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### Psychological Consultation in Rehabilitation

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#### ABSTRACT

Patients' emotional well-being highly affects the outcomes of rehabilitation. Psychological interventions enhance the rehabilitation process. We describe a normal rehabilitation curve in which injured patients experience a cycle of emotional highs and lows. We also suggest a four-step consulting strategy to address these emotional changes during the rehabilitation process: (1) In which stage of change is the patient? (2) Does the clinician know the patient's personality? (3) What are the goals of the patients and the clinicians? and (4) Does the patient adhere and stay motivated? Clinicians should explain the rehabilitation curve and use the four step strategy, so that patients stay motivated with positive emotional feelings.

#### INTRODUCTION

Most clinicians are aware that an injured patient achieving his/her rehabilitation goals is as much an issue of psychological management as it is physical recovery. Injured patients experience various emotional challenges that affect the outcomes of rehabilitation.<sup>1</sup> Since emotion highly affects physical recovery in rehabilitation, the management of a patient's emotions is a key factor in the rehabilitation process. Emotion is defined as a reaction to a stimulus event.<sup>2</sup> Since emotional feelings of injured patients constantly change, clinicians may assist patients to change their negative feelings into positive ones.<sup>3</sup> Psychological interventions such as goal setting and adjusting, education, consultations, and social and environmental support enhance the rehabilitation process and promote positive outcomes. This paper will explain the rehabilitation curve and suggest a four-step consulting strategy to promote positive emotional changes during the rehabilitation process.

#### NORMAL REHABILITATION CURVE

On the day of injury, the patient may experience negative emotional feelings as a result of his/her injury. The patient's emotions may worsen in the following days because he/she may not want to accept the injury and the impairments associated with it. During this time, patients may also want to know which specific body structures have been injured, how severe the injury is, and what they can do to take care of the injury. For these reasons, patients typically start rehabilitation with negative emotions. Soon after the initial treatments (e.g. cryotherapy with electrotherapy), patients may feel better because the treatments have reduced symptoms such as pain and swelling.

Patients experience emotional highs and lows and may repeat this cycle during the rehabilitation process (Figure 1). Near the end of rehabilitation, the curve becomes flatter and more stable. Factors such as history of previous injury or certain personality traits could alter the usual rehabilitation curve. Possible reasons for emotional alterations could be from within and/or outside of rehabilitation. For example, social concerns related to family and business issues may decrease patients' emotional well-being. Pain or soreness from aggressive therapeutic exercises may increase negative feelings.

Are patients aware of these emotional alterations associated with normal rehabilitation curve? If not, when should clinicians address these issues? Clinicians first show a blank rehabilitation graph with a horizontal line and a vertical line, representing time and emotional feeling/physical condition, respectively. Afterwards, the clinician will ask the patient to draw a line, showing the anticipated path of the rehabilitation process, starting at the beginning of the rehabilitation (lower left corner, Figure 1). Almost invariably the patient would draw a straight line (See a dotted line in Figure 1). Although this error is very common, we believe this error should lead to an important discussion regarding the patient's perception of the rehabilitation process. A straight line shows that the patient's progress is linear and thus each day will be better than the last.

In Figure 1, the second valley is higher than the previous peak (injury day). As the rehabilitation process progresses, the patient may experience the third valley soon after the second peak. This third valley is also higher than the second peak. Since the valleys do not drop down below the previous peak, patients think that they linearly progress. This is probably why the patient would draw a straight line and say "It has been always going up." From this information, clinicians should make sure that the downs are not too low and do not last too long. Clinicians may educate and explain to the patients that this curve is normal during the rehabilitation process and it is common for most individuals to follow the ups and downs of this path. It can be assumed that the valleys longer than two or three days would decrease motivation and adherence. Having a discussion of the normal curve would help patients stay motivated and advance to peaks. The first day of rehabilitation is an appropriate time to inform patients that it is common to experience these highs and lows. This discussion will help patients understand why they feel better at times and worse at other times.

**Figure 1. Normal Rehabilitation Curve**

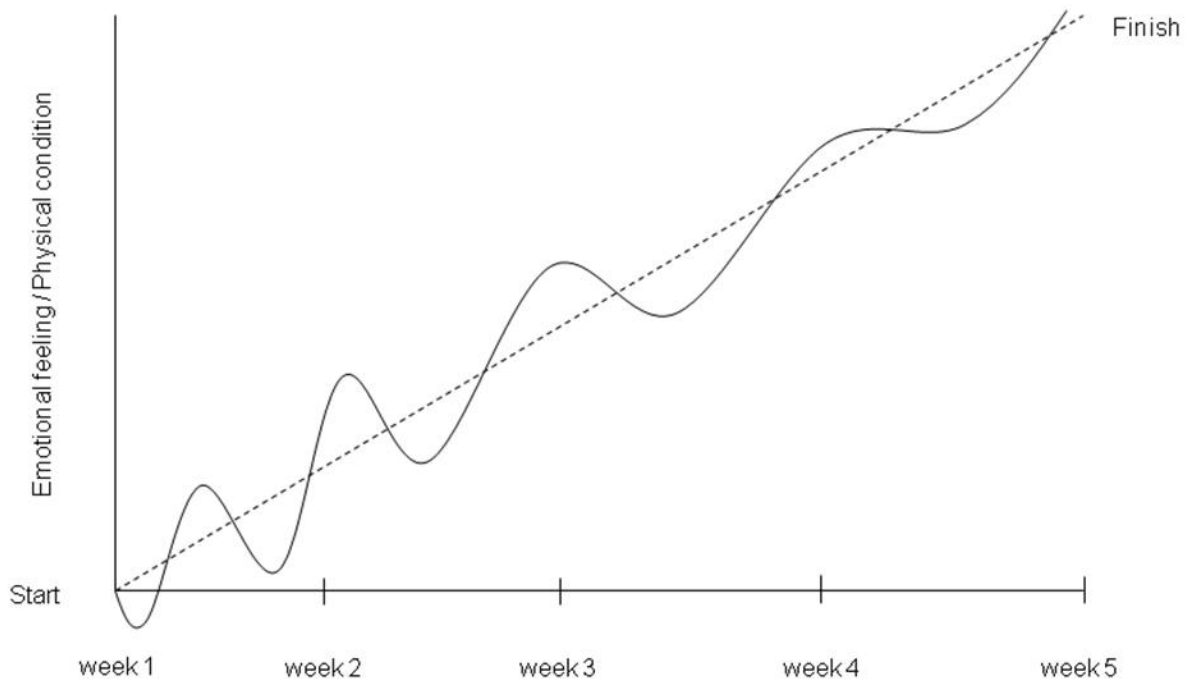
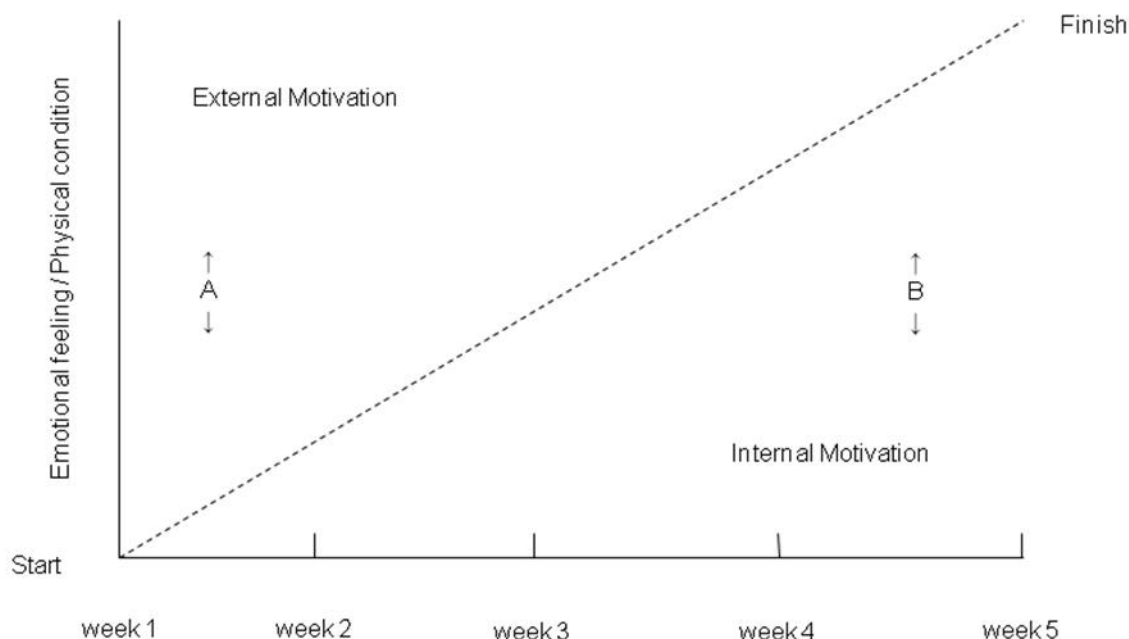


Figure 2 shows what percentage of the patients' internal and external motivations make up their behavior as the rehabilitation process progresses. Patients' stages of change (precontemplation, contemplation, preparation, action, and maintenance) highly affect their motivations and behaviors.<sup>4,5</sup> It is assumed that patients in the early rehabilitation phase (A: week 1 or 2, as seen in Figure 2) are in the precontemplation or contemplation stage. A patient in precontemplation stage will heavily rely on the clinician's guidance and education. In this case, a higher percentage of external motivation is required by the patient. As rehabilitation progresses, patients move towards the "action" and "maintenance" stages (B: week 4 or 5 as seen in Figure 2). During these phases, patients understand why and how they receive therapeutic modalities, perform therapeutic exercises, and what potential outcomes to expect from these interventions. Therefore, during this time, internal motivation is critical in the rehabilitation process. Patients' previous history of injury and rehabilitation will alter the normal rehabilitation pattern.

Figure 2. Internal and External Motivation



Internal motivation comes from within patients and is explained by how much effort they put into participation and how consistently they participate in the activity.<sup>6</sup> With self-determination, internally motivated patients actively participate in their rehabilitation program. External motivation, on the other hand, comes from outside of the individual in the form of external rewards or avoiding punishment.<sup>7</sup> Although internal motivation is a key factor to attain optimal sports performance, both internal and external motivation are equally important to achieve successful rehabilitation outcomes.<sup>6</sup> After mutual goal setting, patients actively participating in a rehabilitation program who are guided and supported by the clinician would be an ideal rehabilitation model.

#### FOUR STEPS OF CONSULTING STRATEGIES

We propose four steps to promote patients' psychological well-being and help them adhere and stay motivated in their rehabilitation programs. Education of patients, while not specifically outlined in the steps, should be integrated throughout the entire rehabilitation process.

##### Step I: In which stage of change is the patient?

Prochaska and Norcross developed a trans-theoretical model of behaviour change which proposed that behaviour change occurs in five distinct stages.<sup>5</sup> The five stages include: precontemplation, contemplation, preparation, action, and maintenance.

Individuals at the precontemplation stage have no intention of changing their behavior because they do not think that they have a problem.<sup>8</sup> In the contemplation stage, individuals are aware that they have a problem, but they do not make a commitment to take action.<sup>5</sup> It can be assumed that most injured patients seen in the clinics are in the contemplation phase. During the first two stages, clinicians should actively listen to patients and help them explore their own concerns about their problems. Active listening is a patient-centred communication, including clear understanding, paraphrasing, reflection, and summarising. Through this conversation process, the patients have the opportunities to talk and explain their emotional status.<sup>9</sup> Obtaining more information from patients would result in providing more effective psychological approach to rehabilitation. In addition, these communication skills will help patients cogitate on their concerns and move on to the next stage (preparation or action).

Preparation is the stage when individuals find out what options are available and effective for them. They may commit to action only when they believe their efforts to change will be effective. In this stage, clinicians should educate the patients and explain why the rehabilitation program is important.

Action refers to the stage when individuals actively change their behavior. It is important to note that clinicians, almost without exception, begin the rehabilitation process assuming the patient is in action phase. Although the patient seeks treatment, which

seems to imply action, they may actually be in one of the earlier phases regarding the injury and recovery process (e.g. understanding the effect of the injury on their life or examining potential treatment options). The clinician must understand this discord and allow this to shape initial conversations with the patient. For example, the clinician may wish to spend more time discussing the injury with the patient and looking for signs that the patient is progressing to the preparation or action phases. Failure to do this may lead to patient frustration, or feelings that the clinician “does not understand.”

Maintenance is a critically important stage during which the patients progress with their actions. In this stage, good communication skills are important factors to help them stay confident and motivated in their actions. Clinicians should also teach them how to prevent relapses as well as develop coping resources.<sup>1</sup> Our advice in this stage is to slow down and make sure that the clinician understands the stage that the patient is in and develops an appropriate strategy. It is also critical to remember that most patients experience grief, and that although each patient may react to loss (e.g. loss of function) differently, grief and loss may affect the transitions through the stages of change.

### **Step II: Does the clinician know the patient's personality?**

Individual personality contributes to the variance in patients' psychological responses to injury.<sup>7</sup> Some patients who have an extrinsic locus of control believe their main source of injury is from an external force over which they have no control, such as chance or luck. Other patients who have an intrinsic locus of control believe that events are controlled by their own efforts. The clinicians must make a conscious effort to foster the transition from an extrinsic locus to an intrinsic locus of control.

Introverted and extroverted personalities need to be accounted for as well. The extroverted person will typically be somewhat easier to approach and communicate with than the introverted person. Extroverts gain energy from others and their surroundings while introverts gain energy from their own thoughts, experiences, and interests.<sup>10</sup> Our advice is for the clinician to know the patient, professionally, and determine how the clinician can intentionally shape the transition from extrinsic to intrinsic in order to increase the patient's perception of control, thereby increasing the likelihood of continued success post discharge.

Gender differences regarding managing stress (as when there is an injury) should also be considered. Females typically have or express higher anxiety and frustration than males.<sup>11</sup> Females use less coping resources to control anxiety and cope with stress in more emotional ways than males.<sup>12</sup> Therefore, female patients may need more psychological intervention at the beginning and throughout the whole rehabilitation process. We recommend that clinicians should be aware of these differences but also avoid total gender bias because of individuality.

### **Step III: What are the patient's goals and the clinician's goals?**

Goal setting has positive effects on both the rehabilitation process and outcomes by allowing patients to actively participate in the process. Traditionally, the SMART goal setting principle (specific, measurable, attainable, realistic, and timely) has been introduced to aid the clinician in goal setting.<sup>13</sup> We have added two more elements to include patient components. The acronym that we use is IM SMART which adds “individual” and “mutual” to the existing framework. The placement of IM before SMART was intentional, not just because it's easy to remember, but to allow the clinician to view goal setting from a patient-centered approach. Our recommendations are to set goals with a patient-centered philosophy, reevaluate often, and celebrate accomplishments regularly.

Oftentimes, clinicians assume that the patients' goals would be to return to normal function or competition. However, the patient's actual goals may be sleeping normally, throwing a ball without pain, or performing normal activities of daily living. After identifying the patient's goals and expectations, clinicians should integrate the clinical goals with the patient's goals, considering both the short-term and long-term outcomes. This is important to the process because ultimately, the patient is going to be most interested in the goals that they envision or set themselves.<sup>14</sup> Any gap between the goal and the patient's psychological state highly affects the patient's motivation.<sup>15</sup>

### **Step IV: Does the patient adhere and stay motivated?**

After goal setting, ideal patients would behave in ways that they think are appropriate or suitable to accomplish their goals. This is commonly referred to as rehabilitation adherence.<sup>1</sup> To help the patients adhere to their rehabilitation program, social and environmental support should be considered. Social support can be described as how the patient is supported by the people around him and how the patient interacts with other people. Family, teammates, classmates, and roommates would be sources of social support. Scheduling and planning the patients' rehabilitation are also important for adherence. Adjusting the rehabilitation schedule for the convenience of the patient is an example of environmental support.<sup>10</sup> Our suggestion is for the clinician to evaluate the programs that are being implemented to see if they incorporate social and environmental factors which can improve patient adherence.

Motivation highly influences the effectiveness and success of the rehabilitation process, which helps to maintain the patient's commitment and dedication. If the patient knows where they are going, how they are going to get there, and why they are going there, it frequently offsets many negative feelings and generates greater confidence. This will help the patient maintain sufficient motivation to carry them through rehabilitation process. Patients' motivation stems from internal factors such as self-efficacy, initiative, and a sense of self-competence and external factors such as their environment.<sup>16</sup> Our recommendations are that clinicians should encourage patients to actively pursue their goals and be allowed to create and evaluate progress throughout the rehabilitation process. The clinician should also remember to inquire about the patient's perception of self-confidence especially regarding progress and return to function.

### SUMMARY

The emotional feelings of injured patients constantly change. A patient's psychological well-being highly enhances their rehabilitation process. Clinicians should consider psychological consultations to achieve all of their rehabilitation goals. We have described a normal rehabilitation curve showing that patients typically experience emotional highs and lows during the rehabilitation process. Clinicians should explain to patients that these highs and lows are common and every patient experiences these up and down curves. This education may assist patients in understanding the rehabilitation process and staying motivated. We have also suggested a four-step consulting strategy based on the patients' emotional changes during rehabilitation. The clinician should consider these ideas and develop his/her own strategies for incorporating psychological consultations into clinical practice. Remember these consultations may be small interventions that are casually integrated into practice rather than an intimidating, uncomfortable, additional process.

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### KEY TERMS

Normal rehabilitation curve, Emotional changes, Psychological consulting strategies