a rational and primary empirical analysis, was conducted on the case of therapeutic treatment of a couple (married 47 years) where the husband (68 years) survived sudden cardiac arrest 8 months before. His wife witnessed the event and resuscitation. They entered therapy because due to the event, the husband experienced a high level of anxiety, which hindered him in his daily activities. Although he was aware of the dynamics of the effects after sudden cardiac arrest (cognitive deficits, memory and concentration issues, physical weakness), at the slightest stimuli and perceived changes in his body he felt fear and anxiety bordering on panic attacks. Rationally, he knew that fear and anxiety were expected reactions, but he felt that this fear was too overwhelming and beyond his control. This fear overcame him to the extent that it blocked him in his relationships and overall functionality.

6.2. Results

After creating the initial task map, which we formed according to the fundamental premises of the Relational Family Therapy paradigm, we reviewed the transcripts, in which we identified the events of change and determined their components. Then, in the rational analysis phase, we outlined this process and created a map of the client's and therapist's process leading to change. Through empirical analysis, we created a mini-theory about the process (intervention) that leads to change, and verified (validated) it on other cases of therapeutic processes with people with a related experience of surviving acute life-threatening medical events.

6.2.1. Rational analysis and creating therapy map

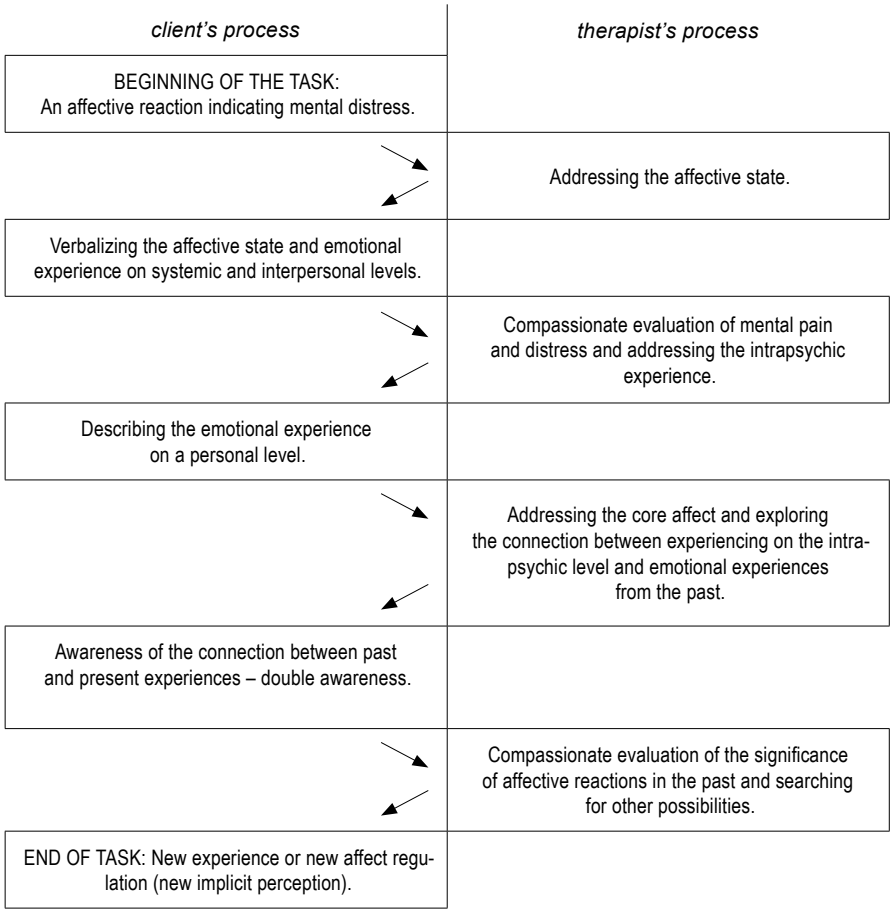
Research on coping with severe emotional complications in the process of therapeutic treatment of a client after sudden cardiac arrest has revealed the following key steps that allow for change in therapy:

1. An affective reaction indicating mental distress.
2. Verbalizing the affective state and emotional experience on systemic and interpersonal levels.
3. Describing the emotional experience on a personal level.
4. Awareness of the connection between past and present experiences – double awareness.
5. New experience or new affect regulation (new implicit perception).

The therapist enables transitions between these steps of change by means of the following interventions:

1. Addressing the affective state.
2. Compassionate evaluation of mental pain and distress and addressing the intrapsychic experience.
3. Addressing the core affect and exploring the connection between experiencing on the intrapsychic level and emotional experiences from the past.
4. Compassionate evaluation of the significance of affective reactions in the past and searching for other possibilities.

The therapy map showing parts of the process of change in therapy is presented in picture 1.



Picture 1: The therapy map showing parts of the process of change in therapy.

6.2.2. Empirical analysis – presentation of therapeutic process

(C: client, T: therapist)

- *Affective response indicating mental distress (beginning of the task) and addressing affective state (therapist's process).*

C: It all came crashing down on me. I felt so bitter when I came out.
T: Let's talk some more about that…
C: I'm a coward.

T: A coward?

C: I constantly feel fear now. Constantly. I have never known that before. Me, never. My wife was surprised, too. After I came from the hospital I was so scared that I didn't have a clue what was going on. At first, my dreams were sheer horror. Quite a few times I had difficulty breathing. I was afraid. And still am… Terrible anxiety.

T: Can you now view all that is emotionally happening to you as your reality after cardiac arrest? That is the effect. And what you experience, that fear, it's the emotions, feelings, and thoughts that are part of it.

- *Verbalizing affective states and emotional experience at the systemic and interpersonal level (client's process) and compassionate evaluation of mental pain and distress and addressing the intrapsychic experience (therapist's process).*

C: I've never known that before. Fear – what is this? But now it's different. In the hospital, I often woke up out of fear, too.

T: How much fear do you experience now?

C: I watch how I breathe, I watch not to catch a cold. At the hospital, I was taught breathing and calming exercises. That helps me. But fear is always there: What if something goes wrong? Because it really can go wrong. If I start to choke, the next stage is a heightened heart rhythm. I can't trust the defibrillator at the moment, it may or may not work. If my wife is around, I'll probably win, otherwise I probably won't. Very likely not. I can't say I'm 100% OK, because I'm not; I used to be in the past. I don't trust these techniques. I have changed, too much and too fast. I surprise my wife. Now I understand what she was saying. I don't force her and I know she needs time. I'm analyse retrospectively. Today I see how I made mistakes. Now I see why life is the way it is. If I had listened to my wife, things would be different.

T: You said that with some regret. But you followed the path you had chosen, you two. You made decisions that you thought were good for you. It seems everything went so fast.

C: No, no. My wife did take her time. I was the one who didn't. I was selfish. We talked about it. There was a lot of alcohol, too, for me. I could have lived differently if I knew better. I didn't know how to say no. Especially with my family. When I did see problems it was already too late. And today my wife helps me a lot. Sometimes I think, How long will she bear with me?

T: Is there a lot of fear too, in your relationship?

C: Quite a lot. Last summer brought many changes.

- *Describing emotional experiencing on personal level (client's process) and addressing the core affect and exploring the connection between intrapersonal experiences and emotional experiences from the past (therapist's process).*

T: Was it difficult to accept so many changes?

C: Very difficult. I'm still struggling. Many things changed. In the past, I wouldn't agree to a dialogue we have now. Today, I'm happy to. Emotionally, I've changed a lot. In the past I was ashamed of that. Not anymore.

T: A whole new reality has been created, a new life in which there are also emotions from which you used to quickly escape in the past.

C: I have missed a lot.

T: One can also feel a lot of sadness along with fear. What are you feeling now?

C: I don't know. It is different than it used to be; it should have been like that in the past. At the end of life, things will unfold as they should have some time in the middle of our relationship. We did have quite a bit of a marital crisis. But then it returned to normal. I didn't overdramatize. Sometimes one needs to compromise.

T: This distress seems to accumulate, to remain locked inside. This fear needs to be talked about. Could you talk about how you felt in the past? What was going on with your emotions? How did you accept them? As a kid?

- *The awareness that past and present experiencing are connected – double awareness (client's process) and empathetic assessment of the meaning of affective reactions in the past and searching for different possibilities (therapist's process).*

C: I didn't think about my emotions. Life just went on. I was often defiant if something bothered me at work, or at home… I have been stubborn since birth. Sometimes it helped, sometimes not. 'That's the way it has to be.' When I resisted, I knew I was alone. Counting on help is futile, you're only disappointed. I wasn't used to talking about how I experienced things.

T: You were more or less by yourself.

C: Certainly. Sometimes I must have been awfully difficult. Life has taught me a lot of lessons. I knew from a young age that I would have to take care of myself.

T: Even when as a kid you were powerless, weak, afraid?

C: Nobody was there for me, ever… I had no childhood. I'm not saying everything should be as in a fairy tale… I was soon forced to grow up and take care of myself.

T: You had to endure it all yourself. There was nobody to share it with, someone to hug and be a child with. And this should belong to you. Just to have someone to be there for you.

C: I wish there was at least one person. To tell me that everything would be okay. That's it. I have no idea how I was able to survive some things and not to choose some other outcome.

T: There's so much sadness and pain here… So that one must just cut off these emotions in order to not feel, to survive. That's what you did then, throughout your life: you relied on yourself because it was too risky to stop, allow yourself to feel distressed, and lean on someone. And even now, when you face the fear after this event, when you are overwhelmed by emotions… Maybe that's why this fear feels so uncontrollable?

C: Probably. I'm learning a lot. Now I can no longer ignore my feelings: they are too strong.

- *New experience, i.e. new affect regulation (new implicit perception) (end of task).*

T: And what miraculous power one feels when accepted? With you is your wife whom you can trust. There is a kind of safety around her. Can you share those emotions with her?

C: Yes, with her I feel truly accepted, heard. Now I see and feel our relationship differently – the relationship that used to just run past me. I know she'll take care if something goes wrong. I learn to deal with emotions, talk about them, not just run away and persevere on my own.

T: Perhaps in the background of this flight from the emotions of the past and the distress you feel now that you can't escape that fear, there is the pain, the sadness that awakens at the memory of how hard it was when you were a little and scared boy, and there was no one there for you. Now, however, there is your wife with whom you can share things. And you are no more a young and helpless child; you can now have control, also by seeking shelter in a relationship.

C: Yes, this means a lot. On second thought, the fear is not even that great any more.

6.3. Discussion

Through the analysis of therapeutic processes, we presented the process of change in Relational Family Therapy in clients who suffer from the emotional effects of facing death when they survived sudden cardiac arrest or other acute

life-threatening medical conditions. We delineated a map that illustrates step-by-step the process of change in therapy. The task of this therapeutic treatment is resolving emotional distress while facing the effects of sudden cardiac arrest and of emotional distress. Through addressing the affective picture of the situation, psychological distress is being processed when aspects of present and past experiences are connected and a new understanding and new possibilities of perception are established. Relational Family Therapy aims at finding deeper foundations and mechanisms in the background of an experience which prompt even more dysfunctional behavioural patterns. Therefore, its approach is searching for the core affect that drives the dynamics of relationships at three levels of behaviour: systemic, interpersonal and intrapsychic level.[37] This affect pervades all relationships at all levels. Often, the structure of these relationships was established at a very early age, or was imposed through traumatic relationships and is repeated in adulthood. The core affect must first be revealed and then the basic system of affect regulation must be changed, and a way must be found to make the regulation of affect more functional. For the client, therapy opens the possibility of processing the destructive affect (which is often the base of more difficult coping with traumatic challenges, and sudden cardiac arrest is among these), as well as a new setup of relationships at all levels.[38]

In the case we analysed, the client expressed a severe, overwhelming affect of fear that made his life really hard. Exploring this affect has shown that there is sadness in the background that had never been addressed. It stemmed from the client's loneliness in his childhood, when he experienced no real closeness, protection and support: in the moments of emotional distress as a child he had to quickly learn not to show emotion and take care of himself. By addressing and exploring this background, the client obtained a new view of his emotions in the present, which are expected after such an event, but are difficult to bear. He realized that with connection and sensitivity to oneself, it is possible to give oneself the opportunity to address and process these emotions, rather than just being troubled and stressed by them.

The process, which we arrived at by task analysis, was also examined in other comparable therapeutic treatments of individuals who had survived an acutely

[37] C. Gostečnik, *Relational family therapy,* New York 2017, Routledge, pp. 4–5.

[38] C. Gostečnik, *Inovativna relacijska družinska terapija,* Ljubljana 2011, Brat Frančišek, Faculty of Theology and Franciscan Family Institute, pp. 63–64; C. Gostečnik, *Relational family therapy,* New York 2017, Routledge, pp. 39–40.

threatening medical condition, and their relatives. This model has proven to be a path to change in these cases as well. In all cases there were difficult and stressful emotional states, based mostly on fear. By exploring this dynamic, addressing these difficult emotions in depth, and searching for background emotional dynamics from past experiences, the safe therapeutic relationship facilitated a change that has been reflected in a more functional perception and emotional regulation.

7. Conclusion

We can conclude that the therapeutic process according to the Relational Family Therapy model can help to cope with emotional distress after surviving sudden cardiac arrest or other acute life-threatening medical conditions. Change occurs through the revealing of affective vulnerability caused by the event, which is to some extent the repetition of unresolved expectations, desires and needs from the past, especially from one's childhood, i.e. from the period when an individual's psychological structure is created, which influences their experience of self, relationships and the world in general. The awareness of these repetitions and addressing emotional vulnerability helps to improve emotional awareness and increases emotional regulation skills. The experience of emotional security in a therapeutic relationship creates more flexible and effective ways of emotional regulation and enables better management of emotional distress.

Bibliography

Ballenger J. C., Davidson J. R. T., Lecrubier Y., Nutt D.J., Marshall R.D., Nemeroff C.B., Shalev A.Y., Yehuda R., *Consensus statement update on posttraumatic stress disorder from the international consensus group on depression and anxiety*, "Journal of Clinical Psychiatry" 65 (2004), pp. 55–62.

Benítez-Ortega J., Garrido-Fernández M., *Review of task analysis research of significant events in psychotherapy*, "Revista de Psicoterapia" 27 (2016), pp. 99–122.

Birk J. L., Sumner J.A., Haerizadeh M., Heyman-Kantor R., Falzon L., Gonzales C., Gershengoren L., Shapiro P., Edmondson D., Kronish I.M., *Early interventions to prevent posttraumatic stress disorder symptoms in survivors of life-threatening medical events: A systematic review*, "Journal of Anxiety Disorders" 64 (2019), pp. 24–39.

Bradley B., Furrow J.L., *Toward a mini-theory of the blamer softening event: Tracking the moment-by-moment process*, "Journal of Marital and Family Therapy" 30 (2004), pp. 233–246.

Cvetek R., Cvetek M., *The Concept of Respect in the Bible and in Modern Sciences: A Descriptive Model of Respect in Interpersonal Relations*, „Bogoslovni vestnik" Vol. 78 (2018), No. 3, pp. 855–869.

Cvetek R., Gostečnik C., Pate T., Simonič B., Valenta T., Repič Slavič T., *Spirituality and psycho-organic regulation*, "The Person and the Challenges" 8 (2018), pp. 147–166.

de Vos R., de Haes H.C., Koster R.W., de Haan R.J., *Quality of survival after cardiopulmonary resuscitation*, "Archives of Internal Medicine" 159 (1999), pp. 249–254.

Edmondson D., *An enduring somatic threat model of Posttraumatic Stress Disorder due to acute life-threatening medical events*, "Social and Personality Psychology Compass" 8 (2014), pp. 118–134.

Fisher J., Collins D., *Psychocardiac disorders*, in: R. Allan, J. Fisher (eds.), *Heart & mind: The practice of cardiac psychology*, Washington 2012, American Psychological Association, pp. 55–90.

Flaum Hall M., Hall S.E., *When Treatment Becomes Trauma: Defining, Preventing, and Transforming Medical Trauma*, "VISTAS" 2013, pp. 1–15. Retrieved from https://www.counseling.org/docs/default-source/vistas/when-treatment-becomes-trauma-defining-preventing-.pdf (28.07.2020).

Gostečnik C., *Relacijska družinska terapija*, Ljubljana 2004, Brat Frančišek and Franciscan Family Institute.

Gostečnik C., *Inovativna relacijska družinska terapija,* Ljubljana 2011, Brat Frančišek, Faculty of Theology and Franciscan Family Institute.

Gostečnik C., *Relacijska paradigma in klinična praksa*, Ljubljana 2013, Brat Frančišek and Franciscan Family Institute.

Gostečnik C., *Relational family therapy,* New York 2017, Routledge.

Gostečnik C., Cvetek R., Repič Slavič T., Pate T., *Nove dimenzije analize*, "Bogoslovni vestnik" 74 (2014), pp. 507–520.

Greenberg L. S., *A guide to conducting a task analysis of psychotherapeutic change*, "Psychotherapy Research" 17 (2007), pp. 15–30.

Islam S., *Therapeutic hypothermia in cardiovascular disease [doctoral thesis]*, Cambridge 2017, Anglia Ruskin University, Faculty of Medical Science.

Ketilsdottir A., Albertsdottir H.R., Akadottir S.H., Gunnarsdottir T.J., Jonsdottir H., *The experience of sudden cardiacarrest: Becoming reawakened to life*, "European Journal of Cardiovascular Nursing" 13 (2014), pp. 429–435.

Kutz I., Shabtai H., Solomon Z., Neumann M., David D., *Posttraumatic Stress Disorder in Myocardial Infarction patients: Prevalence study,* "The Israel Journal of Psychiatry and Related Sciences" 31 (1994), 48–56.

Lundgren-Nilsson A., Rosen H., Hofgren C., Sunnerhagen K.S., *The first year after successful cardiac resuscitation: function, activity, participation and quality of life*, "Resuscitation" 66 (2005), pp. 285–289.

Middelkamp W., Moulaert V.R., Verbunt J.A., van Heugten C.M., Bakx W.G., Wade D.T., *Life after survival: long-term daily life functioning and quality of life of patients*

with hypoxic brain injury as a result of a cardiac arrest, "Clinical Rehabilitation" 21 (2007), pp. 425–431.

Moulaert V. R., Verbunt J.A., van Heugten C.M., Wade D.T., *Cognitive impairments in survivors of out-of-hospital cardiac arrest: A systematic review*, "Resuscitation" 80 (2009), pp. 297–305.

Moulaert V. R., C. M. van Heugten, B. Winkens, W. G. M. Bakx, M. C. F. T. M. de Krom, T. P. M. Gorgels, D. T. Wade, J. A. Verbunt, *Early neurologically-focused follow-up after cardiac arrest improves quality of life at one year: A randomised controlled trial*, "International Journal of Cardiology" 193 (2015), pp. 8–16.

Moulaert V. R. M., van Heugten C.M., Gorgels T.P.M., Wade D.T., Verbunt J.A., *Long-term outcome after survival of a cardiac arrest: A prospective longitudinal cohort study*, "Neurorehabilitation and Neural Repair" 31 (2017), pp. 530–539.

Pusswald G., Fertl E., Faltl M., Auff E., *Neurological rehabilitation of severely disabled cardiac arrest survivors. Part II. Life situation of patients and families after treatment*, "Resuscitation" 47 (2000), pp. 241–248.

Randall G., Molloy G.J., Steptoe A., *The impact of an acute cardiac event on the partners of patients: A systematic review*, "Health Psychology Review" 3 (2009), pp. 1–84.

Roine R. O., Kajaste S., Kaste M., *Neuropsychological sequelae of cardiac arrest*, "JAMA" 269 (1993), pp. 237–242.

Rothschild B., *The body remembers, Volume 2: Revolutionizing trauma treatment,* New York 2017, W. W. Norton & Company.

Saner H., Borner Rodriguez E., Kummer Bangerter A., Schuppel R., von Planta M., *Quality of life in long-term survivors of out-of-hospital cardiac arrest*, "Resuscitation" 53 (2002), pp. 7–13.

Shapiro F., *Eye movement desensitization and reprocessing: Basic principles, protocols and procedures*, New York 2001, Guilford Press.

Stickgold R., *EMDR: A putative neurobiological mechanism of action*, "Journal of Clinical Psychology" 58 (2002), pp. 61–75.

van der Kolk B. A., Hopper J.W., Osterman J.A., *Exploring the nature of traumatic memory: Combining clinical knowledge and laboratory methods*, "Journal of Aggression, Maltreatment, and Trauma" 4 (2001), pp. 9–31.

van Wijnen H. G., Rasquin S.M., van Heugten C.M., Verbunt J.A., Moulaert V.R., *The impact of cardiac arrest on the long-term wellbeing and caregiver burden of family caregivers: a prospective cohort study*, "Clinical Rehabilitation" 31 (2017), pp. 1267–1275.

van't Wount Hofland J., Moulaert V., van Heugten C., Verbunt J., *Long-term quality of life of caregivers of cardiac arrest survivors and the impact of witnessing a cardiac event of a close relative*, "Resuscitation" 128 (2018), pp. 198–203.

Vilchinsky N., Ginzburg K., Fait K., Foa E.B., *Cardiac-disease-induced PTSD (CDI-PTSD): A systematic review*, "Clinical Psychology Review" 55 (2017), pp. 92–106.

Wachelder E. M., Moulaert V.R., van Heugten C., Verbunt J.A., Bekkers S.C., Wade D.T., *Life after survival: long-term daily functioning and quality of life after an out-of hospital cardiac arrest*, "Resuscitation" 80 (2009), pp. 517–522.