



I was recently invited to review a legal case as an expert witness and without going into all the specifics (which are now public), I wanted to highlight a concern. I have been involved in 8 legal cases and each time, the same concern is evident. The concern that I speak of also occurs in DPT entry-level students and in practicing therapists of various ranges of experience. That concern is the pervasive use of 3 sets of 10 repetitions in exercise. The concern I have is that 3 sets of 10 repetitions without modification is terribly wrong.

There are all kinds of resistance variables that can be manipulated. Load, the amount of mass lifted. Volume, the total number of repetitions in a session multiplied by the resistance used. Even the order of exercises within a session contributes to benefits to the patient. There are several approaches to progressively overload muscles besides defaulting to 3 sets of 10 repetitions. By increasing the resistance, increasing the volume through increasing repetitions, sets, number of exercises performed, altering resting time between sets or by increasing the repetition velocity during submaximal resistances as suggested by excellent authors.¹ In the legal case that I reviewed, a patient was being treated by a therapist for 6 months and I reviewed all of the patient's notes. As you might guess, the patient was still doing the same number of sets, repetitions, and weight for over 4 months of therapy. I have taught in 4 different DPT programs and have observed a similar mindset in students, of defaulting to 3 sets of 10 reps. I am certain the use of Holten's curve is taught, which suggests finding a 1 rep maximum for an exercise for a healthy client. This approach is contraindicated for a patient who is being seen for rehabilitation of an injury.¹ DeLorme, way back in 1945, suggested 3 sets of 10 reps BUT qualified this by suggesting that progressive loading must occur to reach strength gains.² For some reason, this latter idea has been lost in translation.

In this editorial, I would like to have the reader consider the use of the OMNI-RES first introduced by Robertson.^{3,4}

By observation, the OMNI-RES scale appears similar to the Wong-Baker FACES® for pain scale. The OMNI-RES is used to determine when to increase intensity. This scale is applied when the individual initially performs the exercise with resistance or theraband or tubing and is asked to rate the level

of difficulty for the exercise using the OMNI-RES scale.⁴ When the individual is able to perform the exercise with 3 sets of 15 repetitions and the OMNI-RES score falls below a 5, resistance is increased by one pound or resistance of the tubing or band is increased. Obviously, if the therapist is trying to work on strength vs endurance, the number of repetitions and resistance is modified.

I am not sure why the OMNI-RES is not more commonly used and that very few therapists have even heard of it, but it has construct validity with the RPE scale and provides objectivity to a subjective measure of intensity. Recently, a therapist friend of mine told me of an incident in which he was covering for another therapist and asked the patient to perform the exercise for the same amount recommended by the absent therapist. My friend asked the patient to go until fatigue on the last set much like what is recommended in the daily adjustable progressive resistance exercise technique (DAPRE).⁵ She was doing straight leg raises for 4 minutes before he stopped her from doing any more and added resistance. This has got to stop. We are underdosing our patients.

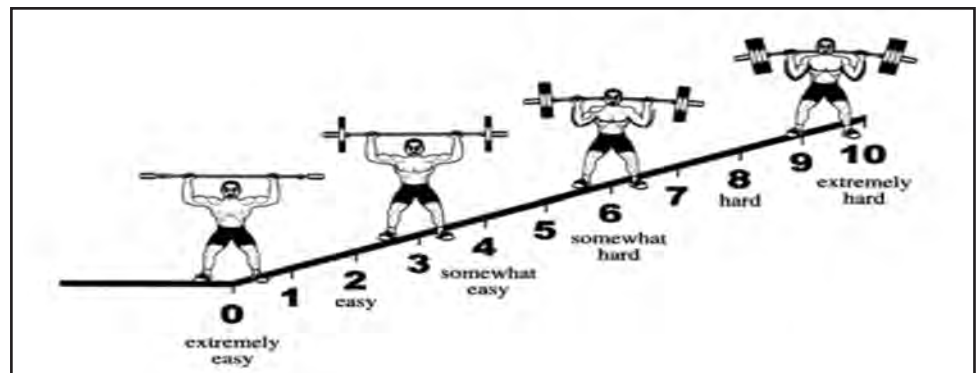
Intensity has been suggested by authors to be the most important aspect of gaining strength. After watching the fantastic documentary "The Last Dance" I think it would be safe to say that Michael Jordan's approach to intensity in practice, games, and in everything in his life resulted in his success. I believe that for a successful outcome with a patient, both the patient and the therapist must do their part. As physical therapists, we can do a better job of prescribing exercise with the proper intensity AND we can

ask our patients to do their part by following through with the personalized program we prescribe. Exercise is medicine. Perhaps tools like the OMNI-RES will help bring about this success on both sides.

*Professionally,
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