

RELAXATION AND IMPACT ON THE MULTIDIMENSIONAL HEALTH LOCUS OF CONTROL: INTEREST OF GROUP PSYCHOEDUCATION FOR STRESS MANAGEMENT IN THE CONTEXT OF LIAISON PSYCHIATRY WITHIN A GENERAL HOSPITAL

Denis Jacques^{1,2}, Brice Lepière^{1,2}, Christine Reynaert^{1,2} & Nicolas Zdanowicz¹

¹Université Catholique de Louvain, CHU Dinant-Godinne, Psychopathology and Psychosomatic Unit, Mont-Godinne University Hospital, Yvoir, Belgium

²Université Catholique de Louvain, Institute of Health and Society, Mont-Godinne University Hospital, Yvoir, Belgium

SUMMARY

Background: In this article we propose a model for caring for a group focusing on psychoeducation for stress management and learning relaxation designed for patients experiencing somatization and who were recruited during organic medicine consultations.

We are developing an interest for this kind of group from a clinical and practical point of view and have sought to demonstrate the impact that this kind of care can have on health representations among these patients through using the MHLC (Multidimensional Health Locus of Control) questionnaire.

Subject and methods: Participants in the stress management and relaxation groups completed the questionnaire at the beginning of the first session and at the end of the second and last session. We collected 94 usable questionnaires between January 2008 and December 2014 and processed the data using Student's t-test on paired samples.

Results: The results tend to demonstrate that psychoeducation for stress management and relaxation reduces internality scores in patients with high scores and the opposite for patients whose internality scores are low.

Discussion: Our research protocol does not enable us to distinguish between the respective influences of the psychoeducation group and the relaxation group.

Conclusion: The psychoeducation groups for stress management and relaxation have an impact on health representations in patients experiencing somatization who would not have spontaneously sought out psychiatric consultations.

Key words: liaison psychiatry – psychosomatic – psychoeducation – stress - Jacobson relaxation

* * * * *

INTRODUCTION

For several years, as part of treatment for anxiety and stress disorders, therapeutic approaches focused on the development of awareness of the body have become increasingly successful. In the field of cognitive-behavioral psychotherapies, relaxation techniques (Jacobson 1947) or sophrology have long been used in exposure and desensitization therapies as adjuvant tools and as stress management (Dimou 2014). More recently, meditation/mindfulness has developed indications for depressive and anxiety disorders, as well as in strategies for preventing relapse in dependency.

The target group for this kind of approach is still a population that has already undertaken work on elaborating and understanding the impacts of emotions and stress on health.

But for patients with a psychosomatic profile, the predominant alexithymia precisely leads them to prefer consulting a somaticist-physician with an exclusively organic reading and expectations for their problems. Schematically speaking, with the three dimensions of treating an anxiety disorder: pharmacological treatment, a bodily approach and psychotherapy, psychosomatic

patients have a clear tendency to only be familiar with the first option and to be reticent when it comes to bodily and psychotherapeutic approaches through a lack of understanding or because they do not see how it concerns them given their alexithymia and the operational dimension of thought.

From a clinical point of view, we have often observed patients who signed up for psychiatric consultations and were sent by neurologists, cardiologists, internists or ENT specialists for problems related to stress and somatization.

During these consultations, we often observe that the patient had come without really understanding why the consultation was needed (other than that it was strongly advised) and few of them continued psychotherapeutic or physical treatment.

Another difficulty lies in the fact that waiting times for psychiatric consultations have become very long in the healthcare network, and these patients often cancel their appointments and consult other somaticists.

Based on these observations, we proposed creating a stress management and relaxation group based on psychoeducation for stress mechanisms and somatization, teaching a relaxation technique (Jacobson's

technique) (Golombek 2001). The aim was twofold: firstly, to provide a faster response to a large number of patients who presented somatization and were not prepared to truly undertake psychological treatment and, secondly, to give information that would enable patients to assess and understand the indications for possible psychotherapy.

Jacobson's relaxation technique consists in exercises alternating the contraction of muscle groups coordinated with inhaling followed by relaxation with exhaling (Kohl 2002). The person is asked to concentrate on the feeling of contrast between contraction and relaxation. The idea is that it is easier to perceive what a relaxed state is in opposition to contraction (Lehrer 1982). This type of method, which has a logical and operational definition, encounters less resistance in alexithymic patients for whom the perception of a state of relaxation is presumably not even clear.

The group is made up of a maximum of eight patients and meets in two sessions held one week apart.

The first session is dedicated to psychoeducation on the consequences of chronic stress on the autonomic nervous system's loss of adaptability to external stimuli. Information is provided on the basic principles of the various relaxation techniques. Jacobson's relaxation technique is described along with the procedure for using it.

The second session consists in using Jacobson's technique itself in a group followed by scheduling for self-directed exercises to be performed at home.

The patients were recruited during neurologic, cardiologic, ENT or psychiatric consultations. The indication was the presence of stress that had an influence on a known organic pathology or a stress situation leading

to somatization. The prerequisite was that the patient had had one assessment consultation with a somaticist excluding the presence of an organic pathology.

We have defined several assessment criteria for our groups, including an assessment of the impact on the MHLC (Pauwels 1999) before and after participation in the group, which we shall develop in this article.

SUBJECTS AND METHODS

The inclusion period ran from January 2008 to December 2014 for 158 patients who took part in 25 stress management and relaxation groups.

The patients completed the MHLC questionnaire for the first time before the start of the first session. It was completed a second time at the end of the second session.

We collected 94 usable questionnaires that had been filled in correctly. The other questionnaires that were not used were either incomplete or were filled in incorrectly.

RESULTS

The results were processed using the Student's t-test on paired samples.

There is no significant difference when we compare the entire sample without distinguishing between time 1 and time 2 (Table 1).

On the other hand, when we compare the patients who had low internality indexes (IHLC) (lower than the sample's average of 21.73), we observe that the internality index tends to increase significantly, as does the others' power index (PHLC) (Table 2, Table 3).

Table 1. Student's t-test on paired samples for the entire sample

| | N | Minimum | Maximum | Average | Ecart Type |
|------|----|---------|---------|---------|------------|
| IHLC | 94 | 10.00 | 35.00 | 21.7340 | 5.56134 |
| PHLC | 94 | 6.00 | 33.00 | 20.1489 | 5.10104 |
| CHLC | 94 | 8.00 | 31.00 | 19.9787 | 5.22397 |
| IE | 94 | 0.41 | 3.14 | 1.1382 | 0.42338 |

Table 2. Half sample with $IHLC \leq 21.73$ statistics

| $IHLC \leq 21.73$ | Average | N | Ecart type |
|-------------------|---------|----|------------|
| IHLC | 17.2128 | 47 | 0.40571 |
| IHLC2 | 19.9362 | | 0.58536 |
| PHLC | 18.9574 | 47 | 0.68549 |
| PHLC2 | 19.5957 | | 0.63338 |
| CHLC | 20.2128 | 47 | 0.83013 |
| CHLC2 | 20.2766 | | 0.80453 |
| IE | 0.9300 | 47 | 0.04185 |
| IE2 | 1.0411 | | 0.04496 |

Table 3. Student's t-test on paired samples for the half sample with IHLC≤21.73

| IHLC≤21.73 | Average | t | sig |
|------------|----------|--------|-------|
| IHLC-IHLC2 | -2.72340 | -4.457 | 0.000 |
| PHLC-PHLC2 | -0.63830 | -1.010 | 0.318 |
| CHLC-CHLC2 | -0.06383 | -0.096 | 0.924 |
| IE-IE2 | -0.11106 | -2.777 | 0.008 |

Table 4. Half sample with IHLC>21.73 statistics

| IHLC>21.73 | Average | N | Ecart type |
|------------|---------|----|------------|
| IHLC | 26.2553 | 47 | 3.60837 |
| IHLC2 | 25.0426 | | 3.59926 |
| PHLC | 21.3404 | 47 | 5.25554 |
| PHLC2 | 20.6596 | | 4.81066 |
| CHLC | 19.7447 | 47 | 4.76157 |
| CHLC2 | 18.2979 | | 4.65746 |
| IE | 1.3464 | 47 | 0.43763 |
| IE2 | 1.3362 | | 0.36162 |

Table 5. Student's t-test on paired samples for the half sample with IHLC>21.73

| IHLC>21.73 | Average | t | sig |
|------------|---------|-------|-------|
| IHLC-IHLC2 | 1.21277 | 2.122 | 0.039 |
| PHLC-PHLC2 | 0.68085 | 1.112 | 0.272 |
| CHLC-CHLC2 | 1.44681 | 2.053 | 0.046 |
| IE-IE2 | 0.01021 | 0.217 | 0.829 |

For the other half of the group whose internality index (IHLC) was high (greater than or equal to the average of 21.73), we observed the opposite phenomenon, i.e. a significant decrease in the IHLC and PHLC (Table 4, Table 5).

DISCUSSION

Our results tend to show that participation in a psychoeducation group for stress management and learning relaxation has an impact on the health representations assessed using the MHLC questionnaire. Patients with high internality indexes tend to decrease, apparently attributing power to others, while the scores of patients with lower internality indexes rise.

In our research protocol, we did not envisage distinguishing the impact of group psychoeducation from the impact of learning relaxation itself. It would have been interesting to give an intermediate MHLC questionnaire after the first psychoeducation session for a refined view of the respective influences of the two therapeutic tools.

CONCLUSION

Our research work tended to show that the implementation of a psychoeducation group for stress management and learning relaxation has an impact on health representations among patients experiencing

somatization and who had so far mainly consulted somaticist physicians.

From a clinical point of view, this kind of therapeutic setting appears to respond more quickly to somatization problems without immediately undertaking an individual psychiatric consultation and also makes it possible to better guide and define the indication for following psychotherapeutic treatment.

Our research protocol does not make it possible to distinguish between the respective influences of the psychoeducation group and of relaxation education.

Further research would be necessary, notably concerning what becomes of the participants in the group in terms of undertaking psychiatric treatment and the number of consultations with somaticists.

Acknowledgements: None.

Conflict of interest: None to declare.

References

1. Dimou PA, Bacopoulou F, Darviri C & Chrousos GP: Stress management and sexual health of young adults: a pilot randomised controlled trial. *Andrologia* 2014; 46:1022-1031.

2. Golombek U: *Progressive muscle relaxation (PMR) according to Jacobson in a department of psychiatry and psychotherapy - empirical results. Psychiatrische Praxis* 2001; 28:402-404.
3. Jacobson E: *The influence of relaxation upon the blood pressure in essential hypertension. Federation Proceedings* 1947; 6:135.
4. Kohl F: *Progressive muscle relaxation according to E. Jacobson. A modern relaxation technique. Medizinische Monatsschrift Für Pharmazeuten* 2002; 25:77-87.
5. Lehrer PM: *How to relax and how not to relax: a re-evaluation of the work of Edmund Jacobson - I. Behaviour Research And Therapy* 1982; 20:417-428.
6. Pauwels A, Janne P, Reynaert C: *De différents modèles de croyances envers la santé au vécu subjectif de contrôle vis-à-vis de la santé: une tentative d'approche intégrative. J Ther Comporet Cogn* 1999; 9:99-107.

Correspondence:

Denis Jacques, MD,
Université Catholique de Louvain, CHU Dinant-Godinne,
Psychopathology and Psychosomatic Unit, Mont-Godinne University Hospital
5530 Yvoir, Belgium
E-mail: denis.jacques@uclouvain.be