Meeting the Challenge of Employment While Managing Arthritis

Brief Description of the project:
Americans are working longer and delaying retirement, primarily for financial reasons. This aging workforce is also living with chronic health conditions that threaten continued employment. As a nation, we routinely skip exercise that could help manage musculoskeletal conditions - such as arthritis - the #1 disability in the U.S. today.

This proposed project seeks to educate and empower Oklahomans to remain employed while managing arthritis to reduce loss work time and successfully manage family resources including time and productivity. The project goal is to certify OCES personnel to provide National Arthritis Foundation’s (NAF) land-based exercise to:

- Increase physical activity, self-manage with education; and receive group support
- Empower Oklahomans to manage arthritis to remain productive at work.

Background of Applicant:
Dr. Jan Johnston is an Associate Professor in Human Development & Family Science and an Extension State Specialist in Adulthood and Aging. Her area of expertise related to this project is recognizing normative processes of aging in extended employment in later life as well as daily managing arthritis. She was the Principal Investigator of Oklahoma AgrAbility, a USDA-NIFA funded project to keep agricultural families working toward economic pursuits. OK AgrAbility originally provided funds to train a group of OCES Educators in the land-based exercise program but no longer can do so. This request is to provide the same opportunity to more Educators. Dr. Johnston is the State FCS Leader for the Jobs and Employment Readiness Issue Team and intends to work with all interested Educators and OHCE members on this project.
Situation Statement:

This proposed project sheds light on two important issues confronting today’s working adult: delayed retirement costs and managing chronic health conditions while working. Americans are working longer in life and delaying retirement primarily for financial reasons. Nearly 13% of working adults believe they will never be able to afford to retire (2011 Retirement Confidence Survey). Further, there are Baby Boomers re-entering the workforce including grandparents raising grandchildren along with divorced and widowed spouses to remain above poverty.

In 2010, 17.4% of people aged 65 years and older were in the labor force: by 2020 that number is expected to be 22.6% (U.S. Bureau of Labor Statistics). While postponing retirement can benefit us by staying connected and providing an outlet for experience and knowledge, many remain in the work force because of the need for more income and family health benefits. With the extended years of “work” life there are also the accompanying years of “health” life. That is, as we age on the job, chronic health conditions begin to interfere with daily functioning: none more prevalent than arthritis. Living with such conditions that cause pain, stiffness, poor balance and diminished stamina impacts work performance and can threaten continued employment.

Arthritis is the #1 disability among Americans, with nearly 52.5 million adults diagnosed by a doctor. As the population ages, that number will increase to 67 million people by 2030. Currently, 820,000 adult Oklahomans (3,500 children) live with some form of arthritis. There are more than 100 varieties: osteoarthritis and rheumatoid arthritis are most common. The associated pain limits activities (climbing stairs or walking any distance) for 23 million of us (CDC 2014). It is little surprise that living with arthritis can discourage physical activity, yet we know that is a necessary component to remaining active, engaged and, for many, gainfully employed. Too
often we erroneously believe that exercise can exacerbate the condition or working through pain is not helpful, even as doctors warn that physical inactivity further weakens the musculoskeletal system, diminishes balance and increases the risk of cardiovascular disease. Yet nearly 44% of adults with doctor-diagnosed arthritis reported no leisure physical activity compared with 36% without arthritis (American Journal of Preventive Medicine; 2006). The benefits of activity are well documented. Among older adults with knee osteoarthritis who participated in moderate exercise at least 3 times a week there was a 47% reduction in risk of arthritis-related disability (Archives of Internal Medicine; 2001). In the matter of prevention or reduction of arthritis, we also know that early and regular properly performed exercises build and preserve muscle strength, joint flexibility, and range of motion protecting against further damage.

As we see, the demands to remain employed to maintain family resources and the chronic condition of arthritis are often at odds with each other.Workers experience arthritis-related absences, reduced ability to carry out duties and decreased work hours and resulting paychecks. Indirect arthritis-related costs are substantial. A 2006 study found the average cost of loss work productivity from arthritis to be $8665 per employee per year (Li, Gignac, Anis). An employee’s level of pain has a tremendous impact on performance, attendance and pay.

The Institute of Medicine’s 2011 Report found – in a two-week period – 2% of the nation’s total workforce reported loss of work time due to the effects of arthritis. Lost time at work and associated employer costs are not the only effects; there are also psychosocial factors including how the employee feels about self and (dis)connection to co-workers. In 2003, the CDC estimated total annual loss costs attributable to arthritis and other rheumatic conditions to be
approximately $128 Billion: $80B were direct costs of care; $48B were indirect costs of lost earnings and productivity. In Oklahoma during this time those loss costs were $1.6 Billion.

This proposed project seeks to educate and empower adult Oklahomans to manage their arthritis with evidence-based exercise to reduce loss work time, manage household resources and improve quality of life. It also aims to reduce the prevalence of the condition with early preventive exercise.

**The project goals:**

Provide National Arthritis Foundation’s land-based exercise to:

- Increase physical activity, self-manage with education and receive group support.
- Utilize evidence-based exercises to reduce pain; increase confidence in productive activities (e.g. work, service); decrease doctor/ER visits; increase social support.
- Empower Oklahomans to manage arthritis to remain productive at work.

**Objectives to Assess:**

- Increased physical activity as evidenced by class attendance and self-reported activities through the week
- Self-management of pain with education and correct exercise instruction from OCES personnel
- Self-reported support in a group setting to remain active and engaged in daily activities and on the job
- Self-reported vignettes demonstrating improved productivity on the job

**Methods:**

The proposed project will proceed with funded opportunities to participate in the National Arthritis Foundation’s land-based exercise program, conveniently available in an online video
workshop format. At the end of the successful 3-hour training, each will be expected to conduct a 6-weeks series of 1-hour weekly community classes to become a certified Arthritis Foundation Exercise Program Instructor. Certified Leaders can co-lead and series will be offered as the community dictates. Evidence-based exercises are used to improve work productivity while managing arthritis. Education to improve other factors (e.g. Walking with Ease, proper nutrition) and assistive technology tools and devices demonstration will enhance lessons. An Ambassador report will be developed and a summary report of evaluation will be completed within 2 months of completion.

**Proposed Budget**

**PERSONNEL**  
Project Director; Jan Johnston  

Arthritis Foundation Exercise Program Training Costs  
$129 Fee/ per Educator X 77 Educators includes:  
- On-hands video training of 90 safe & effective exercises  
- Instructor’s Manual containing:  
  - Exercise routines, illustrations and health education  
- 7 Continuing Education Units (CEU) for professionals  
- Must be re-certified every 2 years  
- With 77 requested opportunities, each Educator can be certified or recertified during the award period to effectively cover the state with NAF Land Based Exercise programming

**TOTAL PROJECT COSTS**  
$9,933