

“I'm asking you to believe—not in my ability to create change, but in yours.”: Four strategies to enhance patients’ rehabilitation adherence

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AG, DF and TG produced the initial concept of the editorial. All authors contributed to the theoretical and applied considerations within the editorial. AG collated all ideas and produced the final version of the editorial, which was then critically revised by DF and TG to ensure meaningfulness for applied sports medicine practitioners.

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“I’m asking you to believe—not in my ability to create change, but in yours.” Former US President Barack Obama provides a poignant message for sport and exercise medicine clinicians that relates to rehabilitation adherence (‘adherence’ in this paper): Patients have to be their own agent of change; we can’t do it for them.

At a time when patients can experience negative psychosocial and emotional responses to injury, their emotional integrity (e.g., the honesty of information they share with their treating clinicians) and their ability to make rational decisions can be compromised.¹ Think about your own practice; how many times have you had a conversation similar to that in Box 1. We know that patients’ home and clinic-based adherence rates are often poor.² Helping to improve adherence is important as it is associated with better return to sport (RTS) outcomes.^{3,4} Therefore, the aims of this editorial are to: (a) provide psychologically informed suggestions that can enhance adherence; and (b) based on principles of best evidence-synthesis,⁵ provide theoretical or empirical underpinning to these suggestions.

Box 1: Example conversation between clinician and patient

Clinician: “Hi there. How are you doing today?”

Patient: “Good, thanks”

Clinician: “That’s great! Has the injury improved?”

Patient: <Dies a little bit inside> “No, not really”

Clinician: “Oh, that’s too bad. Have you been doing your rehab activities?”

Patient: “Kind of, but not really...I’ve done a bit”

Clinician: <Also dies a little bit inside>

Strategy 1: Form strong relationships and provide high-quality social support

Strong clinician-patient relationships and higher levels of perceived social support are associated with improved adherence.^{1,2,13} A strong relationship is characterised by clinicians

providing clear, honest and understandable informational support to patients. This can create a sense of shared goal commitment with potential to increase patients' confidence and trust in their clinician, as well as improving patients' understanding of the benefits of their rehabilitation activities.^{2,14,15} Consequently, the patient can feel more empowered to make informed decisions regarding their rehabilitation behaviours and develop greater autonomous motivation as a result.^{4,5} These factors can improve rehabilitation adherence.^{6,7,14,15}

Strategy 2: Encourage patients to maintain the social side of sport

When patients experience satisfaction of the basic psychological needs (see table 1) of autonomy, competence and relatedness, successful return to sport post-injury is more likely.¹⁶ Advising patients to maintain the social aspect of their sport can help develop perceived social support and a sense of relatedness. Clinicians could facilitate this social aspect by scheduling rehabilitation sessions within the team environment wherever possible (e.g., pitch side/in the vicinity of the team). By contrast, removal from both training and socialisation associated with sport can lead to patient isolation and frustration¹⁷ and reductions in adherence.³

Strategy 3: Support the patient's autonomy

We have all worked with the athlete who expects us to "make them better". One way to support an athlete in transitioning away from this passive approach to their rehabilitation is to be a clinician who encourages the patient to be autonomous.¹⁸

An autonomy supportive approach is characterised by providing a clear rationale for rehabilitation activities, acknowledging the patient's feelings and perspectives, and providing opportunities for input and decision-making.⁶ In experiencing these conditions, patients can feel like they are engaging in rehabilitation activities of their own volition.

Promoting the patient's autonomy is positively associated with more autonomous motivation^{7,8} (e.g., the patient believing that rehabilitation is important to them and it is in

their best interest to adhere) and greater levels of observed and self-reported adherence.^{7,8}

Adopting communication styles based on principles of autonomy support can enhance patients' home-based rehabilitation adherence.⁹ Unfortunately, clinicians sometimes create a controlling climate⁹ that fails to fully consider patients' views. The patient attends their rehabilitation session, takes part in a pre-planned exercise mode and has little choice in the activities. This type of climate can create a sense of pressure for patients and a view that clinicians are making decisions without patient consultation, which can reduce adherence.⁷

Strategy 4: Use goal-setting techniques with athletes

Prospective correlational evidence¹⁰ and RCTs^{11,12} demonstrate that goal setting interventions related to achieving specific rehabilitation criteria; attending a specific number of rehabilitation sessions; profiling improvements and re-adjusting goals improve adherence.

Within the goal setting processes, having goals which relate to individual sessions, progression through stages of return to sport, return to sport goals and lifestyle goals can all benefit the patient. These goals will likely facilitate improved adherence via increases in patient self-efficacy and perceived treatment efficacy^{11,12} or simply the patient becoming more focussed on achieving a specific outcome.¹⁰ Self-report measures are most commonly used to measure adherence, but can lack requisite psychometric properties.¹⁹ Combining psychometric measures with other methods (e.g., session observations) can create a more realistic picture of adherence.

Conclusion

By being a source of high-quality social support, supporting the patient's autonomy, making effective use of goal setting and encouraging relatedness satisfaction, clinicians can enhance patients' beliefs in their ability to be their own agent of change. These strategies likely complement each other—for example supporting the patient's autonomy will likely facilitate

greater perceived social support – and their adoption will likely improve in adherence, contributing to improved rehabilitation outcomes with patients as a result.

References

1 Forsdyke D, Smith A, Jones M *et al*. Psychosocial factors associated with outcomes of sports injury rehabilitation in competitive athletes: A mixed studies systematic review. *Br J Sports Med* 2016; 50: 537 – 544.

2 Granquist MD, Podlog L, Engel JR *et al*. Certified athletic trainers' perspectives on rehabilitation adherence in collegiate athletic training settings. *J Sport Rehab* 2014; 23: 123 – 133.

3 Ivarsson A, Tranaeus U, Johnson U *et al*. Negative psychological responses of injury and rehabilitation adherence effects on return to play in competitive athletes: A systematic review and meta-analysis. *Open Access Journal of Sports Medicine* 2017; 8: 27 – 32.

4 Steffan K, Emery CA, Romiti M *et al*. High adherence to a neuromuscular injury prevention programme (FIFA 11+) improves functional balance and reduces injury risk in Canadian youth female football players: A cluster randomised trial. *Br J Sports Med* 2013; 47: 794 – 802.

5 Gledhill A, Forsdyke D, Murray E. Psychological interventions used to reduce sports injuries: A systematic review of real-world effectiveness. *Br J Sports Med* 2018; 52: 967 – 971

6 Ryan RM, Deci EL. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. 2017; New York, NY: Guilford Publications.

7 Chan DK, Lonsdale C, Ho P-Y *et al*., Patient motivation and adherence to post-surgery exercise recommendations: The influence of physiotherapists' autonomy-supportive behaviours. *Arch Phys Med Rehabil* 2009; 90: 1977 – 1982.

- 8 Lee ASY, Yung PS-H, Mok K-M *et al.* Psychological processes of ACL-patients' post-surgery rehabilitations: A prospective test of an integrated theoretical model. *Social Science & Medicine* 2020; 244: 112646
- 9 Lonsdale C, Hall AM, Murray A *et al.* Communication skills training for practitioners to increase patient adherence to home-based rehabilitation for chronic lower back pain: Results of a cluster randomised controlled trial. *Arch Phys Med Rehabil* 2017; 98: 1732 – 1743.
- 10 Scherzer CB, Brewer BW, Cornelius AE *et al.* Psychological skills and adherence to rehabilitation after reconstruction of the anterior cruciate ligament. *J Sport Rehabil* 2001; 10: 1675 – 172.
- 11 Evans L, Hardy L. Injury rehabilitation: A goal-setting intervention study. *Res Quart Ex Sport* 2002; 3: 310 – 319.
- 12 Coppack RJ, Kristensen J, Karageorghis CI. Use of a goal setting intervention to increase adherence to low back pain rehabilitation: A randomised controlled trial. *Clinical Rehabilitation* 2012; 26: 1032 – 1042.
- 13 Brewer BW, Cornelius AE, Van Raalte J *et al.* Age-related differences in predictors of adherence to rehabilitation after Anterior Cruciate Ligament reconstruction. *Journal of Athletic Training* 2003; 38: 158 – 162
- 14 Marshall A Donovan-Hall M Ryall S. An exploration of athletes' views on their rehabilitation adherence to physiotherapy rehabilitation after sport injury. *J Sport Rehabil* 2012; 21: 18 – 25.
- 15 Arvinen-Barrow M Clement D Hamson-Utley JJ *et al.* Athlete's expectations about sport-injury rehabilitation: A cross-cultural study. *J Sport Rehabil* 2016; 25: 338 – 347.
- 16 Kolt GS Brewer BW Pizzari *et al.* The Sport Injury Rehabilitation Adherence Scale: a reliable scale for use in clinical physiotherapy. *Physiotherapy* 2007; 93: 17 – 22.

17 Alexanders J, Anderson A, Henderson S. Musculoskeletal physiotherapists' use of psychological interventions: A systematic review of therapists' perceptions and practice.

Physiotherapy 2015; 101: 95 – 102

18 Podlog, L, Eklund, RC Psychosocial considerations of return to sport following Injury.

(2020). In Johnson, U. & Ivarsson, A (Eds). Psychological bases of Sports Injury (4th Ed, pp. 101-114). Fitness Information Technology: Morgantown, WV.

19 Bollen JC, Dean SG, Siegert RJ, et al. A systematic review of measures of self-reported adherence to unsupervised home-based rehabilitation exercise programmes, and their

psychometric properties. *BMJ Open* 2014;4:e005044. doi:10.1136/bmjopen-2014-005044

Table 1. Basic Psychological Need descriptions. For further information, see^{5,18}

Basic Psychological Need	Contextualised description	Clinician strategies to facilitate need satisfaction
Competence	The patient feels able to complete their rehabilitation activities successfully and/or efficiently	Work with athletes to select and progress rehabilitation activities at a manageable rate; Work with athletes to revise and progress goals, once they have been achieved. Highlight the benefits of these achievements as part of the process.
Autonomy	The patient feels a sense of choice and control over their rehabilitation programme	Provide a clear rationale for rehabilitation activities; Acknowledging the patient's feelings and perspectives; Provide opportunities for input and decision-making
Relatedness	The patient maintains a sense of connectedness and relationships with their peers in the team environments	Have rehabilitation sessions within the vicinity of team training sessions (e.g., pitch-side rehabilitation sessions)