



Addressing Compliance: Does Supervision Foster Patient Adherence in an Ergonomic Exercise Program? - A Narrative Review

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Abstract

Patient compliance is essential in creating optimal results in an Ergonomic Exercise Program. Unfortunately, there is little research into how to best achieve patient compliance. This narrative review explores the positive relationship between patient supervision and compliance in Home Exercise programs.

This review also explores several types of supervision that are possible, (Patient Partnership, Experiential Learning, Written or Pictorial Communication, etc). Writing off poor results in a health care program as being due to patient noncompliance is an effort to deny personal responsibility for that failed program. Instead, the clinician should take personal responsibility in helping their patient achieve compliance

Keywords: Compliance; Ergonomics; Patient Supervision; Exercise; Physical Therapy

Introduction

Achieving patient compliance is a fundamental building block of health care. Without patient compliance in a health care program, very little can be done to help the patient. Therapeutic non-compliance leads to a continuation of illness, excess medical care and increased medical costs [1].

Scarlett and Young describe medical noncompliance as an epidemic [2]. In Physical Therapy (PT) patient compliance is a necessity for successful rehabilitation. The patient will attend treatment for a short few hours each week and a finite calendar period of time per year, usually less than six weeks. It is of great importance that the patient learns and adheres to a home care protocol if they are expected to have extended

or permanent success in resolving a health concern [3].

Extended illness leads to a variety of problems negatively affecting the patient in many ways, including financial hardships (lost work and health care costs), emotional difficulties (including anger, depression and strained family relationships), and lost leisure or social activities [4].

Research shows that there are multiple ways of educating or instructing a patient that will increase compliance with a home care program [5]. This paper will examine the role of the Physical Therapist as a specialist, whose supervision can lead his or her patients to improved compliance with their health care program, thus achieving the best possible health care outcome.

PICO Question

The focus of this exploration is, "Is there a single common factor needed to achieve optimal patient compliance with a health care program?" This is a difficult question to research as the vast majority of studies focus on the effectiveness of a treatment program, not the patient compliance of a health care program. Just as often the studies conflate patient compliance of a health care program with the effectiveness of that program. There is a reason for this. A patient who sees that a program is effective is more likely to be compliant with that program. Also, a patient who is strongly compliant with a minimally effective program will find a greater level of effectiveness from that program. Separating effectiveness and patient compliance is not an easy task. Often research studies will discuss that lack of patient compliance as being a chief problem with their results. In fact, the phrase patient compliance is so ubiquitous in research, that that to achieve a meaningful search the word 'adherence' had to be substituted for 'compliance'. After a multitude of Internet searches, the following PICO question was developed, "In Physical Therapy does supervised exercise foster patient adherence better than unsupervised exercise."

Search Strategies

PubMed was searched as follows to answer the PICO question: (((Physical Therapy) AND (Adherence)) AND (Supervised Exercise) AND (Unsupervised Exercise)) NOT (Protocol)). The search filter only included studies from the last ten years. The search yield 24 articles, with 18 being excluded because they did not specifically study participant adherence in a comparison of supervised versus unsupervised exercise. That left 6 articles that were most pertinent to the PICO question.

Characteristics of the Subject Populations in the Included Studies

Each study had a unique common factor, including, Cancer (2) [6,7], Older Adult [8], Teenaged Female Soccer player [9], Psychosis [10], and Female Body Mass Index of 25-35 [11]. Two of the studies involved females only [9-11] while the other four studies involved both males and females [6-8,10]. The studies had various participant sizes, the smallest being 15 and the largest being 360. The ages ranges varied from 13 years to 80 years of age. The results of this demographic information indicate that the findings of this study can be applied to patient groups of all ages, excluding young children and infants.

Designs of Included Studies

Four studies were randomized clinical trials (RCT's) [7-9,11] and one study was a cohort study [10]. One study was

an RCT study, but it included a post hoc Single Group Analysis [6]. All studies collected included an analysis regarding patient adherence to an exercise program regardless of the effectiveness of that program. All studies used a supervised group exercise program as the intervention of 'supervised' exercise. There was no study that looked at patient adherence in a one-on-one, physical therapist to patient, ratio.

Summary of Studies

All studies found that supervision led to increased patient compliance. One study found adherence to supervised exercise sessions was 94% compared to 78% for the unsupervised sessions. One study found adherence in a supervised exercise program to be 76%, while the unsupervised adherence was zero [7]. (This study involved Cancer patients who the author's believed were so conflicted by their disease that they did not have the emotional strength to exercise independently [7]. One study measured adherence to the study using a dropout rate. The results being 95% adherence in a supervised program, with the unsupervised program being 86% and the control group being 91% [8]. One study found compliance in a supervised program to be 85.6% and the compliance to an unsupervised program to be 73.5% [8]. One study found 89% of the patients were compliant with a supervised exercise program. These same patients saw a decrease in compliance to 55% when they were moved to an unsupervised program [10]. One study found adherence in the supervised groups to be 95.4% and the unsupervised groups to be 64.5% [11].

Conclusion

This paper shows that a strong relationship between patient supervision and patient compliance. All of the studies meeting the criteria of this project found that supervised health care resulted in greater patient compliance than unsupervised health care. Physical Therapists, and all health professionals, should take note of these results as supervised exercise is a key component of successful interventions. Therapists need to understand that the simple act of supervision leads to improved patient compliance and improved patient compliance leads to improved health outcomes.

This study did not touch on the multitude of ways a clinician can offer more effective supervision. Martin, et al. [5] have written an excellent article describing patient supervision as an effort in 'mutual collaboration. The therapist needs to not only have a realistic assessment of the patient's physical assets, but also of the patient's cognitive and emotional assets. The therapist needs to build trust, ensure effective communication, and importantly, give the patient a chance to tell their story. "Physician-patient

partnerships are essential when choosing amongst various therapeutic options to maximize adherence” [5].

Beyond patient partnership in decision making, the clinician has an abundance of tools to use to enhance patient learning and so enhance patient compliance. Experiential learning is one of the most valuable ways students learn. This should certainly be a consideration when teaching an exercise program [12]. Other techniques to consider in patient learning are, written instructions, ideally with pictures [13]. keeping a journal [14] or having programs available online which the patient can access. Positive affirmation (cheerleading) is another technique offering the patient strong emotional support which can lead to better patient compliance [15]. The patient may be unaware of their progress (or weaknesses). The clinician needs to ensure the patient has the tools they need allowing the patient to better self-monitor and self-motivate.

Is there one of these techniques or strategies a therapist might use to help their patients the most? Perhaps, but every person has a unique personality and a unique learning style. To be most effective, the instructor needs to be able to use any and all of these strategies.

Patients who are non-compliant with a home care program are often blamed for their non-compliance [16]. Patient non-compliance allows the health care provider to deny personal responsibility for the failure of a rehabilitation program because “it’s the patient’s fault.” It is important for the health care provider to take responsibility for patient compliance [17]. This results in the health care provider looking for ways to increase patient compliance rather than ignoring patient compliance as someone else’s problem. Ultimately, it is the responsibility of the clinician to regularly review the patient’s progress with the patient. The clinician needs to take leadership in developing the therapist-patient partnership so that both the clinician and the patient are aware of the possible success or failure of the home exercise program.

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