

Expressive writing. A tool to help health workers of palliative care

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Abstract. *Background and aims:* From a previous study (1) was highlighted that Expressive writing is an important strategy for preventing and managing the effects of compassion fatigue (2). It helps educate caregivers in recognising these feelings and providing them with a “space” and a time for their reflection. This, in turn, results in significant positive repercussions on the quality of service, reducing burnout risk, implementing coping strategies, and increasing perceived work satisfaction. Reflecting occasionally in writing about ambiguous and emotionally charged situations helps in many ways: it facilitates clarification and problem-solving, and makes one more spontaneous and present in social situations, more in tune with others and available to interact. People begin to interact differently with others and see themselves in a new light after writing about an emotional subject. The objective of this study is ascertain and confirm the results of the previous study using a reduced methodological approach. In fact, the difference from the previous research is the use of only two expressive writing sessions. *Methods:* A comparison was made between the expressive writing and neutral writing of two randomized groups of health care professionals of palliative care. They were evaluated pre- and post-intervention using several scales and an ad hoc questionnaire. *Results:* After analyzing the texts, this study confirms previous results, using only two sessions.

Key words: coping, emotions, expressive writing, working satisfaction

Background

From a previous study (1) it was highlighted that Expressive Writing (EW) is an important instrument to improve individual strategies for preventing and managing the effects of compassion fatigue (2). It helps educate caregivers in recognizing these feelings and providing them with a “space” and a time for their reflection. This, in turn, results in significant positive repercussions on the quality of service, reducing burnout risk, implementing coping strategies, and increasing perceived work satisfaction (1-6). Reflecting occasionally in writing about ambiguous and emotionally

charged situations helps in many ways: It facilitates clarification and problem-solving, and makes one more spontaneous and present in social situations, more in tune with others and available to interact. People begin to interact differently with others and see themselves in a new light after writing about an emotional subject.

The interventions of EW in literature show a differentiation in the methodological structure. The writing methodology includes time and numbers of writing sessions.

In the meta-analysis of Smith (7) we notice that “...the numbers of the writing sessions and the length of each session do not influence the effects of the technique. We

obtained positive results letting patients write from 3 to 6 days and for a period that varies from 15 to 20 minutes for each session..." and Smyth concludes that "...writing once per week instead of 3 or 4 times during the following days increases the effects in the set of variables took into account in the different works. This effect depending on the interval among sessions could suggest the need of a longer period of time to allow the processing of what was written" (8).

Another meta-analysis (4) analyzed studies where participants were asked to write for 20 minutes per 3 or 4 days but also once or twice per week per several weeks taking into account few other variables but nobody has ever experimented a shorter writing program. A further study (9), led on patients affected by leukemia and lymphoma, shows that also an only, brief exercise of expressive writing is linked to an improvement in terms of quality of life.

Imrie & Troop (10) employed the expressive writing in a day-hospice setting. The three sessions of 20 minutes each occurred in a gap of one week to each other, according to the visit frequency of patients to hospice; this study highlighted physical and psychological benefits: The patients who experienced the expressive writing increased the level of self-compassion and self-confidence.

In the study about the expressive writing for metastatic breast cancer patients, Low, Stanton, Bower and Gyllenhammer (11) asked participants to write at home for four sessions of 20 minutes in a gap of three weeks. The results show that the expressive writing is effective to reduce the pain in those patients with a low level of anxiety.

Milbury, Lopez, Spelman, Wood, Matin, Tannir, Jonasch, Pisters, Wei and Cohen (12) arranged a study to identify the groups with the highest possibilities to benefit from the expressive writing. The participants (277 patients affected by kidney cancer) were assigned to complete four writing sessions of 20 minutes at home throughout a period of 10 days with at least 1 day and not 3 days among the sessions. The results underlined that the patients with recognition of baseline depressive symptoms and social support as intervention moderators may lead to improved patient selection for EW interventions. The results showed also that the same patients obtained better results for QOL.

Aim

Based on the literature, the objective of this study is to evaluate whether a reduced methodological approach will confirm the results of the previous study (1). In fact, only two expressive writing sessions were scheduled for the intervention.

In particular, the hypotheses are that:

- The use of the expressive writing improves or maintains the work satisfaction;
- the use of the expressive writing increases the employ of the adaptive coping strategies (social support, active participating, problem - orientation) and reduces the maladaptive coping strategies (avoidance);
- the use of the expressive writing reduces stress and the burnout risk;
- the benefits on work situation and adaptive coping strategies are higher in professionals that use the Expressive Writing compared to the ones that employ the Neutral Writing.

Method

Study Design

This study is quantitative, multicenter, prospective with quasi experimental 2x2 design with two groups (experimental group expressive writing/neutral control group) and two measurements (pre/post test with a minimum interval of 1 day and not more than 3 days) (13).

Participants

Participants were selected through a balanced sampling for setting and years of professional experience. Professionals that work in the Palliative Care field, speak and write Italian, have been included.

The professional in this study was selected in the Palliative Care operating units and Hospice and Local Health Service like as:

- Hospice of Vertova (BG) e ADI (Italian nursing Home Care system) "Foundation of Cardinal Gusmini";

- Hospice of Bergamo “Beato Luigi Palazzolo home care”;
- Hospice of Cremona “San Camillo home care”;
- Home Care Operating Unit of oncology of Scandiano;
- ADI (Italian nursing Home Care system) of Carpi (Modena).

Participants who expressed the desire to participate in the study, after signing the informed consent, were assigned by randomization to the experimental or control group.

Instruments

A personal-social questionnaire has been given to participants in the pre-test phase. In this stage, we asked:

- Age;
- sex;
- marital status;
- education level;
- job.

To evaluate the effects of the EW vs the Neutral Writing on the investigated constructions (work satisfaction, coping strategies and burnout) during the pre-test and at the end of the last writing session, we used:

1) Coping Orientation to the experienced (COPE-NVI-25) (13), a reduced version of the COPE-NVI scale that measures faster and easier the coping strategies. In particular, this test is made of 25 items that investigate five dimensions:

- Problem orientation;
- transcendent orientation;
- positive aptitude;
- social support;
- avoidance strategies.

The questionnaire requires answers that follow a 6 points Likert scale (1=I never do it, 6=I always do it) about what to do and how to behave in situations of high stress.

2) Stress evaluation thermometer a tool consisting of a Likert scale with a score range of 0-10. 0=emotional distress absence and 10=the maximum of emotional distress perceived.

The participant is asked to circle the number that describes better his/her distress during the last week.

3) Maslach Burnout Inventory (MBI) (14)

At the beginning, it was aimed to caregiving professions or those jobs that involve a considerable emotional interaction between the professional and the user (for instance psychologists, voluntary and social workers, teachers, nurses, doctors, etc.) but over time, its use increased involving all those jobs and professions that require a constant relation with the audience or people in need.

The MBI is made up of 22 items that measure 3 dimensions and are independent from the burnout:

- 1) *Emotional exhaustion* that examines the feelings of being emotionally withered and exhausted with the job.
- 2) *Depersonalization* that measures impersonal and cold answers of service users.
- 3) *Personal fulfillment* that evaluates feelings about his/her own competence and success desire in the work with others.

Each one of the 22 items requires to show the frequency of the feeling concerning each item, following a 7 points Likert scale (0=never; 1=sometimes per year; 2=once per month or less; 3=sometimes per month; 4=once per week; 5=sometimes per week; 6=everyday).

4) Questionnaire about the work satisfaction (15)

It is made up of 31 items that investigate 8 subject areas:

- 1) Explicit recognition (salary, incentives, etc.).
- 2) Work - family balance.
- 3) Organization of working hours.
- 4) Colleagues.
- 5) Social interaction opportunities.
- 6) Professional opportunities.
- 7) Praises and recognitions.
- 8) Control/responsibility.

For each one of the 31 items, it is asked to specify the satisfaction level on a 5 points Likert scale (1=maximum dissatisfaction and 5=maximum satisfaction).

5) Questionnaire about the writing session evaluation

It is an ad hoc questionnaire developed to evalu-

ate the usefulness of writing in relation to the constructions analyzed in a brief time (during the last days before the first session). It is made up of 4 items:

- 1) How much is the writing experience useful?
- 2) Did you find solace in the writing during last days?
- 3) Were you uncomfortable with the using of the writing?
- 4) Would you suggest someone the use of writing?

For each questions, the participant is asked to tick the item that identify the usefulness of the writing: not at all useful, slightly useful, quite useful, very useful. This tool was given to participants that joined the *Expressive Writing* group in the *post-test* phase.

Intervention

The intervention procedure in the experimental group was an expressive writing protocol, while the control group was given a neutral writing protocol (Figure 1), like a previous study. In fact, Expressive writing is a tool through which the subject describes his/her most profound thoughts and feelings about emotional events. In contrast, neutral writing is a comparison tool, through which the participant describes in a more objective way an event that is devoid of emotions, thoughts or feelings.

Procedure

Before its development, we explained the study and its procedure to each professional. Furthermore, we asked each professional his/her informed consent signature, showing the information and consent on personal data treatment in accordance with the Legislative Decree 196/2003 pursuant to the standards of good clinical practice (Legislative Decree 211/2003). A form, which contains the all Socio-Demographic details of the sample, has been completed. The anonymity of the study has been guaranteed through the creation of a personal code for each enlisted professional. This code is the result of coded information.

Experimental sessions were divided into two days:

Session 1: Socio-Demographic Questionnaire (sex, age, level of education, years of practice, Role currently held), Pre-Intervention, Sheet with Code Instructions, expressive writing session, Evaluation

Session 2: paper with Code Instructions; writing mandate with writing sheets, post-intervention.

In particular, both groups of the first writing session were required to complete the socio-demographic questionnaire and scales requested by the study.

Thereafter, participants were asked to complete the first writing session following the directions his/her own mandate. At the end of the second writing

Expressive writing instructions

*Over the next three days, we would like you to write about your most profound thoughts and feelings about an important traumatic, emotional or stressful event that has affected your life. Write for 20 consecutive minutes. Do not worry about the grammar, spelling or structure of the writing. We would like, in your text, for you to examine your moods and deeper thoughts about this experience. It can be about any topic. But whatever it is, it should be something that struck you very deeply. It could be something about the past, the present or the future. The ideal would be if you choose something you did not talk about, in detail, with anyone. It is essential that you let yourself go and come into contact with your emotions and deeper thoughts. In other words, write what happened, how then did the episode feel, and what it means to you now. You can write about different experiences during each session, or about the same experience for all three days. At each session, the choice of the subject is entirely up to you. All your writing will be completely confidential and anonymous. The only rule is that once you start writing, you continue **until the end of 20 minutes for 3 consecutive days.***

Neutral writing instructions

*We would like you to write for the next 3 days for 20 minutes continuously, without interruption, about how you use your time. In this writing we would like you to be as objective as possible. We are not interested in your emotions or opinions. We want you to be completely objective. Feel free to be as detailed as possible. In today's writing we would like to describe what you did yesterday since you got up, until you went to bed. For example, it might start when the alarm clock goes off and you get out of bed. It could include things you ate, where you went, what buildings or objects you saw. The most important thing in this writing is to describe your days as accurately and objectively as possible. All the writings will be completely confidential. Do not worry about spelling, grammar, or sentence structure. The only rule is that once you start writing, continue **until the end of 20 minutes for 3 consecutive days.***

Figure 1. Mandatory Expressive Writing and Neutral Writing

session, participants received the same scale given in the pre-test phase before the writing session and in addition also an ad hoc questionnaire for the experimental group to evaluate, "Would you suggest someone the use of writing?"

Data analysis

Quantitative results were analyzed using SPSS 23. A descriptive analysis of all variables and non-parametric statistical analysis was performed for intra- and between-group comparison (expressive writing vs. neutral writing). The expressive writing samples were analyzed using the paper and pencil method through a coding of positive and negative emotions.

Results

As stated, there were 26 health palliative care professionals who participated in the study. Average age was 46,15 (D.S.=7,842; minimum age=28 years; maximum age=59 years).

The sample is made up of: N=16 nurses (61,5%); N=1 psychologist (3,8%) e N=9 health care assistants (34,6%).

The respondent group was composed mostly of females (N=88, 5%; male N=11,5%). Of these, 61.5% were nurses (N=16); 34,6% by health care assistance (N=9) and one psychologist.

Of the group, 88.5% (N=23) did not have previous writing experience before attending the study; 11.5% (N=3) wrote in the past: personal diary and creative writing.

Finally, N=11 (42.3%) recruited employees were tasked with neutral writing, while N=15 (57.7%) employees received the expressive writing task.

Comparison within the Expressive Writing Group

Friedman's non-parametric test for related samples was used for the analysis within the experimental group in the 2-stroke (pre / post) (Table 1).

It highlighted a significance relating to avoidance and transcendent strategies, depersonalization, and colleagues justifying the analysis post hoc with the

Table 1. Comparison within the expressive writing group

Scale	Chi2	Sig. (2-way)
Avoidance strategy	19,333	0.023
Orientation strategy	7,600	0.749
Transcendent strategy	37,600	0.000
Positive strategy	12,000	0.528
Social Support Strategy	10,133	0.683
Emotional exhaustion	13,067	0.668
Depersonalization	30,800	0.001
Personal fulfillment	12,000	0.606
Explicit recognition	6,000	0.740
Work - family balance	8,867	0.545
Work hours	9,467	0.852
Colleagues	14,000	0.016
Social interaction	9,200	0.758
Professional opportunity	8,400	0.677
Praises and recognitions	9,600	0.476
Responsibilities control	7,333	0.884

use of the Wilcoxon test for dependant paired samples (Table 2).

The experimental group and the control group were paired compared in each phase using the Mann-Whitney U test. From this comparison, we noticed a significant difference in the use of the avoidance strategy (U=58; p<.05) and in the colleagues relationship (U=5.6; P<.05) (Table 3 and 4).

It is interesting the existence of a statistical significance (U= 232: p<.05) of the job satisfaction in the post intervention measured with the McCloskey Mueller Satisfaction Scale. In the control group, there is a decrease in the satisfaction concerning the work with colleagues from the PRE Phase=3 (Mdn) to the POST Phase=2.9 (Mdn). This does not occur in the experimental group that reports in the PRE Phase=3 (Mdn) and in the POST phase=3.8 (Mdn).

Table 2. Post hoc analysis: pre/post sample group comparison through Wilcoxon test

Pre/post Variable	Test Statistic (Z)	Sig. (2-way)	Median Value (Mdn1)/(Mdn2)
Avoidance strategy	157	,11	(1,50)/(1,50)
Transcendent strategy	52	,59	(2,37)/(2,37)
Depersonalization	74	,45	(,30)/(,20)
Colleagues	274	,00	(4,50)/(4,50)

Table 3. Mann Whitney test between EWgroup and Cgroup in Baseline

Scales	EWgroup (Mdn)	Cgroup (Mdn)	U	Sig. (2-way)
Avoidance	2.5	3.0	58	.049
Transcendent	2	1.5	603	.427
Positive aptitude	3.24	3.24	524	.816
Social support	3.4	3.2	632	.248
Problem orientation	4.5	4.5	592	.522
Emotional exhaustion	3	3.25	1.4	.495
Depersonalization	4.3	3.33	.574	.750
Personal fulfillment	4.25	4	45	.434
Explicit recognition	4	3.5	38	.526
Work-family balance	3.75	3.75	2.1	.211
Work family	3.25	2.5	3.1	.289
Colleagues	3	3	5.6	.002
Social interaction	3.4	3.4	1.9	.385
Professional opportunities	3	3	.96	.617
Praises and recognitions	3	3	.463	.793
Responsibilities control	3	2.8	4.6	.099

Table 4. Mann Whitney test between EWgroup and Cgroup in Post treatment

Scales	EWgroup (Mdn)	Cgroup (Mdn)	U	Sig. (2-way)
Avoidance	1.2	3.0	98	.002
Transcendent	2.25	2	218	.821
Positive aptitude	3.8	3.37	178	.423
Social support	3.8	3.3	199	.793
Problem orientation	4.75	4.5	145	.864
Emotional Exhaustion	2.5	3	123	.310
Depersonalization	3.6	3	134	.311
Personal fulfillment	3.75	3.25	289	.104
Explicit recognition	4	3.5	278	.168
Work-family balance	3.25	3.125	224	.486
Work hours	2.5	2.75	178	.423
Colleagues	3.8	2.9	232	.001
Social interaction	3.4	3.1	208	.990
Professional opportunities	3.3	3.3	261	.133
Praises and recognitions	3.2	3.2	234	.392
Responsibilities control	3.25	1.9	243	.479

These questionnaires measure long- distance variation and it is for this reason that an ad-hoc questionnaire was developed to evaluate the perception of short term effectiveness of professionals. The 53,3% of the sample (N=8) consider the expressive writing very useful and 33,3% (N=5) quite useful. Only 13,3% consider the expressive writing slightly useful. A 40% of the sample (N=6) found quite solace in using the expressive writing while 33,3% (N=5) found a lot of solace. Only 20% (N=3) found a little solace. A 6,7% (N=1) found no solace.

The 46,7% of the sample (N=7) felt a little uncomfortable using the expressive writing while 33,3% (N=5) did not feel uncomfortable at all. Only 20% (N=3) felt quite uncomfortable.

In the end, the majority of the sample, the 66,7 (N=10), deeply suggests the use of the expressive writing while 26,7% (N=4) quite suggest it. Only 6,7% (N=1) slightly recommend the expressive writing.

Discussion

The Expressive Writing is a writing intervention developed to improve the psycho-physical wellness through the strengthening of the emotional and cognitive processing of events.

Through the writing of the traumatic event, the individual changes the emotional perception of the event with the re-elaboration of the emotional and cognitive reactions and the recovery of his/her own identity; this allows an improvement of the coping strategies and a reduction of the emotional distress (16).

The results of the study highlight that the avoidance and transcendent strategies are reduced from the pre-expressive writing phase to the post-expressive writing phase. This element confirms the idea that coping with a stressful or traumatic situation directly instead of avoid it reduces the physiological work of inhibition and the biological stress (17). The comparison with the trauma helps people to understand and internalize the event (17, 18). When they are organized, the events are smaller and easier to deal with. The choice of not speaking and writing about negative experiences could be harmful causing inhibition: stopping and avoiding the solution of traumas imply a continuous cohabitation with others. The same occurs when maladaptive coping strategies like avoidance are used.

The writing is a useful tool to encourage self-understanding and the comprehension of past experiences.

From the comparison within the experimental group, there is a significant difference in a dimension that identifies the burnout: the depersonalization that evaluates the cold and impersonal answer of professionals to service users. The health workers provide treatments with difficult and stressful work condition taking into account the fact that they deal with illness, human suffering, pain, chronicity, and death continually. When the pain is not recognized, faced and developed may become chronic and cumulative with serious personal and professional consequences. The Expressive Writing represents a useful tool that allows professionals to think about experienced stressful events, deal with the feelings associated with them that may overwhelm the capabilities of professionals and avoid

their emotional distance from experiences in the long term.

Consequentially, the psychological resilience of professionals affects the quality of the patient treatment.

From the comparison within the experimental group, it emerges a significant difference in the job satisfaction relating to colleagues. In the daily work, the professionals deal with many stressful events (difficulties in communication, death, responsibilities, verbal or physical abuse, long working hours) and these aspects can modify the individual job satisfaction and have consequence on the quality of assistance; it is necessary a support. The expressive writing is an efficient intervention, cheap, easy to apply and able to support healthcare workers in stressful situations. The expressive writing represents an important strategy to help healthcare workers: it allows a reduction of the maladaptive strategies, it improves the self-understanding, the past experiences acknowledge, and the professional's capability to cope with difficulties. It has significant positive repercussions on the quality of assistance and the professional's work quality with a reduction of the burnout risk, an implementation in the coping strategies and an increase in the work satisfaction.

In this study, the quantitative analysis allowed to highlight the presence of some important effects that an only expressive writing intervention can ensure to professionals. In fact, in the previous study led by Tonarelli (1) comparing the two groups (experimental and control), it emerged a significant difference in the working hour satisfaction. The use of the expressive writing, maybe with the effects of the emotional processing and the recognition of the positive emotions, would have had a "buffering effect" on the working hour satisfaction that has no deflection from t1 to t2 in the experimental group. Conversely, Control Group has a continuous downward trend in the values of this variable. The difference reduces and disappears in the follow up, giving the idea that later there is a nullification of the expressive writing positive effect. This result aligns with the recently data, highlighted in literature: they introduce a new methodological model that is completely new compared to the classic Pennebaker (4, 12). It suggests to vary the writing sessions (1 or 2 times) and the time distance between each session

(minimum 24 hours, maximum 72) in order to obtain more stable and longer-lasting results. Furthermore, compared to the first study, it has been used a different protocol to confirm possible changes in the short term.

The limited numbers of participants makes impossible to generalize the results limiting the encountered significance. Many values showed a trend towards significance that could be completed and confirmed with a bigger sample. A further limit of the study is the use of questionnaire that measure long-term modifications and for this reason it is necessary to develop an ad-hoc questionnaire to evaluate the short-term modifications.

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