Psicoterapia multimediale: breve relazione di uno studio pilota

DOMENICO ARTURO NESCI^{1*}, SALVATORE GAETANO CHIARELLA², ELISABETTA CORONA³, VEZIO SAVOIA⁴, MARIACARMELA ZAMPOGNA³, FILIPPO ARTURO NESCI³, GIORGIO PORCARO³, GIORGIA MARI⁶, MARIA ROSARIA NAPPA², ANTONIO PALUMMIERI³, LUCIA CALABRESE², ANTONINO RAFFONE², SIMONETTA AVERNA³, LAURA B. DUNN⁵, GIOVANNI ALMADORI⁶, GAETANO PALUDETTI⁶

*E-mail: dr.danesci@gmail.com

¹Department of Psychiatry, Fondazione Policlinico "A. Gemelli" IRCCS, Rome, Italy

²Department of Psychology, Sapienza Università di Roma, Italy

³The International Institute for Psychoanalytic Research and Training of Health Professionals, Rome, Italy

⁴UOS of Clinical Psychology, Fondazione Policlinico "A. Gemelli" IRCCS, Rome, Italy

⁵Department of Psychiatry and Behavioral Sciences, Stanford University, Stanford CA, USA

⁶Department of Otorhinolaryngology, Fondazione Policlinico "A. Gemelli", Rome, Italy

SUMMARY. Introduction. Multimedia Psychotherapy is a new form of brief psychotherapy based on narrative medicine and ethnopsychoanalytic theories, developed to help patients affected by prolonged grief disorder (ICD-11). It consists of eight sessions, during which an 'audio-video memory object' is produced by using pictures, video clips, and music chosen by the bereaved patient. The audio-video montage is focused on remembering the deceased relative and help the patient to move on. Considering initial positive results, we ran a first controlled pilot study comparing experimental and control group. **Methods.** We enrolled a sample of bereaved patients who were referred for prolonged grief disorder (ICD-11) by their general practitioners or psychiatrists. Patients were randomly assigned to the experimental group (n=18) or to the control group (n=18). Patients in the experimental group received psycho-pharmacological therapy and multimedia psychotherapy, while patients in the control group received psycho-pharmacological therapy and psycho-oncological support. All patients were assessed with Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and Prolonged Grief-13 (PG-13) prior to beginning treatment (pretreatment), and with PG-13 after six months from the end of the treatment (post-treatment). **Results.** Patients in the experimental group (i.e., Multimedia Psychotherapy treatment) after six months performed better than patients in the control group in Criteria B, D, and E of PG-13 (i.e.: Separation Distress, Cognitive, Emotional, and Behavioral Symptoms, Functional Impairment). **Discussion.** We will discuss our results, issues related to the screening of patients (due to possible contraindications of Multimedia Psychotherapy), and methodological limitations. Finally, we will discuss new future applications in other clinical situations. **Conclusions.** These findings suggest that multimedia psychotherapy may hold promise for the treatment of prolonged grief disorder (ICD-11).

KEY WORDS: prolonged grief disorder (ICD-11), art therapy, psychosocialoncology, narrative medicine, ethnopsychoanalysis.

RIASSUNTO. Introduzione. La psicoterapia multimediale è una nuova forma di psicoterapia breve che si colloca nell'ambito della medicina narrativa e dell'etnopsicoanalisi. È stata concepita per aiutare pazienti affetti da lutto prolungato (Prolonged Grief Disorder secondo l'ICD-11). Consiste in 8 sedute nel corso delle quali viene prodotto un video con materiali audiovisivi forniti dal paziente del defunto per ricordarne la storia di vita ed elaborarne la perdita. Dopo i primi risultati positivi abbiamo pensato di procedere a uno studio pilota confrontando un gruppo sperimentale con un gruppo di controllo. Metodi. Abbiamo confrontato un campione di pazienti che ci erano stati inviati con diagnosi di lutto prolungato dal loro medico di famiglia o dal loro psichiatra. I pazienti sono stati assegnati con criteri di randomizzazione al Gruppo sperimentale (n=18) e al Gruppo di controllo (n=18). I pazienti del primo Gruppo hanno ricevuto la psicoterapia multimediale mentre il secondo Gruppo ha avuto il supporto psico-oncologico. I pazienti di entrambi i gruppi hanno avuto una terapia psicofarmacologica, se necessario. Tutti i pazienti sono stati valutati con MMPI-2 (prima della cura) e con la scala PG-13 (edizione italiana) sia prima che dopo il trattamento (sei mesi). Risultati. I pazienti del Gruppo sperimentale hanno avuto risultati migliori di quelli del Gruppo di controllo, dopo la cura, nella seconda somministrazione della scala PG-13 nei criteri B, D ed E (stress da separazione, sintomi cognitivi, emotivi e comportamentali, riduzione funzionale). Discussione. I risultati vengono discussi prendendo in considerazione i limiti metodologici dello studio, i casi esclusi per controindicazioni specifiche al trattamento e le prospettive di ulteriori ricerche che si stanno progettando. Conclusioni. I risultati confermano l'impressione clinica emersa dalle prime ricerche già pubblicate, e cioè che la psicoterapia multimediale possa costituire un valido strumento per il trattamento del lutto prolungato (Prolonged Grief Disorder, ICD-11) in quei pazienti che non presentano controindicazioni al suo impiego.

PAROLE CHIAVE: lutto prolungato (ICD-11), arte terapia, psiconcologia, medicina narrativa, etnopsicoanalisi.

INTRODUCTION

Prolonged Grief Disorder (ICD-11) is defined as «a disturbance in which, following the death of a [...] person close to the bereaved, there is persistent and pervasive grief response characterized by longing for [...] or persistent preoccupation with the deceased accompanied by intense emotional pain [...]. The grief response has persisted for an atypically long period of time following the loss (more than 6 months at a minimum) and clearly exceeds expected social, cultural or religious norms for the individual's culture and context. [...]. The disturbance causes significant impairment in personal, family, social, educational, occupational or other important areas of functioning»¹.

Multimedia Psychotherapy was conceived as new form of psychotherapy in which a patient who suffers from Prolonged Grief Disorder (ICD-11) is helped to work it through by producing an 'audio-video memory object' (or 'psychodynamic montage') of the deceased loved relative supported by a therapist and a video artist^{2,3}. The purpose of the therapy was to give meaning and wholeness to the life of the deceased, making the images of the most important moments 'flow' harmoniously on the screen with music and sounds chosen by the bereaved patient as its soundtrack, in order to try to replace the negative audiovisual memories induced by cancer and/or its traumatic therapies with positive ones, mostly recorded before the onset of the illness. The idea is within the theoretical frameworks of narrative medicine and art therapy for grief, in which "family snapshots" tell the story of the deceased loved relative⁴ or written narratives and images are used together⁵. The positive role of music in grief is also well known⁶, and music therapy is internationally applied to grief and mourning⁷.

Multimedia Psychotherapy was developed by Domenico A. Nesci and Filippo A. Nesci, who released a report on the first case². An essay on the following treated cases was published, with transcripts of sessions and a discussion of clinical issues within an interdisciplinary field of study considering narrative medicine, art therapy, ethnopsychoanalysis and transcultural psychiatry³.

The goal of the present study is to verify if a randomized sample of patients, compared with a control group, would confirm the successful results described in the previous studies where no control group was involved. After this early results, a post graduate program in 'Psycho-Oncology (Multimedia Psychotherapy)' was started in Italy, and a first generation of multimedia psychotherapists began to practice at our Consultation Liaison Psychiatry (CLP) Unit within our University Hospital (area of Psycho-Oncology) which is part of the Italian National Health Service (NHS).

Although it is true that the ICD-11 "disorder definitions" imply that "there is no strict requirement for the number of symptoms needed to meet the diagnostic threshold, which will result in greater sensitivity of case identification", it is also true that "this is likely to increase the risk of overdiagnosis". Italian NHS considers a priority to offer psychotherapy not only to cure an illness but also to prevent the onset of any illness or disorder, so we fully endorse the broad approach of ICD-11 and the importance of identifying all cases at risk, and treat them. We prefer to run the risk of overdiagnosis, when requested for help by a bereaved person, rather than running the risk of not treating a patient since

his/her case might not fit the requirements of too strict diagnostic criteria.

The interdisciplinary theoretical roots of Multimedia Psychotherapy are described in detail within two books: a handbook of the therapy³ and a study of the Jonestown death ritual⁹. Both works took inspiration from the anthropological works of Briffault¹⁰, the ethnopsychoanalytic ideas of Roheim¹¹ and the interdisciplinary studies of Ong¹² and Harari¹³. Here is theorized the existence of a prehistorical group-individual mind from which our individual mind gradually developed. Multimedia Psychotherapy follows a ritual pattern making use of an audio-visual sensory channel in order to get access to this prehistorical group-individual mind that unconsciously denies the very existence of natural death and limits. From this theoretical perspective, our group-individual mind would be exposed to experiencing "syncytial" grief ³⁻⁹ - an overwhelming emotional state that evokes the idea of the end of the world and is at the roots of death rituals. Words alone cannot cure this mental state. What is needed is to metaphorically re-create the primal cultural world of the "group individual" through the concrete and "ritual" production of a sensory "memory object" built in the most ancient audio-visual communication channel of images and sounds, within a reparative relationship. In fact, art, religion, and all cultural derivatives¹⁴⁻¹⁵, are used, from time immemorial to cure human grief, normal and pathological.

We conceived the Prolonged Grief Disorder as the regression to a pre-historical, emotional state of the mind of the group-individual that unconsciously lives inside us. It requires not only the re-organization of the individual's actual external world, after the loss, but also the re-organization of the fusional structure of the "syncytial group" 3-9, within our group-individual's imaginary inner world, by a primal universal language (i.e., images and sounds). In other words, "grief work" 16, needs to be done "oscillating" 17, between two levels: individual and group-individual mind which is exactly what we do in Multimedia Psychotherapy, alternating the use of images and music (mostly addressed to the group-individual mind) with the use of words (mostly addressed to the individual mind). Multimedia Psychotherapy assumes that when someone is in grief, it is not one but they are two: an individual and a group-individual, and we have to take care of both entities, a singular and a collective one. Multimedia Psychotherapy integrates sight and ear, as well as their different languages: the distance modality of vision (associated with our perception of images) and the close contact modality of hearing (associated with music) since sound waves physically touch our ears and move us emotionally from prenatal life.

MATERIALS AND METHODS

Participants

Initially, we evaluated all patients who were referred to our CLP Unit by general practitioners (GPs) or psychiatrists of the Italian NHS for prolonged grief disorder (ICD-11) (=56). Eligible participants of our pilot study were all subjects who were 18 years of age or older, experienced a loss from at least six months, and had already received a diagnosis of Prolonged Grief Disorder by their general practitioner or a psychiatrist of the NHS. Pa-

tients who manifested, during the first psychiatric consultation, feelings of severe ambivalence for their deceased relative, were excluded from our study since as demonstrated by previous clinical experiences, multimedia psychotherapy is contraindicated in these cases³. We also excluded patients who explicitly said they did not want to look at the pictures of their deceased relative since this might evoke severe mental pain, sadness, and anxiety. Finally, thirty-six patients (31 females, M=59.1, SD=12.4) were confirmed of suffering from Prolonged Grief Disorder (ICD-11) by the psychiatrist of our CLP Unit. Eighteen patients were randomly assigned in the control group (16 females, M=58.7, SD=12.5) and the other half in the experimental group (15 females, M=59.6, SD=12.9). This study was approved by the Ethical Committee of the School of Medicine of the Università Cattolica del Sacro Cuore (UCSC) in Rome, and was conducted in accordance with the principles of the Helsinki Declaration.

Procedure

After having provided written informed consent including a release form to allow our interdisciplinary medical team and the multimedia artist to work on the family pictures, videoclips, and sounds, all participants recruited by our psychiatrist have been randomly divided into two groups: Control group and Experimental group. Each patient would then be evaluated (PG-13 and MMPI-2) by a psychologist of our team. Psycho-pharmacological therapy was prescribed (when needed) and controlled by the same psychiatrist who had recruited all patients of both groups. Patients in the experimental group received psycho-pharmacological therapy, when needed, and multimedia psychotherapy. Patients in the control group received therapy as usual (psychopharmacological therapy when needed, and psycho-oncological support). Psycho-oncological support consists in psychological sessions (as requested by the patient, in a flexible way). The Italian NHS provides 8 psychological sessions with only one prescription, which is the same number of sessions we use for Multimedia Psychotherapy.

Multimedia Psychotherapy

Multimedia Psychotherapy follows these steps:

- Intake. The therapist describes Multimedia Psychotherapy and explains its rationale to the patient.
- 2. Picture sessions. The patient brings photographs, videos, or other visual materials. These pictures and video clips are shared and discussed with the therapist during 2 or 3 sessions, allowing for emotional relief and insights.
- 3. Music sessions. The patient selects a song or music for the soundtrack of the "psychodynamic montage". Patient and therapist listen to the song or music together, during 1 or 2 sessions, and, again, this offers new opportunities for insight and expression of emotions.
- 4. Working at the audio-video (out of the sessions). The therapist provides a multimedia artist with the visual and musical materials chosen by the patient. Patient and multimedia artist never meet each other. The artist makes the video and sends it to the therapist.
- 5. Screening session. Patient and therapist watch the video together.
- 6. Outcome. These are 1-3 sessions in which the whole experience is worked through by patient and therapist, exploring new meanings in the life of the deceased and looking for new perspectives in patient's life.

Measures

Minnesota Multiphasic Personality Inventory-2

The Italian edition¹⁸ of Minnesota Multiphasic Personality Inventory-2 (MMPI-2) was administered at baseline only (i.e., T1, before the first psychotherapy session) by a psychologist of our team. The MMPI-2 is a self-report inventory that assesses important clinical areas. For this study, only the clinical scales were analyzed since we were concerned that important clinical differences between the Experimental and Control groups might interfere with the homogeneity of our two samples. At the end of our pilot study we realized that this test was not a good choice, since it was burdensome for our patients and it is out of line with the ICD-11 diagnostic manual. So, we will abandon it in our next study, as will be discussed in the Conclusions.

Prolonged Grief-13

At baseline (T1) and six months later (T2), all participants completed the Italian edition¹⁹ of the Prolonged Grief-13 (PG-13). PG-13²⁰ was developed in the United States to evaluate the level of distress related to Prolonged Grief Disorder (PGD), i.e. the experience of persistent bereavement at least six months after the loss of a loved person. The PG-13 consists of a 13-item self-report questionnaire with five criteria to assess the diagnosis of PGD: presence of a loss (Criterion A); separation distress (Criterion B); duration of symptoms (Criterion C); cognitive, emotional, and behavioral symptoms (Criterion D); functional impairment (Criterion E). Our study was focused on separation distress (Criterion B), duration of symptoms (Criterion C), cognitive, emotional, and behavioral symptoms (Criterion D), and functional impairment (Criterion E), as they are the criteria of PG-13 in which change is expected, after therapy.

Data analysis

For Criterion B and D, two 2 x 2 mixed repeated measure designs were employed with Group (Experimental and Control), and Time (T1 and T2) as independent variables. The dependent variables were, in turn, the total score for separation distress (Criterion B) and for cognitive, emotional, and behavioral symptoms (Criterion D). The analyses were followed by post-hoc ttests corrected with Holm-Bonferroni method for multiple comparisons. Moreover, for each effect we reported the partial η^2 as a measure of effect size. For Criterion E, two Chi-square tests of Independency were employed to compare frequency of response (Yes and No) between the two groups (Control and Experimental), at time T1 and T2. Then, two McNemar tests were employed to determine change in response (Yes and No) between time T1 and T2, in Control and Experimental groups. All data analysis was performed using IBM SPSS Statistics.

RESULTS

MMPI-2

Table 1 presents the participants' demographic data and their clinical characteristics (MMPI-2). The two samples

Table 1. Statistical co	omparisons of demograph	ic and clinic	al (MMPI-2)	characteristic	s in Control and	Experiment	tal groups.	
		Control group (n=18)		Experimental group (n=18)				
		n	%	n	%	χ^2	p	
Gender	Female	16	88.8	15	83.3	.232	.629	
	Male	2	11.1	3	16.6			
Education	Lower	10	55.5	6	33.3	1.886	.406	
	Upper	4	22.2	6	33.3			
	University	4	22.2	6	33.3			
		M	SD	M	SD	t(34)	p	Cohen's d
Age (years)		58.7	12.5	59.6	12.9	.212	.823	070
	(range)	(40-82)		(39-77)				
Clinical characteristics (MMPI-2)	Hypochondria	66.1	10.2	68.2	10.9	.596	.554	198
	Depression	65.9	13.1	69.5	13.7	.805	.426	268
	Hysteria	56.5	10.8	62.6	11.1	1.671	.103	.557
	Psychopathic deviation	57.2	7.6	59.1	6.2	.821	.416	.027
	Masculinity/Femininity	50.0	12.1	50.4	12.8	.096	.923	.032
	Paranoia	61.7	11.0	62.9	12.3	.308	.759	102
	Psychasthenia	61.3	10.2	63.6	9.8	.689	.495	229
	Schizophrenia	62.0	6.6	62.5	5.0	.256	.799	085
	Hypomania	50.4	8.7	51.6	9.3	.399	.691	133
	Social Introversion	60.2	9.0	62.2	8.5	.685	.497	228

(Experimental and Control groups) did not differ regarding age (t=-.212, p=.823), gender (χ^2 =.232, p=.629), education (χ^2 =1.800, p=.406) and MMP1-2 scores in the clinical scales (Student's t-test for independent samples: ps>.100). Scores in the clinical scales were pathological (55-75) except Hypomania, as expected, since pathological grief usually provokes depression rather than manic states.

Table 2 presents each participant's main demographic data (age and sex) in the Experimental and Control groups (36 total patients) regarding Separation Distress (Criterion B), regarding Duration (Criterion C), Cognitive, Emotional, and Behavioral Symptoms (Criterion D) and Functional Impairment (Criterion E).

Since all patients met Criterion A (presence of a loss) at PG-13, no table was necessary to show it.

PG-13

PG Separation Distress (Criterion B)

A mixed repeated measure ANOVA with Time (T1 Pre and T2 Post) as within-subject factor, Group (Experimental and Control) as between-subject factor, and average total score separation distress as dependent variable, revealed significant main effects of both Time, F(1,34)=171.53, p<.001,

 η_p^2 =.83 and Group, F(1,34)=36.09, p<.001, η_p^2 =.51. For the main effect of Time, it was evident that mean score for separation distress was greater before therapy T1 (M=9.1) as compared to after therapy T2 (M=6.6). For the main effect of Group, it was evident that mean score for separation distress was greater for Control group (M=8.6) as compared to the Experimental group (M=7.2). The ANOVA also revealed a significant Time X Group interaction effect, F(1,34)=47.83, p<.001, η_p^2 =.58. Figure 1 shows the average score of separation distress as a function of Time and Group. Post hoc t-test analyses revealed that although both Control and Experimental groups have a significant effect over time (ps<.001), at T1 (before therapy) there was no difference between the two groups (p=.729), whereas at time T2 (after therapy) there was a significant difference between Control and Experimental groups. In fact, comparing the Experimental group with the Control group in T2 (after therapy), the Experimental group had significantly lower scores than the Control group (p<.001), demonstrating a significant decrease in separation distress (Criterion B).

PG Duration of Symptoms (Criterion C)

Looking at the frequency of responses (Yes or No) all patients in the Control group, both at T1 and T2, answered Yes,

Patient Sex			PG-13 B		PG-13 C		PG-13 D		PG-13 E	
	Age	pre	post	pre	post	pre	post	pre	pos	
1	M	57	9	4	1	0	37	17	1	0
2	F	43	10	4	1	1	27	14	1	0
3	F	60	8	4	1	1	31	13	1	0
4	F	73	10	6	1	1	44	25	1	0
5	F	39	10	6	1	0	43	14	1	0
6	F	51	8	4	1	1	21	14	0	0
7	F	45	8	6	1	1	28	19	1	0
8	F	76	10	8	1	1	29	22	1	0
9	F	71	10	6	1	1	39	26	1	0
10	F	77	8	6	1	1	27	17	0	0
11	F	74	10	6	1	1	26	19	1	0
12	F	72	8	4	1	1	32	18	1	0
13	F	73	10	6	1	1	30	17	1	0
14	F	45	9	6	1	1	33	20	1	0
15	F	52	7	6	1	1	29	19	1	0
16	M	63	10	4	1	1	29	18	1	0
17	M	52	10	6	1	1	28	18	1	0
18	F	50	9	4	1	1	20	15	1	0
				C	Control Grou	р				
			PG-	13 B	PG-	13 C	PG-	13 D	PG-13 E	
Patient	Sex	Age	pre	post	pre	post	pre	post	pre	pos
1	F	40	10	8	1	1	33	24	0	0
2	F	59	8	8	1	1	28	21	1	1
3	F	51	8	8	1	1	35	26	1	1
4	F	59	10	8	1	1	36	29	1	1
	F	59	10	8	1	1	28	23	1	1
5			10		1	1	35	28	1	0
5 6	F	52	10	8	-					0
		52 47	9	8	1	1	21	16	0	
6	F					1	21 27	16 20	0	1
6 7	F F	47	9	8	1					1
6 7 8	F F F	47 73	9	8	1	1	27	20	1	
6 7 8 9	F F M	47 73 50	9 8 9	8 8 8	1 1 1	1	27 30	20 23	1	1
6 7 8 9 10	F F M M	47 73 50 40	9 8 9 9	8 8 8 8	1 1 1 1	1 1 1	27 30 28	20 23 19	1 1 1	1
6 7 8 9 10	F F M M	47 73 50 40 64	9 8 9 9	8 8 8 8	1 1 1 1	1 1 1 1	27 30 28 37	20 23 19 30	1 1 1 1	1 1 0
6 7 8 9 10 11	F F M M F	47 73 50 40 64 69	9 8 9 9 10 8	8 8 8 8 8	1 1 1 1 1 1	1 1 1 1	27 30 28 37 28	20 23 19 30 22	1 1 1 1	1 1 0
6 7 8 9 10 11 12	F F M M F F	47 73 50 40 64 69 73	9 8 9 9 10 8 10	8 8 8 8 8 8	1 1 1 1 1 1 1	1 1 1 1 1 1	27 30 28 37 28 31	20 23 19 30 22 25	1 1 1 1 1 1	1 1 0 1
6 7 8 9 10 11 12 13	F F M F F F F	47 73 50 40 64 69 73 75	9 8 9 9 10 8 10	8 8 8 8 8 8 8	1 1 1 1 1 1 1	1 1 1 1 1 1 1	27 30 28 37 28 31 30	20 23 19 30 22 25 24	1 1 1 1 1 1 1	1 0 1 1
6 7 8 9 10 11 12 13 14	F F M F F F F F	47 73 50 40 64 69 73 75 42	9 8 9 9 10 8 10 8	8 8 8 8 8 8 8	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	27 30 28 37 28 31 30 35	20 23 19 30 22 25 24 28	1 1 1 1 1 1 1 0	1 0 1 1 1 0

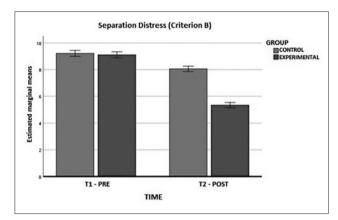


Figure 1. PG Sepration Distress (Criterion B). Interaction effect between Time X Group, F(1, 34) = 47.83, p < .001. The horizontal axis represents the Time (T1 - pre session, T2 - post session) and the vertical axis separation distress rates for Control and Experimental group. $Time\ T1$: no significant difference between Control and Experimental group. $Time\ T2$: Experimental group (red bar) has significantly lower separation distress than Control group (blue bar).

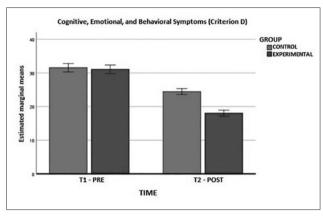


Figure 2. PG Cognitive, Emotional, and Behavioral Symptoms (Criterion D). Interaction effect between Time X Group, F(1,34) = 18.55, p<.001. The horizontal axis represents the Time (T1 - pre session, T2 - post session) and the vertical axis separation distress rates for Control and Experimental group. Time T1: no significant difference between Control and Experimental group. Time T2: Experimental group (red bar) has significantly lower Symptoms than Control group (blue bar).

while for the Experimental group all patients answered Yes at T1 and two patients answered No at T2. This unexpected result will be analyzed in the Discussion.

PG Cognitive, Emotional, and Behavioral Symptoms (Criterion D)

A mixed repeated measures ANOVA with Time (T1 Pre and T2 Post) as within-subject factor, Group (Experimental and Control) as between-subject factor, and average total score in cognitive, emotional, and behavioral symptoms as dependent variable, revealed significant main effects of both Time, F (1,34)=213.56, p<.001, $\eta_p^2=.86$ and Group, F(1,34)=6.22, p=.018, $\eta_p^2=.15$. For the main effect of Time, it was evident that mean score for cognitive, emotional, and behavioral symptoms was greater before therapy at T1 (M=31.3) as compared with post therapy at T2 (M=21.2). For the main effect of Group, it was evident that mean score for cognitive, emotional, and behavioral symptoms was greater for Control group (M=28.0) as compared with the Experimental group (M=24.6). The ANOVA also revealed a significant Time X Group interaction effect, F(1,34)=18.55, p<.001, η_p^2 =.35. Figure 2 shows the average score of *cognitive*, *emo*tional, and behavioral symptoms as a function of Time and Group. Post hoc t-test analyses revealed that although both Control and Experimental groups have a significant effect over time (ps<.001), between the two groups there was no difference at T1 (before therapy, p=.800), whereas as expected at time T2 Experimental group was significantly lower than Control group (post therapy, p<.001), demonstrating a significant decrease in separation distress score (Criterion D) in the Experimental group compared with the Control group in T2.

PG Functional Impairment (Criterion E)

A Chi-square test of independence with Yates' continuity correction revealed that at Time T1, the frequency of the answers (Yes and No) in T1, did not significantly differ between groups, χ^2 =.23, p=.630 (Figure 3a).

At Time T2, a Chi-square test of independence with Yates' continuity correction revealed that the percentage of the answers Yes and No post-therapy, significantly differed between groups, χ^2 =20.34, p<.001 (Figure 3b).

Two McNemar's tests were employed to determine change in response (Yes and No) between Time T1 and T2, in Control and Experimental group. An exact McNemar's test determined that there was no significant difference in the proportion of answers (Yes or No) at T1 and T2 in Control group, p=.50. A second exact McNemar's test determined that there was statistically significant difference in the proportion of answers (Yes or No) at T1 and T2 in Experimental group, p<.001. In Figure 4a and 4b it is possible to see the amount of response Yes and No before and after the 6 months in Control and Experimental group.

DISCUSSION

Our study confirmed results obtained in previous studies on Multimedia Psychotherapy^{2,3} where no control group was included, on a randomized sample of patients suffering from Prolonged Grief Disorder (i.e., half treated with Multimedia Psychotherapy and the other half treated with psycho-oncological support, as control group). Both groups present the Criterion A of PG-13, confirming a loss at least six months before the beginning of therapy. Analyses on Criterion B (Sepa-

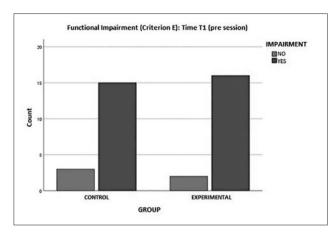


Figure 3a. PG Functional Impairment (Criterion E): Time T1 (pre session). The horizontal axis represents Groups (Control and Experimental) and the vertical axis count response (Yes and No) for impairment. Chi square revealed no difference in T1, both for Control and Experimental group, between answer Yes and NO in Functional Impairment ($\chi^2(1) = 0.23$, p = 0.63).

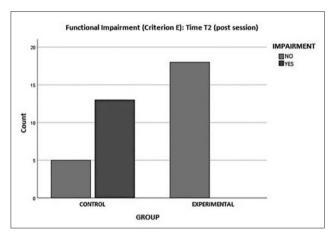


Figure 3b. PG Functional Impairment (Criterion E): Time T2 (post session). The horizontal axis represents Groups (Control and Experimental) and the vertical axis count response (Yes and No) for impairment. Chi square revealed significant difference in T2, both for Control and Experimental group, between answer Yes and NO in Functional Impairment ($\chi^2(1) = 20.34, p < .001$).

ration Distress) confirmed that before therapy there was no difference in separation distress between the two groups, whereas six months after therapy (T2) the separation distress score was significantly lower in the experimental rather than in the control group. Analyses on Criterion C (Duration of Symptoms), showing that before therapy all patients were remembering a long-lasting mourning experience with high separation distress for more than 6 months. At Time 2, only 16 of the participants in the experimental group remembered such a prolonged experience while in the control group all participants correctly remembered to have suffered from high separation distress after 6 months from their loss. Our interpreta-

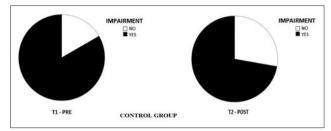


Figure 4a. PG Functional Impairment (Criterion E): Control Group. At Time T1, 3 subjects respond No and 15 Yes; at time T2 5 subjects respond No and 13 Yes (p = 0.50).

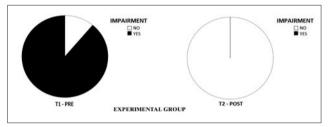


Figure 4b. PG Functional Impairment (Criterion E): Control Group. At Time T1, 2 subjects respond No and 16 Yes; at time T2, all 18 subjects answered No (p < .001).

tion is that when people recover from Prolonged Grief Disorder and move on, as occurred in the experimental group, they tend to forget and minimize the duration of their past suffering. Analyses on Criterion D (Cognitive, emotional, and behavioral symptoms) show an improvement over time in both control and experimental groups but while before therapy there was no difference between groups, after therapy experimental group scores were significantly lower than scores of the control group, showing a decrease of Cognitive, emotional, and behavioral symptoms (Criterion D). Since both groups received the psychopharmacological therapy it is unlikely that these findings are due to it. The main difference between the control and the experimental groups is more likely to depend on the kind of psychological support that patients received: Multimedia Psychotherapy in the experimental group and psycho-oncological support in the control group. The remarkable improvement of patients obviously has an influence on Criterion E (Functional impairment). As expected, we have a significant improvement regarding functional impairment (from Time 1 to Time 2). While before therapy 16 patients in experimental group and 15 patients in control group felt to be impaired, after six months we have no patients who feel impaired in the experimental group whereas 13 patients yet feel impaired in the control group. These results are in line with the clinical impression that all patients that completed Multimedia Psychotherapy improved after the new treatment. Differently from previous studies, we did not have any drop out, confirming that our method of participants' selection is effective.

Our study showed that Multimedia Psychotherapy is an effective treatment for Prolonged Grief Disorder. The experimental group, treated with Multimedia Psychotherapy, had a better outcome than our control group that was treat-

ed with our usual therapy, confirming that Multimedia Psychotherapy might be offered as a tool for the Prolonged Grief Disorder treatment. Nevertheless, more research must be done, with broader samples, with patients from different cultural backgrounds, and using different diagnostic tools, in order to have stronger evidence that symptoms of prolonged grief disorder are relieved by multimedia psychotherapy. On this regard, we are planning to abandon the MMPI-2 since it was experienced as burdensome by our patients and it is out of line with the ICD-11 diagnostic manual. Thus, we will replace it with other tests to better evaluate the symptoms experienced by our future patients so that the outcome of therapy can be assessed more precisely.

LIMITS AND FUTURE DIRECTIONS

We must introduce some reflections on the methodological limits of this paper. The first observation has to do with the small samples we studied as well as with the fact that all patients were Italian and Catholic. Prolonged Grief Disorder, in Italy, might be considered by someone as a gender pathology. In our sample most patients were women. The same happened with the study in which the Italian edition of PG-13¹⁹ was validated. Not without a meaning, the text of the Italian edition of PG-13 was written using the feminine gender as the first choice for all patients answering the test items. However, at the same time, someone could rather think that we should seriously consider the need for a transcultural approach²¹ in grief research. All the more so, if we remember that, in the Mediterranean basin, not only in Italy, women were culturally expected, in the past, to cry loudly and fill artistic vessels with their tears, at funerary rituals, while men should fight games and show their strength (even the Greek Olympic games have this origin).

Another limitation of the study is that Multimedia Psychotherapy is personally designed on each patient, and must be offered by a specifically trained therapist, with all the limitations implied by these issues. It would also be interesting to focus future studies on the very nature of the "psychodynamic montages" and the process to produce them. For example, the next step is to develop a software to produce the audio-videos, so that Multimedia Psychotherapy could be offered in a more objective and easy way. This is meaningful if we remind that multimedia psychotherapy might be implemented not only for Prolonged Grief Disorder after the death of a human being (or a pet), but for all metaphorical griefs. For example, it can be used in a group setting, with refugees and/or patients suffering from displacement and loss of their original homeland, which are relevant psychosocial problems, today, in Italy as well as in many other Countries of our global world²¹.

Acknowledgements: we want to acknowledge the following psychologists and artists who contributed in different ways to our work in order to prevent burn-out syndromes in all members of our interdisciplinary team: Serena Bernabè, Valeria Colasanti, Davide D'Ambrosio, Barbara Feliziani, Giovanni Hassan, Giulia Radi, Armando Tacconelli.

Conflict of interests: the authors have no conflict of interests to declare.

REFERENCES

- 1. Killikelly C, Maercker A. Prolonged Grief Disorder for ICD-11: the primacy of clinical utility and international applicability. Eur J Psychotraumatol. 2017; 8 (Suppl 6): 1476441.
- Nesci DA. Multimedia psychodynamic psychotherapy: a preliminary report. J Psychiatr Pract 2009; 15: 211-5.
- Nesci DA. Multimedia Psychotherapy: a psychodynamic approach for mourning in the technological age. New York: Jason Aronson, 2012.
- Beaumont SL. Art therapy for complicated grief: a focus on meaning-making approaches. Canadian Art Therapy Association Journal 2013; 26: 1-7.
- 5. Dysvik E, Natvig GK, Furnes B. A narrative approach to explore grief experiences and treatment adherence in people with chronic pain after participation in a pain-management program: a 6-year follow-up study. Patient Prefer Adherence 2013; 7: 751-9.
- Perlovsky L. Music, passion, and cognitive function. London: Academic Press, 2017.
- O'Callaghan C, Michael N. Music therapy in grief and mourning. In: Edwards J (ed). The Oxford Handbook of Music Therapy. Oxford: OUP, 2016.
- 8. Eisma MC, Lenferink LI. Response to: Prolonged Grief Disorder for ICD-11: the primacy of clinical utility and international applicability. Eur J Psychotraumatol 2018; 9: 1512249.
- 9. Nesci DA. Revisiting Jonestown: an interdisciplinary study of cults. Lanham, MD: Lexington Books, 2017.
- 10. Briffault R. The Mothers: a study of the origins of sentiments and institutions (Vol. 2). New York: The Macmillan Company, 1927.
- Roheim G. The eternal ones of the dream; a psychoanalytic interpretation of Australian myth and ritual. International Universities Press, 1945.
- 12. Ong, WJSJ. Orality and literacy: the technologizing of the word. London and New York: Methuen, 1982.
- Harari YN. Sapiens: a brief history of humankind. London, UK: Vintage, 2011.
- Werneke U, Bhugra D. Culture makes a person. Nord J Psychiatry 2018; 72 (sup1): S1-S2.
- 15. Winnicott DW. Transitional objects and transitional phenomena: a study of the first not-me possession. Int J Psychoanal 1953; 34: 89-97.
- 16. Freud S. Mourning and melancholia. In: Strachey J (ed). The standard edition of the complete psychological works of Sigmund Freud, Volume XIV (1914-1916): on the history of the psycho-analytic movement, papers on Metapsychology and other works. London: The Hogarth Press and the Institute of Psycho-analysis, 1957.
- Schut MSH. The dual process model of coping with bereavement: rationale and description. Death Stud 1999; 23: 197-224.
- Sirigatti S, Pancheri P, Narbone G, Biondi M. L'adattamento italiano del MMPI-2 al vaglio del test-retest con bilingui. Bollettino di Psicologia Applicata 1994; 211: 23-7.
- De Luca ML, Tineri M, Zaccarello G, et al. Adattamento e validazione del questionario "PG-13" Prolonged Grief nel contesto italiano. Rivista italiana di cure palliative 2015; 17: 1-9.
- Prigerson HG, Horowitz MJ, Jacobs SC, et al. Prolonged Grief Disorder: psychometric validation of criteria proposed for DSM-V and ICD-11. PLoS Med 2009; 6: e1000121.
- Bäärnhielm S, Sundvall M. Clinical challenges in cultural psychiatry: searching for meaning, searching for methods. Nord J Psychiatry 2018; 72 (sup1): S9-S12.