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## **Abstract**

Giving less importance to pain and focusing on achieving objectives in accordance with values can help people to live their lives in spite of the pain. We present a rationale for this orientation and several techniques that can help people achieve this. Specifically, we present the importance of starting the intervention by educating people about pain and setting objectives in line with each person's personal values. After that, we present some techniques that can help people deal with triggers and barriers that can make it difficult to stay on track when it comes to giving less importance to pain and more to achieving objectives.

**Keywords:** Giving less importance to pain; Setting objectives; Coping with pain and related triggers; Psychosocial perspective.

## **Executive summary**

- **Giving less importance to pain and focusing on living.**

Recurrent pain cannot be eliminated completely. For this reason, it is not worth focusing on eliminating pain but rather on living life whether with or without pain.

- **Mixing techniques from the traditional cognitive-behavioral model and the so-called third wave cognitive behavioral therapy can be useful.**

Educating people on the importance of not spending their lives trying to eliminate pain (when it is recurrent) is important. However, teaching them some coping strategies can help them reduce pain and deal with the barriers and pitfalls that they may face when trying to achieve their objectives. For this reason, we propose teaching people to pace their activities, learn relaxation and distraction techniques and change maladaptive thoughts.

- **We live in a society, so the social context should be included**

People who are significant to the person in pain can play a prominent role in modulating pain. For this reason, they must be included in any pain management program.

## Introduction

Chronic pain is one of the principal problems in public health worldwide (1–4) due to the economic costs it generates, the way in which it affects people's quality of life and the significant repercussions it has on people's work, family and personal lives (5,6). The biopsychosocial model is the most effective framework for understanding and managing pain effectively (7). We aimed to use this framework in this work to present our experience and perspective about how to help people with pain. Our proposal is to focus our efforts on helping people learn how to give less importance to pain and more to achieving their objectives. In this regard, we also present a summary of some strategies that can be useful for managing barriers to this perspective, triggers and pain.

We would like to clarify that this proposal does not contain any novel techniques: all techniques are underpinned by previous well-established literature. What it might be more innovative is the way we propose to use a range of techniques from different psychological theories as explained below. It is important also to highlight that this article does not claim to be a complete guide about "what should be done for people in pain". Rather, it aims to present an introduction to the techniques and some ideas that can inspire interested readers on how to apply them and to engage them in further reading on the subject. So, this work can be useful for readers looking for an introduction of psychosocial techniques for the management of pain and to hear about a proposal on how they can be combined and used in clinical practice.

A key starting point that inspired this paper was provided by the results obtained with DARWeb intervention. In 2012 we started designing this online psychosocial intervention for children with recurrent abdominal pain and their parents. The cognitive-behavioral model of pain guided the design of our intervention because most of the research on pain management from a psychosocial point of view has been based on this perspective (8–10). To explain it very briefly, this perspective proposes that pain management focus on educating people about pain and teaching them coping strategies for dealing with pain, reducing psychological distress and improving functioning. Following this paradigm, we teach families to identify triggers for pain in their particular situations and strategies that can help them to deal with them (relaxation, diverting attention and dealing with maladaptive thoughts). We also strive to teach them about effective communication strategies (see 11,12 for a more detailed description of our intervention). In addition, DARWeb included content that can be related more with the philosophy under the so-called third wave of cognitive behavioral therapy, which, according to the literature available (13–15), has also proven to be effective. In short (and to simplify), this perspective focuses on helping people recognize and be aware of pain while focusing their efforts on continuing their lives in accordance with their values despite the pain. Accordingly, we included psychoeducational content to try to make families understand that (1) abdominal pain is not dangerous, and does not attempt seriously their lives, (2) the importance of carrying

on with their lives and (3) how to set objectives and not only focus on pain because it is not always possible to make pain disappear, but they should try to live their lives as they want whether they are in pain or not.

So, we anticipated and obtained objective quantitative results, such as a decrease in the severity of abdominal pain and an increase in the quality of life. Moreover, the families participating in the studies testing our program consistently highlighted issues related to “Giving less importance to pain” in qualitative interviews. These included comments related to understanding and learning not to worry about pain and carrying on with activities (11,12). It was a very positive outcome because the families explained to us that they were living in a better way because they understood the pain, they were also calmer and were trying to carry on with their activities despite the pain. As for example, a mother told us *“The truth is that it also helped us a lot (referring to DARWeb), because, basically for me... it allows me to stop worrying as much, I am not suffering as a mother, I am more relaxed... because I said to myself: she has a stomach ache, it doesn’t matter, it will go away.”* Consequently, according to our experience, people in pain can benefit from a combination of the classical approaches (and techniques) based on the CBT model and the third wave of CBT. This last one, would probably be more effective in helping people to understand that they have to give less importance to pain, but is it enough? From our point of view, after understanding this, people need to learn how to deal with triggers and “enemies” of the idea of giving less importance to pain and getting on with their lives, and the techniques derived directly from CBT can be very useful in this respect.

For example, in the case of a person with chronic back pain, we should help him/her to learn to live with the pain and focus on achieving his/her objectives. Furthermore, we have to explain to him/her that pain is not harmful in his/her situation. As we are trained professionals, he/she would probably understand this and would try to relativize the pain and concentrate on getting on with life. However, what would happen when he or she experiences stress at work? This would probably increase his/her back pain, so could he/she benefit from learning relaxation techniques? What would happen when the person has maladaptive thoughts such as, “Will this pain prevent me from doing any kind of exercise?” Could he/she benefit from learning how to deal with these stressful thoughts? From a strict third wave cognitive-behavioral perspective, the response to these questions would be that it is enough to recognize the presence of these emotions and negative thoughts, and live them consciously. However, we think that learning coping strategies, such as relaxation or cognitive restructuring, can help the person in our example to cope with the pitfalls and triggers that will inevitably appear. Furthermore, these coping strategies could be useful in daily life so learning them will always be beneficial.

In this respect, we present below a series of techniques/ideas that can help people in pain to give less importance to the pain and focus on their lives, in an attempt to increase their quality of life and well-being.

**The beginning: understanding that recurrent/chronic pain is not dangerous.**

Firstly, we must help people understand what pain is and reassure them that it will not affect their safety (when pain is recurrent or chronic in people with a benign condition), thereby allaying their fears and worries. Furthermore, at the outset, apart from conveying content and teaching skills, it is also important to establish a good relationship with the person in pain. As professionals, we have to be able to put ourselves in the person's situation (empathy), and show a real interest in the person.

Psychoeducation should provide an explanation about pain perception and differentiate between acute and chronic/recurrent pain. Different metaphors can be used to illustrate these contents. For example, we ask adults to imagine that pain is like the "check engine" alarm in their car (16). When the warning light comes on, it indicates that there is something happening in the car that requires attention (like acute pain). When it happens, we go to the garage to seek a solution for our problem. Usually, they discover what the problem is using diagnosis techniques and different tests, and then repair the car. The situation is similar when we suffer from acute pain (usually, we go to our physician's office and he/she seeks a solution). However, sometimes the "check engine" alarm system is faulty, and the warning light comes on without there being any problem with the car. In this situation, the people at the garage reassure us that there is nothing wrong with the car, but, unfortunately, they do not know how to repair the "check engine" alarm system because "there is nothing wrong with the car". So, we will have to continue to drive the car in the knowledge that the warning light does not actually indicate that something is wrong. This is what happens with chronic or recurrent pain.

When explaining prevalence among the population and the principal characteristics of a pain problem to a person, we must take into account the person's specific situation. All the conversations we have with persons with are attending need to be based on the tenets of the biopsychosocial model of pain and we should try to demystify the myths associated with pain. In this regard, some people with pain have a long history of visiting different professionals about their problem, and come with the idea of pain "is in my mind". This can be a consequence of the dualistic model of pain that as professionals sometimes we tend to use (17). We have to be convinced of the principles of the biopsychosocial model, which is the most valid in the literature; and base our words, behavior and interventions consistently on this model.

Finally, we should introduce the concept of triggers (again from the biopsychosocial model). We should explain that there are different pain triggers that vary among different people

(despite having similar pain problems), and do not always have the same effect, and usually the most appropriate approach is not to try to avoid them. In summary, from our perspective, we should begin our intervention by addressing the “key points” presented in Table 1.

**Table 1. Key points to transmit to people with chronic pain**

- Recurrent pain is not always indicative of something wrong or dangerous.
- Pain is a complex and subjective, yet real, phenomenon.
- Pain triggers can come in different forms and can be different for different people.
- Certain strategies exist to help deal with triggers and pain.
- Pain cannot always be reduced or eliminated.
- Having an active life, based on values and objectives, is possible despite suffering from pain.

**The next step: identifying values and setting objectives**

After a common framework and understanding is created, we can work on the importance of defining objectives in relation to personal values. In this process, it is crucial to reinforce the idea that eliminating pain is not always an achievable objective; therefore it is more appropriate to define objectives related to people enjoying their lives (in accordance with their objectives and values) whether with or without pain. A seminal work on this issue and in line with the third wave of cognitive behavioral therapies is the one by Lance McCracken and his book “Contextual cognitive behavioral therapy for chronic pain” (15). We strongly recommend reading this work to learn more about this perspective.

Values are ways of living, and refer to how we would like to be and live. They can refer to different domains (e.g., personal life, work or family) which are relevant to our lives. Objectives, on the other hand, are specific goals that have been set based on these values and which we can achieve. There are multiple exercises to help us identify both values and objectives. One example is asking the person to imagine which message he/she would like to see on his/her epitaph. For example, something like, “He/she was an excellent mother/father, highly committed to his/her friends and an active person”. Another exercise to identify values is to ask the person to write a letter (or e-mail) explaining to a friend how he/she would like to live his/her life. Some cues should be offered to the person to help think about the different domains that are relevant to his/her life.

Using these exercises (or any other of the existing exercises), the values can be written down in a table in which we can also ask the person to think and write down his/her objectives. It is important to explain and do exercises with the person to help him/her understand that the objectives must be adequately specified in order to be valid. It can be useful to speak about the SMART objectives, whereby an objective has to be Specific, Measurable, Attainable, Realistic and Time Bound (18).

Both for identifying values and objectives, we think that written tasks and exercises (such as the one about writing a letter to a friend) are especially useful. This is because writing allows us to organize complex ideas and emotional experiences (19).

### **Pacing**

Once the objectives have been established, we consider it important to introduce people to activity pacing and help them in this respect. This is a technique commonly used in psychosocial programs for pain problems although the definition is not always clear in the literature available (20–22). A good attempt was made by Jamieson-Lega et al.(23) to conceptualize pacing, and they proposed the following definition: *“Pacing is an active self-management strategy whereby individuals learn to balance time spent on activity and rest for the purpose of achieving increased function and participation in meaningful activities”*

Pacing is the opposite of carrying out activity according to the pain experience; that way of functioning can worsen pain because people who base their activity on pain levels will tend to be more active and overdo activity on their “pain-free” or “good” days. However, because of the over-activity, the person will probably have more pain on the days after the “pain-free day” (see 21 for case examples). This model of activity can also contribute to creating a circle of fear avoidance (24). People in pain may avoid activities because of the fear related to the potential harm or pain these may cause. Establishing a level of activity (that can be gradually increased in accordance with the objectives set) can help in confronting these fears and reducing related disability.

To help people understand pacing, it can be useful to examine their activity patterns using graphs which illustrate the relationship between activity and pain. Typically, for people who carry out activity dependent on their pain, their graphs will show days with peaks of activity (pain-free days) followed by several days with very low levels of activity (pain days). Conversely, people who pace their activities to achieve their goals will have a lineal graph in which the line of activity will increase slowly but steadily. After discussing the advantages of the pacing model, we identified some points that it is useful to convey to people (16), as outlined in Table 2 below.

### **Table 2. Points that can help people pace their activities**



- Prioritize activities related with personal objectives.
- Avoid over-exertion when doing activities, and combine activity with frequent rest.
- Combine activities demanding high physical activity with others requiring low physical activity when planning daily activities.
- Distribute complex or highly physically-demanding activities on different days.
- Apply coping strategies for dealing with difficulties that may arise during difficult activities.
- Reinforce yourself when you achieve the planned activity levels.

### **Relaxation, one of the most commonly used coping strategies.**

Once people really understand what their main values are and that the most important thing is to live in accordance with them (establishing adequate activity levels), with or without pain, we consider it useful to teach them skills which were originally conceived according to the traditional cognitive behavioral therapy (CBT) perspective. These are skills, which aside from assisting people in coping with pain and its triggers, can help people enjoy healthy lives and deal with the small, everyday difficulties and stresses that all of us have.

One clear skill in this respect is relaxation. It is quite appropriate to start with this skill since it is easily understood and tends to be enjoyed by most people. Relaxation is probably the coping strategy which is most often taught to people with chronic pain (25). It can help people by producing a muscular response that is incompatible with tension and therefore reduces pain. People appreciate it since it is applicable to other situations in life apart from pain. There are many relaxation methods, and it is outside the scope of this paper to make a review of them. However, a relaxation technique that we found useful, both for pain and daily living, and which is amply supported in the literature, is progressive muscular relaxation training by Jacobson (26). There are several variants that can be taught to people with pain, depending on the muscular groups covered. In all of them, the procedure consists of helping the person to feel the sensation of tension and absence of tension of the different muscles, and therefore learning the feeling of relaxation.

Before proposing relaxation training to people in pain, it is important to explore if they already know or have previously learnt any relaxation techniques. In fact, for all of our interventions, it is useful to take into account people's previous knowledge and experiences. A lot of us have learnt relaxation techniques at some point in life, and if it is possible (and the person has used a valid technique), it will be easier for the person to recover the technique he/she has used previously.

### **Distraction, another useful coping strategy.**

Although people with pain can understand that they have to live with it and give it less importance, they will still experience pain, and distraction can be used to divert their attention. Distraction has proven to be a good technique for reducing pain intensity. In this respect, McCaul and Malot (27) presented four principles related to the distraction technique that are very interesting to understand how it works. We have presented them here but we recommend that interested readers review the original work. The principles are (using the words of these authors): *Principle 1- Subjects who are asked to perform an attentionally demanding task will exhibit less distress to a painful stimulus than subjects provided with either no instructions or placebo instructions; Principle 2- Distraction tasks that involve greater use of attentional capacity will be more powerful reducers of pain-related distress; Principle 3- Distraction will be more effective for reducing distress with mild as opposed to intense pain stimuli; Principle 4- Compared with redefinitional strategies, distraction will be more effective at low levels of stimulus intensity; the reverse will hold for stimuli of strong intensity.*

There are many techniques that can be useful for people in pain, including performing a repetitive cognitive task (such as reverse counting), visualizing wonderful images or scenes and playing electronic games. Recently, more modern techniques have been used based on virtual reality; the rationale behind this is that if people engage in the virtual world they will perceive less pain because their attention has been diverted from it (see example 24). Although this innovative technique has generated a lot of interest and shows a lot of potential, it has yet to be fully applied in real life.

As professionals, we also have the responsibility of not directing people's attention to pain more than is necessary. Accordingly, while treating them we should not be constantly focusing on the pain, asking how it hurts or speaking excessively.

### **Changing maladaptive thoughts.**

The way we think significantly affects how we feel and how we act. In situations where we experience pain, negative or catastrophic thoughts may appear (29), that can increase disability and worsen quality of life (30,31).

We all experience automatic negative thoughts in our daily lives because we cannot choose not to have them. They can be very difficult to switch off, precisely, because they are automatic and involuntary, and often go unnoticed (32). Within CBT, cognitive restructuring is a technique that allows a better adaptation to pain (33). It refers to a therapeutic approach in which individuals are taught how to identify faulty thoughts, question the believability and usefulness of these thoughts by looking at evidence for and against the thought, and replace them with more functional ones. This technique reduces the automatic appearance of negative or catastrophic thoughts and promotes greater emotional control for coping with pain.

There are different ways of teaching this technique to people in pain. One that we have found useful (and it is commonly used in clinical practice) is to ask people to fill in a table with the following columns: situation, negative thought, behavior and alternatives to the thought. A resource such as this can help people to understand the effects of negative thoughts in their daily lives as well as to think how the situation could have been different if they had thought in a more positive way. At the end of the day, or when they have some calm time, they can use challenging questions (as professionals, we can provide some examples) to assess the veracity, realism and transcendence of the thoughts they have noted down. As a result of this process, an alternative, more positive, thought can be formulated.

As Beck (34) suggested, one of the advantages of this technique is that by identifying, evaluating and modifying these faulty thoughts, “individuals can learn to distance themselves from them and see them as psychological events”.

### **We are social: achieving the support of others**

The literature is full of relevant works about the role of family in pain (see for example, (35)) because the support from family/friends is fundamental. If they do not understand the perspective which we are using with the person, they could unintentionally act in a way that goes against the principles of “giving less importance to pain” and focusing on objectives. For this reason, as a first step, relatives should understand the philosophy described above about living in accordance with personal values. After that, we need to explain to them how they can affect the pain of others. Specifically, they can act as models and modelers of pain for others. For example, the wife of a man with chronic back pain can affect his pain through two mechanisms. On the one hand, she can act as a model for her husband, who can learn by seeing what she does when she is in pain. If she stops their social activities and stays at home when she is in pain, receiving the attention of their children, her husband may observe this behavior (and consequences); and, unintentionally, when he is in pain he might also avoid social activities and stay at home. This mechanism is what Bandura described as modeling learning (36). On the other hand, but connected to this, the wife in our example can also act as a modeler. For example, with the best intentions towards her husband, she may take responsibility for his duties. She may start doing everything that he usually did at home. This can be helpful when there is a problem with limited duration (for example, when someone has a cold) but if it occurs repeatedly when there is a chronic or recurrent problem, this behavior may lead the person to focus on the pain and display pain behaviors and limit his/her activity. Fordyce’s seminal work provides an interesting insight for anyone wishing to learn more about pain behaviors. An interesting piece of work about this and the cognitive-behavioral model of pain is the classical work by Turk, Meichenbaum, and Genest (37).

It is also useful to work with the people in pain (and their relatives) on different communicative styles and give them some advice about how to communicate their needs assertively.

## **CONCLUSIONS**

In this brief work, we have proposed that our interventions should concentrate on helping people with pain understand that they should give less importance to pain and focus on living their lives. From the outside, as a “pain-free person”, this rationale seems easy to understand. However, a change of perspective such as this requires a substantial effort from the person in pain and the people around them. This is because it is quite likely that he/she has a long history of visiting different professionals and therapeutic options for pain, and that these have not been fruitful. This generates feelings such as anger, frustration, feelings of not being understood and distrust towards professionals. So, we will have to present very convincing arguments to support our proposal, from a position based on real respect and empathy for the individual in front of us. All of our arguments and interventions should be based on the best knowledge available, but without forgetting the individual needs of each person.

If we are able to introduce this perspective to the person, we will also have to help him/her learn some strategies for dealing with difficulties. This is because it is not enough just to understand the perspective, as the person will also have to deal with enemies of this perspective. We are referring, for example, to intense pain episodes, negative thoughts or highly stressful situations. We have therefore proposed the teaching of some specific skills (such as relaxation, distraction or dealing with negative thinking), which are useful for people dealing with pain but also for living in general.

## **FUTURE PERSPECTIVE**

Pain management from a biopsychosocial perspective has been recognized for a long time ago. The cognitive-behavioral model of pain has showed to be effective in multiple studies in this field. However, new advances in the psychological management of pain have been started to be incorporated and will be, probably more frequently used in the next years. As well as there will be an increase of treatments delivered using Information and Communication Technologies. In any case, from our point of view, to advance efficiently, it is essential to grow not forgetting “classical” techniques that have showed to be effective and testing any new development.

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