

Cognitive protocol for occupational stress management and control: a case study**Protocolo cognitivo de gerenciamento e controle do estresse ocupacional: um estudo de caso****Protocolo cognitivo para el manejo y control del estrés laboral: un estudio de caso****Received: 28/10/2019****Approved: 15/03/2020****Published: 01/08/2020****Paulo Eduardo Benzoni¹****Juliana Gomes²****Samanta Benzi Meneghelli³**

This is a case study developed in 2017 at a university clinic, which aimed to analyze a case regarding effectiveness of an individual, cognitive-based care protocol in treatment, control and management of occupational stress. The study was carried out by a 30-year-old man, married, who had stress near exhaustion. An anamnesis and evaluation interview was carried out through inventories to identify the level of stress and perception of work context. Then, a stress management protocol was organized in eight structured meetings based on cognitive therapy. The results showed an improvement in stress situation and in general perception of reality, pointing to the effectiveness of the protocol, which can be applied in focal programs to control occupational stress.

Descriptors: Stress, Psychological; Cognitive behavioral therapy; Occupational health.

Este é um estudo de caso desenvolvido em 2017 numa clínica universitária, e teve como objetivo analisar um caso quanto à eficácia de um protocolo de atendimento individual, de base cognitiva, no tratamento, controle e gerenciamento do estresse ocupacional. Participou do estudo um homem de 30 anos, casado, que apresentava estresse em quase exaustão. Foi realizada uma entrevista de anamnese e avaliação por meio de inventários para identificação do nível de estresse e percepção do contexto de trabalho. Na sequência, foi aplicado um protocolo de gerenciamento do estresse organizado em oito encontros estruturados e baseados na terapia cognitiva. Os resultados demonstraram melhora do quadro de estresse e de percepção geral da realidade, apontando para a eficácia do protocolo, passível de ser aplicado em programas focais para controle de estresse ocupacional.

Descritores: Estresse psicológico; Terapia cognitivo-comportamental; Saúde do trabalhador.

Este es un estudio de caso desarrollado en 2017 en una clínica universitaria, cuyo objetivo fue analizar un caso relativo a la eficacia de un protocolo de atención individual de base cognitiva en el tratamiento, el control y el manejo del estrés laboral. Participó en el estudio un hombre de 30 años, casado que sufría de estrés en casi agotamiento. Se realizó una entrevista para la anamnesis y la evaluación a través de inventarios para identificar el nivel de estrés y la percepción del contexto de trabajo. A continuación, se aplicó un protocolo de manejo del estrés organizado en ocho reuniones estructuradas basadas en la terapia cognitiva. Los resultados mostraron una mejora en el cuadro de estrés y en la percepción general de la realidad, apuntando a la eficacia del protocolo, que puede aplicarse en programas focales para el control del estrés laboral.

Descriptores: Estrés psicológico; Psicoterapia cognitivo-conductual; Salud laboral.

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INTRODUCTION

Stress was initially conceptualized by Hans Selye, who described it as the General Adaptation Syndrome. This syndrome consists of the neuropsychophysiological response of an organism to events that could put its physical and psychological integrity at risk, and is characterized as a biological mechanism of self-preservation¹. Manifesting in phases, stress starts from an initial, low-intensity state and can evolve to a state of deterioration that weakens the immune system, contributing to the emergence of serious diseases².

The concept of stress is presented in different perspectives and specific ways of dealing³. For this study, the cognitive perspective is used, from which stress is considered an individual response when perception of negative experiences exceeds the individual's ability to change or overcome them, leading the body to an excessive energy expenditure to deal with stressful experiences⁴. In other words, when the person's coping strategies are insufficient to deal with or solve the problem.

From the point of view of occupational stress, the theoretical model most cited internationally is the demand-control⁵. Based on the cognitive perspective of stress⁴, this model considers that the processes of production of occupational stress come from two psychosocial dimensions, namely: the psychological demand from work and the control of the task⁵. However, the individual's perception regarding stressing demand load and its control capacity is permeated by cognitive processes of interpretation, and the response to the stressor is filtered according to cognitive vulnerabilities of the individual who will process the information and evaluate the situational aspects and stimuli presented according to their cognitions. As a result of this process, it will elicit emotions as a response, and every response to the stressor is modulated by executive functions of the brain⁶.

The cognitive approach, in its different aspects, is characterized by being a model of structured learning, in which therapist and patient sign a predetermined "contract" of work, with a focus on solving specific problems, which leads to the realization of a focal, pragmatic work, aimed at providing the patient understanding and knowledge on how to control the problem brought to therapy⁷.

For this structured and pragmatic character, in the works on stress management, the most varied techniques have been used: training in coping skills, assertiveness, problem solving, time management, cognitive restructuring⁸, psychoeducation⁹ and mindfulness¹⁰.

Thus, it is considered important to understand the effectiveness of protocols used from a procedural perspective, that is, to analyze the process that is established in the patient, according to the concatenated set of activities that characterizes a cognitive protocol, so that it is possible understand the effectiveness of protocols and discuss them as to their scope and limitations. Thus, the objective of the present study is to analyze a case regarding effectiveness of an individual care protocol, based on cognition, in treatment, control and management of occupational stress.

METHOD

It is a case study that is an empirical investigation of a phenomenon in its real context and that allows an integration of data with theoretical propositions. The case in point addresses a 30-year-old man, married, with no children, who was going through an agonizing process of change in his professional life, and who overcame a high state of occupational stress by developing effective coping resources.

The patient sought the psychological care services offered by the Center for Studies on Occupational Stress of the Research Group on Mental Health in Institutional Contexts, located at Universidade Paulista (UNIP) in the city of Ribeirão Preto, in the state of São Paulo, a work carried out in 2017.

As a diagnosis of the patient's demand, an anamnesis interview was conducted, covering information related to the complaint and its relationship with the personal and occupational history. In a complementary way, the Lipp¹¹ Stress Symptoms Inventory for Adults (LSSI)¹¹ and the Work Context Assessment Scale (WCAS)¹² were used to identify the patient's perception of his universe of work.

Afterwards, eight weekly meetings of 50 minutes each were structured in the format of the occupational stress care protocol, developed by Benzoni¹³. The complete structure of the protocol used is shown in Table 1.

Table 1. Service protocol for stress management and control. Ribeirão Preto, 2017.

| Meeting | Theme | Technique used | Description of technique |
|---------|---|--|--|
| 1 | Personal and professional life story | Collage with pre-defined theme | Collage activity, in which the patient expresses, through magazine images, his perception of his past, present and professional future |
| 2 | Work, career and current situation - Values given to work | Deck of Values and Professional Attitudes | Card game in which, based on the choice of themes that he is valuing and devaluing in his professional practice, the patient is led to reflect on why he values or devalues the chosen themes |
| 3 | Moments of stress in personal and professional life and the resources used to face them | Chip Game - Stressful Situation/ Background/ Consequent | Activity in which stressful situations that were reported by the patient are described and, for each one, the patient should describe the background and consequences of the situation |
| 4 | Process evaluation 1 | Scenic box - How's life today | Box with several miniatures of animals of all types and, from the miniatures, the patient must put together a scene depicting how he perceives his current life |
| 5 | Identification of the standard personal resource for facing life | Thematic session with a triggering question: "From everything that was said, how do you perceive the way you face life?" | From the triggering question, we discuss with the patient what has been worked on so far in the care process |
| 6 | Developing new resources to cope with stress - Assertiveness | Deck of Attitudes - Development of assertiveness | Card game involving stressful situations with the superior and co-workers, for which the patient must choose a card regarding the reaction he would have in the situation |
| 7 | Resuming personal resources for coping | Rescue tree: "From roots to fruits" | Activity in which the patient is given the drawing of a tree and the patient must expose what, in his life, is in the roots, in the stem, in the leaves and in the fruits, hence it is metaphorically worked |
| 8 | Closing process the | LSSI reapplication Process resumption and evaluation session | After LSSI reapplication, the process is evaluated based on the following topics: perception of the occupational environment; demands and control; coping; psychosocial support and job expectations |

Some activities proposed in the meetings are adaptations of widely used techniques, such as: collage, thematic session and exercise with miniatures, and other techniques that consist of published games such as the Deck of Values and Professional Attitudes¹⁴ and the Deck of Attitudes¹⁵.

The data were analyzed according to the nature of each instrument used. Thus, the data from the anamnesis interview were analyzed through categories such as: demand or initial complaint, stressful events from last year, stress coping resources used, family dynamics and work environment dynamics.

LSSI¹¹ and WCAS¹² are quantitative and standardized instruments and, therefore, their analyzes were carried out according to specific instructions. Likewise, the Deck of Values and

Professional Attitudes¹⁴ and the Deck of Attitudes¹⁵ followed standard procedures for analysis and interpretation.

All sessions were transcribed in a discursive manner by the psychologist who applied the protocol, immediately after the end of each session, and all the material was analyzed from a qualitative look that sought to understand dynamics and peculiarities of the process that the patient went through.

From an ethical point of view, the patient's identity was safeguarded and the work was part of a broad project approved by the Research Ethics Committee of Universidade Paulista, where it was carried out, through CAEE 59064116.1.0000 and opinion no. 1,731. 066.

RESULTS

The participant was at a turning point in his life, when he was looking to change jobs. He was leaving his position at his brother's company and starting his own company, which constituted a breaking of ties and new challenges.

It was observed, by WCAS and interview, that the perception that he had of the context in which he was inserted was quite negative, which seemed to be fueled by his cognitions of victimizing, considering that the blame for his life problems was attributed to others, in addition to the lack of self-confidence in professional skills.

He was tired and confused in the interview, a factor that is related to the degree of stress arising from work. Particularly his work, being in a brother's company, carried bonds with his entire family, generating an even greater emotional strain to deal with professional relationships. This set of situations seems to have led to a situation of near-exhaustion stress, as found by LSSI.

As a prognosis, it was realized that points such as: support from the wife, perspective of starting their own business, need to show family that he is capable, seeking psychological help, resignation, leaving the work relationship with family, could help in the process of cognitive change leading to an improvement in stress. The results of interventions performed during the eight proposed meetings, following the standard protocol model are described in Table 2.

The patient showed considerable improvement in his stress condition, as determined by the LSSI, reduced from near-exhaustion at the beginning of the work to alert, indicating a significant decrease in symptoms of stress. The new behaviors when facing stressors proved to be more effective in coping with them because, acting in a more assertive manner, he began to solve personal and professional problems that he put aside and that ended up accumulated.

This demonstrated that the patient was able to face his life history, as well as the conflicts in his work environment in a productive and adaptive way, which could be confirmed by attitudes taken towards his family, at work in brother's company and progress of opening his own company. There was a change in dysfunctional thoughts and beliefs, as well as the development of coping strategies through assertive behaviors, which led to a significant reduction in the stress situation, indicated by the LSSI.

Table 2. Results of the Occupational Stress Management Program. Ribeirão Preto, 2017.

| Meeting | Observed in the case |
|---------|---|
| 1 | He reflected on his immaturity, how much he learned from suffering, exhaustion, fear and hatred due to his employment relationship with his brother and prospects for a better future. |
| 2 | He reflected on the necessary strategies for the exercise of his work, on the fact that he was tired with demands of work and unmotivated with his current job. He had disorganized thoughts about his relationship with his brother and a feeling of injustice. |
| 3 | He discussed his thoughts on sorrow, hatred, anxiety, victimization and feelings of injustice. |
| 4 | He showed emotional exhaustion when thinking about work, fear of the changes he was planning, guilt for leaving his brother and mourning leaving the company. |
| 5 | He demonstrated feeling comfortable with no prospect of change, afraid of the actions he needed to take, said he was unable to continue in his work environment due to the lack of motivation he feels in the exercise of work. |
| 6 | He faced his own non-assertive behaviors, reflecting on his participation in stress-generating conflicts that exist in his work environment. He realized the need to change his behavior. |
| 7 | It was observed that, when retrieving facts about his life, the participant reflected on behaviors he was trying to change, reporting that change is not easy. When faced with the question of how he sees himself as a person, he was scared and said that he felt confused, because he had never thought about it. Reflecting on the rescue of himself, he realized how much he had evolved as a person in the face of difficulties. |
| 8 | The stress profile, calculated by LSSI, reduced from near-exhaustion at the beginning of the work to alert, indicating a significant decrease in symptoms of stress. His speech showed an evident improvement in his condition, managing to solve his problems in the work environment, presenting his point of view and seeking strategies that would provide him with more benefits and quality of life. It was observed the adoption of more assertive and efficient behaviors to deal with stressors. |

DISCUSSION

Through the anamnesis interview, it was possible to observe how much stress was leading to loss of quality of life and causing significant negative consequences in life that, in addition to impairment in social and professional life, the patient described health problems, such as: stomach problems, arterial hypertension, weight gain and tiredness, which goes against physical reflexes of excessive stress².

Based on the theoretical cognitive model of stress⁴, it was observed that the internal, cognitive and external factors, related to demand for work and ability to control this demand⁵, were strongly contributing to generation of stress, once the patient's perception about them and their coping skills were insufficient⁴. It was noted that their ability to cope with stressors was being inadequately modulated, leading to the execution of non-adaptive coping strategies⁶.

The evaluation through WCAS found that the participant had a critical perception of this context, with regard to work conditions, organization of work and socio-professional relationships, which was resulting in a "limit situation" that enhances conflict at work and the risk of physical and psychological illness¹². This perception of the work environment constituted excessive demand on the individual who did not feel capable of controlling it, bringing the demand-control model for occupational stress⁵ closer to the cognitive model of stress⁴.

Having a structured character, cognitive therapy starts from a conceptualization of the case to establish a work strategy⁷ and, based on this model, meetings were developed that sought a cognitive restructuring of the patient, while stimulating adoption of more coping strategies effective.

The care protocol, through provocative and reflective activities such as collage with a predefined theme in the first meeting and scenic box in the fourth meeting, allowed the patient to come into contact with his own cognitions and behaviors. Subsequently, the protocol gradually merged activities that caused dissonances in cognitions, with actions that led to cognitive reorganization through psychoeducation^{8,9}.

The intervention process worked on the identification and development of new resources for coping with stress, with combination of effective methods for stress management, such as: training in coping and assertiveness skills⁸ that was directly worked with using the Deck of Attitudes in the sixth meeting¹⁵ and problem solving⁸, used in the third meeting with the Chips Game - stressful/antecedent/consequent situation.

Cognitive restructuring, also pointed out as a resource in stress management work⁸, was worked on throughout the process, using techniques that provoked reflection on cognitions: Deck of Values and Professional Attitudes¹⁴ used in the second meeting. In particular, this technique is based on provoking dissonances in work-related cognitions to later generate the development of new, more adaptive cognitions¹⁴.

The techniques used in meetings five, seven and eight tried to lead the patient to organize his cognitions, and allowed the development of new ways of coping⁴ and generation of mediators for a more effective performance, activating executive areas of the brain in relation to stressors⁶.

CONCLUSION

The patient showed great adherence to the project, indulging in activities and adequately followed given instructions, which allowed the protocol to be evaluated in its essential nature previously programmed.

Based on these characteristics of the case, the protocol used proved to be effective in cognitive training for stress management and control, since the patient was able to cope with his life history, as well as the conflicts in his work environment. In addition to this, the pre-test and post-test measures of the stress level, which, as demonstrated by the LSSI, reduced from the near-exhaustion phase to alert, with a significant drop in the quantity and intensity of symptoms.

When considering his performance in the work context, it was possible that the patient had a better understanding and reflection of himself, which generated a cognitive restructuring and development of coping strategies and resolution of the most effective and adaptive problems.

Despite the range of stress management programs with efficacies assessed quantitatively, this study proposed a different line that sought to assess dynamics of the process proposed in the protocol. In view of the psychological diversity already known, it is proposed that other studies, focused on multiple cases, be carried out to expand knowledge on the spot, in processes involved in conducting a protocol for stress management and control.

As it is a case study, the limitation is the adoption as the only care protocol, so it is important that research is developed using this care protocol and checking if there is a recurrence of this functioning in other workers.

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CONTRIBUTIONS

Paulo Eduardo Benzoni worked on the conception, outlining, analysis, writing and revision. **Juliana Gomes** participated in collection and analysis of data, and writing. **Samanta Benzi Meneghelli** contributed with writing and revision.

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