CorSalud 2017 Jul-Sep;9(3):169-173



Cuban Society of Cardiology

Brief Article



# Psychosocial and adaptation factors in relatives of patients who died of sudden cardiac death

Ana Soto Rubio<sup>1</sup>, BSc; Francis Savall Rodríguez<sup>2</sup>, PhD; Sara Casaña Granell<sup>1</sup>, BSc; Pilar Molina Aguilar<sup>1,2</sup>, MD; Juan Giner Blasco<sup>1,2</sup>, MD; Esther Zorio Grima<sup>3</sup>, MD; Esther Suissa Castelló<sup>3</sup>, BSc; Marián Pérez Marín<sup>1</sup>, PhD; and Pilar Barreto Martín<sup>1</sup>, PhD; on behalf of the *Grupo Apego, acontecimientos vitales estresantes y duelo* 

<sup>1</sup>Universidad de Valencia. Valencia, Spain.

<sup>2</sup> Institute of Legal Medicine and Forensic Sciences of Valencia. Valencia, Spain.

<sup>3</sup>Hospital Universitario Politécnico La Fe. Valencia, Spain.

Este artículo también está disponible en español

#### ARTICLE INFORMATION

Received: April 18, 2017 Accepted: May 18, 2017

#### Competing interests

The authors declare no competing interests

#### Acronyms

SCD: sudden cardiac death SA-45: Symptom Assessment-45 Questionnaire

*On-Line* Versions: Spanish - English

A Soto Rubio
Av. de Blasco Ibáñez, 21, 46010
Valencia, España.
E-mail address: alusoru@gmail.com

#### ABSTRACT

*Introduction:* Although grief is a natural process that, in most cases, develops without complications, 10-20% of people who suffer a significant loss will experience complicated grief and percentages are much higher in relatives bereaved by sudden cardiac death.

<u>*Objective:*</u> To study the relationship between attachment styles, stressful life events accumulation and psychopathology development, especially complicated grief, in relatives of patients who died of sudden cardiac death.

<u>*Method:*</u> The sample consisted of 16 mourners of deceased from this cause. Questionnaires were used to evaluate, among other variables, stressful life events, psychopathological symptoms, attachment and grief.

**<u>Results</u>**: Sixty-two percent of the cases were middle-aged women (average 49 years), predominantly married or with unmarried partner (60%), and 31% widows (of the deceased). Prior to death, most of the mourners (81%) did not have a history of anxious-depressive symptoms. At present more than 50% attend psychotherapy sessions, showing clear signs of risk to their physical-psychological health, with sleep disturbances, anxious-depressive symptoms and general exhaustion. Particularly relevant in our study is the fact that half of them have very high levels of chronic stress. About 40% of family members have insecure attachment style: 15% anxious and 25% avoidant.

<u>Conclusions</u>: Presenting insecure attachment style is considered a risk factor for developing complicated grief. Its indicators show 56% of subjects at clear risk of suffering it.

*Key words:* Attachment, Psychological stress, Grief, Psychopathology, Risk factors, Protective factors

# *Factores psicosociales y de adaptación en familiares de pacientes fallecidos por muerte súbita cardíaca*

#### RESUMEN

<u>Introducción</u>: Aunque el duelo es un proceso natural que, en la mayoría de los casos, se desarrolla sin complicaciones, un 10-20% de los individuos que sufren

Lecture presented to the II National Symposium on Sudden Cardiac Death and I Ibero-American Convention on Sudden Cardiac Death (December 6-9, 2016. Havana, Cuba). una pérdida significativa experimentarán duelo complicado y los porcentajes son muy superiores en los familiares en duelo por muerte súbita cardíaca.

<u>Objetivo</u>: Estudiar la relación entre los estilos de apego, la acumulación de acontecimientos vitales estresantes y el desarrollo de psicopatología, especialmente duelo complicado, en familiares de pacientes fallecidos por muerte súbita cardíaca.

<u>Método:</u> La muestra estuvo conformada por 16 dolientes de fallecidos por esta causa. Se utilizaron cuestionarios para evaluar, entre otras variables, los sucesos vitales estresantes, la sintomatología psicopatológica, el apego y el duelo.

<u>Resultados:</u> El 62% de los casos eran mujeres de mediana edad (media 49 años), predominantemente casadas o en pareja (60%), y un 31% viudas (del fallecido). Previo al fallecimiento, la mayoría de los dolientes (81%) no contaban con antecedentes de clínica ansioso-depresiva. Actualmente más del 50% acude a psicoterapia, y presentan claros signos de riesgo para su salud física-psicológica, con dificultades para dormir, síntomas ansioso-depresivos y agotamiento general. Un dato especialmente relevante de nuestro estudio es que la mitad tiene niveles muy elevados de estrés crónico. Cerca del 40% de los familiares presenta un estilo de apego inseguro: 15% ansioso y 25% evitativo.

<u>Conclusiones</u>: El presentar un estilo de apego inseguro se considera factor de riesgo para el desarrollo de duelo complicado. Sus indicadores muestran un 56% de sujetos con un claro riesgo de padecerlo.

*Palabras clave: Apego, Estrés psicológico, Duelo, Psicopatología, Factor de riesgo, Factores protectores* 

# **INTRODUCTION**

The sudden cardiac death (SCD) is known as the natural death that happens in a short period of time from the onset of symptoms and occurs, suddenly, in people without a recognized serious condition<sup>1</sup>. It is a phenomenon quite common in Spain that reaches 9000 cases a year in people between 25 and 74 years<sup>2</sup>.

The accumulation and perceived stress when stressful life events take place, such as the loss of a loved one, is a major risk factor for the physical and psychological health<sup>3</sup>. The grief is not a disease, it is a global and natural psychological process that takes place when someone loses a loved one<sup>4,5</sup>. Most bereaved persons pass by this process adaptively, in a period of time which typically ranges between two and three years; however, 10-20% of individuals suffering from a significant loss experience a complicated grief<sup>6</sup>.

Among the important elements to be considered for the adaptive elaboration of the grieving process is the type of emotional bond that was maintained with the deceased. It is important to point out that some studies show that an insecure attachment style is considered a risk factor for developing a complicated grief<sup>5</sup>.

Taking into consideration a traumatic death, sudden or unexpected, as well as the death of a young person, increases the risk of developing a complicated grief<sup>7</sup>, therefore, the relatives of the deceased by SCD may present a complex and pathological grief.

The aim of this research was to study the relationship between the attachment styles, accumulation of stressful life events and the development of psychopathology, particularly complicated grief, in the relatives of patients who died from SCD.

# **METHOD**

#### **Participants**

A total of 16 mourners by SCD participated.

#### Instruments

*Ad hoc* questionnaires: Sociodemographic and clinical variables of the deceased and the mourner.

Stressful life events: Questionnaire of Stressful Life Events  $(QSLE)^8$ , including 65 stressful life events that may have been experienced during the last year.

Psychopathological symptoms: Symptom Assessment-45 Questionnaire (SA-45)<sup>8,9</sup>, which evaluates nine areas: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism.

Attachment: There was employed the Relationship Questionnaire<sup>10,11</sup> which categorizes attachment styles in safe, worried, fearful and away: and the Adult Attachment Questionnaire<sup>12</sup>, which offers the following scales: a) low self-esteem, need for approval and fear of rejection (fearful attachment), b) emotional expressiveness and comfort with intimacy (secure attachment), c) emotional self-sufficiency and discomfort with intimacy (avoidant attachment) and d) hostile resolution of conflicts, anger and possessiveness (worried attachment).

Grief: There was developed a clinical trial concerning the fulfillment of the criteria established by the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) for diagnosing complex or persistent grief. Furthermore, the intensity the grief was assessed through the Complicated Grief Inventory (CGI)<sup>13</sup>. The written questionnaire by Soler et al.<sup>14</sup> was used for the assessment of the risk.

Chronic stress: Psychophysiological measure of stress, measured by studying the level of cortisol present in the hair of the participants.

#### Procedure

After the identification of individuals who were eligible for the inclusion in the study, they were contacted at the Institute of Legal Medicine of Valencia and they were asked their reported consent.

# RESULTS

#### Characteristics of the deceased

The 78% of the deceased were men, with ages between 35 and 63 years (M=46; DT=9.812; Median=43). The 81% were married and 19% single.

#### Characteristics of the mourner

The 62% of the deceased were women, with ages between 26 and 67 years (M=49; DT=13.779; Median=47.5). The marital status was: married (50%), widow/widower (31%), single (13%) and common-law relationship (6%). Regarding the relationship with the deceased: 33%, spouse; 27%, progenitor; 20%, sister/brother; 13%, son/daughter and 7%, others.

The 19% of the mourners had previous history of anxious-depressive symptoms (7% anxiety, 6% depression and 6% anxiety and depression), while more than half (54%) referred to attend the psychologist at the time of the research. In addition, 50% of the sample presented high levels of stress, measured through the cortisol level in the hair.

Regarding the use of drugs and relevant health



Figure 1. Use of drugs and health problems in the last month. S, symptoms; D. disorder.





problems during the previous month, the scores of general exhaustion, anxiety, depression, sleeping problems and analgesic ingestion stand out (**Figure 1**). These results are reinforced by scores on the scales of SA-45, since depression and anxiety have been the most prominent (**Figure 2**).

The attachment measures obtained through the two questionnaires show that 44% of individuals had an insecure attachment. Finally, the measures taken to assess the risk of complicated grief showed that 66% of the sample is at risk, where a 12% stands out with high risk.

Regarding the assessment based on the DSM-5, it is worth to notice that 15% of the mourners meets all the criteria of complex persistent grief.

### Correlation

A positive and statistically significant correlation between psychopathological symptoms and complicated grief (both risk and presence) was observed. A statistically significant positive correlation between the presence of stressful life events and risk indicators of complicated grief was also observed (**Table**). stress and an anxious-depressive state. Likewise, the mourners who participated in the study had a deterioration of health reflected in symptoms such as general exhaustion, sleep problems and common ingestion of analgesics, which also coincides with the results of previous research<sup>15</sup>.

Moreover, the high percentage of mourners who had an insecure attachment style emphasizes the need to be alert for possible indicators of complex  $grief^{16}$ .

Finally, one of the most important results of the present study shows that almost 70% of mourners by SCD have risk indicators for complicated grief, which abounds in the need to treat them in the first possible opportunity. This result is parallel to that raised in other research<sup>7,17</sup>.

# CONCLUSIONS

The present study provides new and relevant information regarding the study of risk factors facing the complicated grief in mourners by SCD, and it is expected to contribute to a better detection of the

> population at risk and the development of prevention programs of grief's complication.

**Table.** Correlations among the characteristics of the mourner.

	SA-45	VRC	CGI	AVE	DSM-5
SA-45	1	0,736**	0,802**	0,120	0,229
VRC		1	0,670*	0,502**	0,704*
CGI			1	0,301	0,139
AVE				1	0,210
DSM-5	0.01				1

\* p<0,05; \*\* p<0,01

CGI, Complicated Grief Inventory; DSM, Diagnostic and Statistical Manual of Mental Disorders; SA-45, Symptom Assessment-45 Questionnaire

# Comparison of means

The comparison results by gender shows that women had higher punctuations than men in attachment measures, specifically in those that assess the dimensions of hostile resolution of conflicts, and resentment and possessiveness (Sig. bilateral=0.076).

# DISCUSSION

In keeping with previous studies<sup>3,4</sup>, these results indicate that mourners by SCD present high levels of

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