Editorial

Leisure Time Physical Activity and Well-Being: Learning from People Living with Arthritis

The findings of Da Costa and colleagues relating leisure time physical activity to less depressive affect in people with and without arthritis and rheumatism[1] add to a growing body of research examining the relationship of physical activity to physiological, functional, and psychological outcomes in arthritis[2-5]. The message seems straightforward: physical activity is associated with physical and psychological benefits. The goal appears clear: encourage people to be more active. But the reality is much bleaker. Physical inactivity appears to be the norm in North America and, for the most part, is even more pervasive among people with arthritis, particularly women and older adults. These findings present a difficult challenge to clinicians and health professionals who want to help people with arthritis. What are we missing? Are we asking the right questions? What can we learn from people with arthritis?

Over the past several years, I've been involved in several studies aimed at understanding how people with arthritis adapt to stressful aspects of their condition. For example, in ongoing research on living with osteoarthritis, many individuals discussed leisure time physical activities. They reported feeling happy, pleased, relieved, sad, upset, fearful, anxious, angry, frustrated, helpless, and depressed. Why such a range of affective states? The answer lies in the meanings or appraisals people made about their condition and often only indirectly in the symptoms of their arthritis. For example, people who engaged in physical activities generally reported being happy or relieved that their arthritis had not interfered with activities and were pleased when physical activity alleviated arthritis symptoms. But for others, increased pain, stiffness, and fatigue had resulted in giving up activities. These individuals often reported being sad or upset because of the impact that their arthritis had on their leisure time activities. Some individuals were also fearful and anxious about engaging in activity because of concerns that these activities were responsible for their arthritis and because they worried that continued engagement in physical activity would aggravate their condition. When talking about physical activity some people with arthritis also mentioned being angry or frustrated. Often these feelings were directed toward others, including health professionals. For example, at the end of a focus group discussing living with OA, one woman noted that, despite all the research on arthritis, the best advice health professionals had given her had been to "eat right, get plenty of rest, and keep active." She was frustrated that her queries about what kinds of activities were best, how often she should engage in them, for how long, and at what intensity, were unanswered. Finally, reports of helplessness or depression were common when people made global evaluations of their condition and the burden it created in their lives. That is, when leisure time physical activities were important to people's sense of identity or to their relationships with others, the loss of the activity was particularly upsetting[6,7].

There are several insights we can gain from these observations. First, the complexity of the link between physical activity and mental or emotional health has typically been underappreciated in arthritis research. Although it is not uncommon for researchers to note that people with arthritis report more depressive symptoms than the general population, we have largely ignored different affective states and mental health in arthritis research and treatment. As well, there is a tendency to slip into causal language and suggest that physical activity decreases depression (despite the relatively small amount of variance in depression explained by physical activity) rather than note that one sign of depression is the giving up of valued pastimes like leisure activities. A clearer differentiation of depressive mood from clinical depression, as well as a better understanding of the underlying nature of the relationship between activity and depression, is important to determine appropriate interventions.

Adding more complexity to this issue is the likelihood that the relationship between leisure time physical activity, depression, and other mood states is mediated by a range of variables. They include people's appraisals of their condition, as well as symptoms of arthritis such as pain and fatigue. Numerous theories describe self-appraisals and

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their role in the process of behavior change, including the health belief model[8], social cognitive theory[9], the theory of planned behavior[10], the theory of reasoned action[11], protection motivation theory[12], and the transtheoretical model of behavior change[13]. However, in a review of the literature, Rothman[14] notes that many studies have focused primarily on appraisals important to initiating behavior change, like self-efficacy[9], and that high rates of initial behavior change have not been matched by similar rates of sustained behavior change. Rothman suggests that other types of appraisals — appraisals assessing the actual outcomes achieved and people's satisfaction with those outcomes — may be more important in maintaining behavior changes. To determine whether they are satisfied, individuals may rely on appraisals that: (1) evaluate how particular behaviors make them feel; (2) assess performance gains (e.g., am I able to do what I want?); (3) monitor whether important elements of their identity are maintained (e.g., I'm still an active person, I'm still an independent person); and (4) monitor the quality of their relationships[14-16].

Drawing upon these different types of appraisals and returning to the comments of people with arthritis, it is clear that researchers and clinicians have numerous hurdles to surmount when designing interventions to encourage leisure time physical activity. People with arthritis sometimes report that physical activities are painful. They are anxious to ensure that their activities do not cause further damage. When attempting to initiate behavior change, successful interventions will need to be specific about the kinds of activities that are appropriate, as well as the duration, frequency, and intensity of involvement in an activity that might be associated with benefit or harm[1,4]. When trying to maintain behaviors like exercise, teaching people to what extent pain is to be expected or even beneficial would also be useful. In experimental and clinical research, people who were told what degree of pain and fatigue were appropriate were more likely to engage in exercise and push themselves beyond their previous limits[15,17].

A recognition that individuals with arthritis make assessments of their gains and losses in a range of activities also needs to be considered when designing interventions. Two issues are likely to be important in this regard. First, people make decisions about whether to engage in leisure time activities taking into account the demands of other activities. For example, people with arthritis often report pacing their activities. They reduce their involvement in leisure activities, leaving more time and energy to engage in other activities like work and household demands[7,18]. Interventions to support physical activity need to help people find ways of incorporating leisure activity into their existing lifestyles so that they do not feel overwhelmed.

Second, people may feel that some leisure time physical activities are particularly valued or important. These may include hobbies or social activities. Previous research has combined physical activities on dimensions like energy expenditure. To better understand the relationship of physical activity to depression and other affective states, researchers need to appreciate the meaning of the activity for the individual as well as its benefits to cardiovascular fitness, endurance, and flexibility. If we substitute relatively meaningless activities for the highly valued activities in people's lives, people will be unlikely to maintain behavior changes.

Finally, interactions with others have been critical in intervention research. Positive reinforcements like compliments from family, friends, and health professionals have been beneficial in maintaining weight loss and in the cessation of smoking[14]. However, physical activity changes in arthritis are not as easily reinforced. Among older adults the absence of physical activity may be excused by others as understandable ("what do you expect, they're just getting older"), leaving this group with less support for physical activity. In addition, others may believe that physical activity should be avoided to prevent the worsening of arthritis. Similar reactions from family members are reported when attempting to get patients with cardiovascular disease to exercise[19]. Even when others support physical activity, they may have difficulty gauging when to provide support. The "invisibility" of arthritis symptoms can leave individuals exhorting someone with arthritis to continue activities when that individual is in extreme pain, disappointed when plans for activities are unexpectedly cancelled, or suspicious about the "apparent" inability of a person with arthritis to be active when they look fine. As a result, people with arthritis may become disappointed or upset with others and unwilling to seek their support. This points to the need for comprehensive interventions that include others like family members and that help people with arthritis to understand and deal with the reactions of others.

This editorial began with an acknowledgment that rates of inactivity are high in people with arthritis and a message about the potential benefits of activity. Various theories can help explicate the complex relationship between people's leisure time physical activities and their affect, as well as aid in the development of appropriate interventions. Although dealing with the complexity of this issue can appear daunting, the richness of the information provided by people living with arthritis suggests that many of the insights we will need to make sense of physical activity and affective states will come from them.

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