ORIGINAL ARTICLE

The experience of post-traumatic stress disorder in patients after acute myocardial infraction: A qualitative research

H. Staikos[1], A. Chalkias[2,3], D. Tsekoura[4], N. Iakovidou[4], T. Xanthos[3, 5]

[1] Psychiatric Hospital of Athens, Athens, Greece, [2] National and Kapodistrian University of Athens, MSc "Cardiopulmonary Resuscitation", Athens, Greece, [3] Hellenic Society of Cardiopulmonary Resuscitation, Athens, Greece, [4] National and Kapodistrian University of Athens, [5] European University of Cyprus, Nicosia, Cyprus

ABSTRACT

Introduction: Acute myocardial infarction (AMI) is one of the most frequent causes of death worldwide, which may result in post-traumatic stress (acute or chronic), as well as in psychological distress, both of which change to a decisive extent the life and daily routine of the patient.

Purpose: To investigate the experience of post-traumatic stress disorder in patients who suffered an AMI and its effect on their quality of life.

Methodology: This qualitative research was conducted using the hermeneutic/phenomenological approach. Using with the method of semi-structured interviews, 20 (15 men, 5 women) patients described their experiences. The data were analyzed using the empirically grounded theory. **Results:** Patients who suffered an AMI exhibited a series of acute post-traumatic stress symptoms during the first hours after the onset of the disease, which sometimes may be evident for up to two years. The daily presence of psychological distress and the evident manifestation of the concept of spiritual maturation significantly altered their daily habits.

Conclusions: Patients with AMI experience post-traumatic stress which starts in the first hours after the event and may last for up to two years, which significantly affect their quality of life.

Keywords: Acute myocardial infarction, post-traumatic stress, psychological distress, spiritual maturation

Citation

H. Staikos, A. Chalkias, D. Tsekoura, N. Iakovidou, T. Xanthos. The experience of post-traumatic stress disorder in patients after acute myocardial infraction: A qualitative research. Scientific Chronicles 2017; 22(1): 74-82

INTRODUCTION

Acute myocardial infarction (AMI) is one of the most frequent causes of death worldwide [1, 2]. Research so far has shown that AMI is almost always followed by a number of symptoms, such as fear, anxiety, tremor, hypertension, weakness and debilitation. Interestingly, these symptoms belong to the major criteria for diagnosing acute post-traumatic disorder. This condition evolves into a chronic state, significantly altering the life and daily routine of patients after discharge [3].

The occurrence of AMI and the existence of post-traumatic stress as a natural consequence, whether acute or chronic result in the so-called psychological distress, which may change the patient's mental function and their daily habits [4, 5]. Therefore, physical rehabilitation of AMI patients should be further enriched with a parallel multidisciplinary programme that will support their psychological recovery [6-12]. The purpose of this qualitative research was to investigate the experience and characteristics of post-traumatic stress in AMI patients.

MATERIAL AND METHODS

In this qualitative research the sample was selected using the method of purposeful sampling, and complied with the rules of the appropriateness and adequacy [7], thus serving the purposes of our research. The study was approved by the Postgraduate Study Program (MSc) "Cardiopulmonary Resuscitation" of the Medical School of the National and Kapodistrian University of Athens.

In this study, we sought to include 35 outpatients who suffered AMI at least 6 months prior to enrollment, in order to study the research question in the long term. The participants gave written informed consent after a thorough explanation of the study's purpose. For the data analysis, empirically grounded theory was used [8], and in full accordance with the six steps of qualitative research [9] it was attempted to conduct a reliable investigation of the studied phenomenon.

The data were collected using in-depth semi-structured interviews, i.e. without strict structure, while the questions were open, focusing key points of the research question (Table 1). This was paramount, as the interview increases the interaction between the interviewer and the interviewee, while allowing additional questions in new areas of interest. Specifically, using this approach allowed us to analyze and record the questions "how" and "why" during the interviews and observe how patients experience post-traumatic stress and associated symptoms through the description of personal events, experiences and narratives.

The duration of each interview in our study does not exceed 45 minutes and realized in the outpatient area, while for the recording used recorder and recording, at the same time held the notes necessary for a better understanding of important points. With the completion of the interviews was the transcription of the complete and full

1 .Can you describe me your feelings after the manifestation of infarct episode?
2. When your life begins to reach normality?
3. How does the illness affect your daily life?
4. How does the illness changed your philosophy towards the life and people?

Table 1. Key points of research questions.

written record of them, followed by the encoding of the text of interviews.

Then was collating and comparing passwords, where he identified the differences and similarities and subsequently from the condensation of identical codes encountered keywords with thematic sections. The topics were the essence of the interpretation and analysis of our investigation linked with the existing literature.

RESULTS

Twenty patients (15 men and 5 women) accepted to participate and included in the study. Men are aged between 45 and 71 years old and women are aged between 48 and 64 years old. All patients are Greek citizens and they all reside in Attica.

The experience of acute post-traumatic disorder

The most important category emerging from data processing and analysis was the experience of acute post-traumatic disorder. The responding patients experienced a sense of intense fear which started within days and lasted for a few weeks: "*I felt that the time stopped, that my life had come to an unexpected standstill...*''. Another important finding was the feeling of "shock" experienced by the participants, as well as the feeling of anger about the incident: '' *I felt chaotic and I was in shock, especially the anger against myself was unprecedented...*''.

In addition, the patients reported that they were filled with guilt and feeling shame for what happened: ''*I was considering myself a looser… a dominant question inside me was a big "why"...*'', ''*I had feelings of guilt and disappointment, I constantly blamed myself.*'' Another important and typical finding was the feeling of emotional numbness: "*There was an unbelievable brutality in my psyche...*", "*I felt I was part of a theatrical performance, without even knowing the play*", "*anhedonia was dominant and I could nowhere find pleasure*".

Additionally, during the first days post-AMI, the patients experienced intense anxiety, confusion and indecisiveness: "*I felt a threat to my life; I was implicitly permeated by the fear of the next day*", "*I didn't want any obligations or responsibilities...*", "*I felt outside myself; I was very skeptical and absent-minded*".

Another common finding among the participants was physical reactions during the first few weeks post-AMI. The patients felt intense physical fatigue, tachycardia, sleeping and eating disorders, and changes in

libido, while the experience of painful memories and flashbacks were particularly strong: *"I had intense palpitations and tachycardia, I was constantly feeling a weight on my chest", "I was sleeping for several hours due to physical stress but also to avoid thinking…", "in the early days I lost forty four pounds because of my sadness", "I felt intense weakness; the illness had worn me down". "I had bulimia", "my sex life was deeply affected because of my image...'', "I have nightmares even now".*

In addition, AMI affected the patient's faith in life itself: *"I felt as if was floating and before me there was only the void"*. The patient felt isolated, experiencing feelings of abandonment and rejection: *"I considered the mood for communication an act of violence", "I experienced severe social discrimination because of the disease", "my marriage became vulnerable and I could not express my feelings"*. The tendency to conflict was typical among participants, as well as while frustration and irritability: *"Although I knew I was wrong, I was strongly confrontational and irritable"*.

The experience of chronic post-traumatic disorder

The second notable category based on the findings is the development of chronic post-traumatic disorder (PTSD). All patients who were included in this category experienced with particular intensity and over a period of time the phenomenon of extreme emotional paralysis: *"I was indifferent to all but especially to me, I didn't care if I die the next moment", "I was in a tunnel from which I managed to get out only after two years", "I had to ask for help as I was always crying and I could not even work"*. In addition, they reported a significant degree of clinical depression with the predominant features being low self-esteem, lack of motivation for life, helplessness, obsessions, compulsive ideas and panic attacks: *"I felt I had embraced sadness and pain", "I had six months to get out of my house", "I needed two years to stand on my feet", "after one year I finally asked for help, as sadness and frustration were bringing me down"*.

Furthermore, some patients reported the occurrence of extremely disturbing memories and flashbacks for a long time of period post-AMI, and especially tiring nightmares which were related to the onset of AMI: *"The nightmares reminded me of the traumatic incident for a long time", "I wasn't sleeping or eating well for quite a time'', "I had constantly flashbacks; I have nightmares even now, after almost two years''*.

The experience of psychological distress

The next category was the psychological distress. Characteristically, the patients highlighted the constant presence of mental fatigue and internal trauma, which started during the first months post-AMI without subsiding until now: *"Psychological distress appears as fever waves that emerge from time to time", "I feel so tired inside", "maybe this mental fatigue is the reason why I cannot stand loneliness", "signs of trauma will be deeply embedded in me", "this mental exhaustion is sometimes devastating"*.

The experience of spiritual maturation

The vast majority of the patients reported the experience of spiritual

maturation and growth. After the onset of AMI, they reported that they changed their view about life and started to face it in a much different way: *"I can now handle things better, I feel much more mature", "I became a better person, I have more self-esteem and confidence", "I'm more generous", "I began to dream again, to set goals; eventually the sign of the disease was positive", "the battle for life itself made me spiritually mature", "I now find pleasure in small things, I enjoy small everyday moments".*

DISCUSSION

It is reasonably presumed by the results of our research, those patients who had a heart attack, experience at first very strongly acute post-traumatic stress with dominant features being the feeling of threat, intense anger, weakness, disappointment and frustration as well as disturbing memories. Also, a frequent observation is the development of acute post-traumatic stress into chronic, where the post infraction patient displays for a long time depressive symptoms, such as despair, very low self-esteem, total lack of motivation, social isolation etc.

Moreover, particular reference should be made to the constant presence of psychological distress and internal trauma in patients over the years, experience which our study demonstrated with particular emphasis. It is also evident from the results of our study that patients with AMI mature spiritually after the attack and manage differently their everyday life.

A large number of recent studies assessed the prevalence of PTSD among MI patients. Ginsburg M. *et al* [10] found that 28% of MI patients have ASD in the first week after myocardial infraction. Other studies of PTSD among AMI found that between 8% and 25% suffered from this disorder during the first year after their AMI. Ladwig N. *et al* [11], who followed-up survivors of cardiac arrest 1-5 years after the event, reported that 38% of subjects had PTSD at the time of the assessment. Despite the variance in the rates, these studies suggest that MI can be a risk factor for ASD and PTSD.

In a typical qualitative research by Melded *et al* [12] the dominant findings among 16 patients were intense fear, sense of threat, physical and mental fatigue and weakness, as well as selective unpleasant memories, like disturbing nightmares. Turner and Beiger also reported that almost half patients suffer episodes of anxiety disorders during the first week's post-AMI, while more than half experience sleeping and eating disorders, as well as individual panic attacks [13].

Our results are consistent with those reported in other studies. AMI is a stressful, life-threatening experience. The threat remains after the acute myocardial infraction is over. The stress is intensified by the fact that MI is often a sudden and unanticipated event over which the victim has no control. In addition, the damage to the heart, with its symbolic meaning as the essence of the human being, may shatter the patient's sense of wholeness and safety, leaving him or her with a lasting sense of vulnerability.

Post-infarction depression has been characterized as a particular psycho-pathological condition affecting more than 40% patients [14]. In another study [15], 32% of the participants were suffering from intense psychological disorder at one year post-AMI, the main features of which were irritability, the sense of fatigue, and inability to concentrate.

Moreover, in another research with Greek patients [16] found it after the onset of AMI, 27% of the participants showed symptoms, especially anxiety, depression, sleep disturbances, changes in personal and social life, as well as changes in their working life. Also, in the same study 34% of the patients pleaded difficulty in their sexual life, finding that agrees with the observations of other studies which find reduced frequency of sexual relationships at a rate of almost 50%.

Of note, libido has been reported to be affected in more than half of patients after AMI, which may be a manifestation of depression or other psychological disorder [16]. However, sex performances tend to improve within the first year post-AMI, although it differs between sexes; female patients may have worse post-infarction progress in sex performance.

The importance of counseling / psychological therapy after an AMI has emerged since 1999. Petrie *et al* [17] reported that patients, who receive supportive psychological treatment for their behavior, in combination of course with cardiac follow-up, had the smallest number of reinfections or death compared with those who did not receive any psychological support.

In addition, the same group confirmed our findings regarding the spiritual maturation, in the study of Petrie et al; the episode of AMI positively affected the patients' life. In this study patients tended to reappraise their relationships with family members and close friends, and reported more improved relationships with the people close to them. They also reported a positive change in roles with regards to strangers, neighbours and colleagues, offering multiple psychological benefits after hospital discharge.

In the study of Coward and Lewis [18] was found that their respondents had a new appreciation of life calling it as a ''gift'' and ''thankful'' that they were touched by such life altering illnesses. Specifically respondents mentioned an appreciation for ''the here and now'', simple things and time. In addition, researchers found that people mentioned for their past and the life that they had, this reappraisal of past life and behavior also prompted a desire to change negative thoughts and regrets.

Our study has several limitations. First, our sample is relatively small and consists of Greek citizens. Therefore, our findings cannot be generalized the general population. However, the reliability of our results was not affected, which minimize study bias.

CONCLUSIONS

In our study, patients who had a heart attack experience at first very strongly acute post-traumatic stress. Also, frequently, the acute post-traumatic stress develops into

chronic, where the post infraction patient display for a long time depressive symptoms. Moreover, the presence of psychological distress and the internal trauma in patients over the years is constant and finally, patients with AMI mature spiritually after the attack and manage differently their life. Our findings support the development and implementation of a multidisciplinary program of psychological support for patients with AMI. This program will be patient-centered and focused on the rapid restoration of personal, social and family life, as well as on occupational rehabilitation.

REFERENCES

1. Stefanadis C. Heart Disease. Paschalidis. Athens, 2005.

2. Kaliampakos S. Acute Coronary Syndromes. Parisianos, Athens, 2004.

3. Shale AY, Schreiber S, Galai T, Melmed RN. Post-traumatic stress disorder following medical events. Br J Clin Psychology 1993; 32:247-53.

4. Wasson LT, Shaffer J, Alcántara C, Schwartz JE, Edmondson D. The association of post-traumatic stress disorder and quality of life during the first year after acute coronary syndrome. Into J Cardio 2014; 176:1042-3.

5. Pedersen SS. Post-traumatic stress disorder in patients with coronary artery disease. Scand J Psychol 2001;42:445-51.

6. Pedersen SS, Middel B, Larsen ML. Posttraumatic stress disorder in first-time myocardial infraction patients. Heart Lung 2003;32:300-7.

7. Green BL, Kimberling R. Trauma, posttraumatic stress disorder and health status. Washington: American psychiatric association, 2004.

8. Turner RJ, Beiger M. Major depression and depressive symptomatology in the physically disabled. J Nerv Ment Dis 1990; 178:343-50.

9. Rauch SL1, Shin LM, Phelps EA. Neurocircuitry models of posttraumatic stress disorder and extinction. Biol Psychiatry 2006; 60:376-82.

10. Harvey AG, Bryant RA. Predictors of acute stress following mild traumatic brain injury. Brain Inj 1998;12:147-54.

11. Gnanasekaran G. epidemiology of depression in heart failure. Heart Fail Clin 2011;7:1-10.

12. Costello JA, Bobbling S. What is the experience of men and women with congestive heart failure? Can J Cardiovascular Nurse 2004; 14:9-20.

13. Brewin CR, Rose S, Andrews B, Green J, Tata P, McEvedy C, et al. Brief screening instrument for post-traumatic stress disorder. Br J Psychiatry. 2002;181:158-62.

14. The management of PTSD in adults and children in primary and secondary care in primary and secondary care. NICE guidelines, evidence update December 2013, evidence update 49.

15. David Kinchin. Post-traumatic Stress Disorder – The Invisible Injury. Publisher: Success Unlimited;2004.

16. Fountouki A, Theofanidis D. The educational role of the nurse.Vima tou asklipiou.2012;11:503-522.

17. Petrie KJ, Buick DL, Weidman J, Booth RJ. Positive effects of illness reported by myocardial infraction and breast cancer patients. J Psychosom Res 1999;47:537-43.

18. Coward and Lewis. Handbook of Posttraumatic Growth: Research and Practice. 2014:243-245.

ΠΡΩΤΟΤΥΠΟ ΑΡΘΡΟ

Η εμπειρία της αγχώδους μετατραυματικής διαταραχής στους μετεμφραγματικούς ασθενείς: μια ποιοτική έρευνα

Χ. Στάικος[1], Α. Χαλκιάς[2], Δ. Τσεκούρα[3], Ν. Ιακωβίδου[4], Θ. Ξάνθος[5]

[1] Ψυχιατρικό Νοσοκομείο Αθηνών, [2] Μεταπτυχιακό πρόγραμμα σπουδών "Καρδιοαναπνευστική Αναζωογόνηση", ΕΚΠΑ, [3] Ελληνική Εταιρεία Καρδιοαναπνευστικής Αναζωογόνησης, [4] Εθνικό Καποδιστριακό Πανεπιστήμιο Αθηνών (ΕΚΠΑ), [5] Ευρωπαϊκό Πανεπιστήμιο Κύπρου, Νικόσια, Κύπρος

ΠΕΡΙΛΗΨΗ

Εισαγωγή: Το οξύ έμφραγμα του μυοκαρδίου αποτελεί μία από τις συχνότερες αιτίες θανάτου διεθνώς και προκαλείται από τη σταδιακή νέκρωση του μυοκαρδίου. Η εκδήλωση ενός ΟΕΜ και η θεραπεία που ακολουθεί έχουν ως αποτέλεσμα τη δημιουργία μετατραυματικού στρες στον ασθενή (οξέος/χρόνιου) όπως και την ψυχολογική καταπόνηση του, τα οποία αλλάζουν καθοριστικά τη ζωή και τη καθημερινότητα του.

Σκοπός: Η διερεύνηση της εμπειρίας της μετατραυματικής αγχώδους διαταραχής σε ασθενείς που υπέστησαν ΟΕΜ και πώς αυτή μετέβαλλε την ποιότητα της ζωής τους.

Μεθοδολογία: Αυτή είναι μία ποιοτική έρευνα, η οποία χρησιμοποίησε την ερμηνευτική/φαινομενολογική προσέγγιση. Είκοσι(15 άντρες και πέντε γυναίκες) ασθενείς οι οποίοι υπέστησαν ΟΕΜ περιγράφουν τις εμπειρίες τους με τη μέθοδο της ημιδομημένης συνέντευξης, οι οποίες διενεργήθηκαν στην Περιφέρεια Αττικής. Για την ανάλυση του ποιοτικού υλικού υιοθετήθηκε η εμπειρικά θεμελιωμένη θεωρία(grounded theory).

Αποτελέσματα: Η ανάλυση των εμπειριών μέσα από τις αφηγήσεις κατέδειξε πως οι ασθενείς που υπέστησαν ΟΕΜ εκδηλώνουν μία σειρά συμπτωμάτων οξέος μετατραυματικού στρες το οποίο κάποιες φορές εξελίσσεται σε χρόνιο, επίσης επισημαίνεται η σταθερή παρουσία της ψυχολογικής καταπόνησης στη ζωή των ασθενών, ενώ τέλος, εμφανίζεται με έκδηλο τρόπο η έννοια της πνευματικής ωρίμανσης, η οποία αλλάζει άρδην τον τρόπο με τον οποίο αντιμετωπίζουν την καθημερινότητα τους μετά το εμφραγματικό επεισόδιο.

Συμπεράσματα: Οι ασθενείς με ΟΕΜ βιώνουν μετατραυματικό στρες το οποίο ξεκινά τις πρώτες ώρες μετά την εκδήλωση του και μπορεί να διαρκέσει έως και δύο έτη, αισθάνονται έντονα και σε διάρκεια την ψυχολογική καταπόνηση, ενώ παράλληλα ωριμάζουν πνευματικά και αυτό επηρεάζει σημαντικά το υπόλοιπο της ζωής τους.

Λέξεις ευρετηρίου: Οξύ έμφραγμα του μυοκαρδίου, μετατραυματικό στρες, ψυχολογική καταπόνηση, πνευματική ωρίμανση

Παραπομπή

Χ. Στάικος, Α. Χαλκιάς, Δ. Τσεκούρα, Ν. Ιακωβίδου, Θ. Ξάνθος. Η εμπειρία της αγχώδους μετατραυματικής διαταραχής στους μετεμφραγματικούς ασθενείς: Μία ποιοτική έρευνα. Επιστημονικά Χρονικά 2017; 22(1): 74-82

Συγγραφέας επικοινωνίας

Staikos S. Haralampos, E-mail addresses: staikoschar@yahoo.com