Factors Associated With Utilization of Arthritis Self-Help Programs in Michigan

Peter DeGuire\textsuperscript{1}, Emily Somers\textsuperscript{2}, Steven Springer\textsuperscript{1} and Judith Lyles\textsuperscript{1}

\textsuperscript{1} Arthritis Program, MI Dept of Community Health
\textsuperscript{2} Dept of Rheumatology, University of Michigan
Objectives

- To identify groups of people with arthritis who have been less likely to participate in arthritis self-management programs (actual use)

- To characterize groups who reported a relatively higher degree of interest in using these programs (potential use)

- To compare groups based on use and interest to identify service opportunities.
Methods
Two statewide random-digit dialed telephone surveys of English-speaking, non-institutionalized adults (age 18 & over) in 2005:

- **Michigan Behavioral Risk Factor Survey (MBRFS)**
  12,136 completed interviews

- **Michigan Diabetes, Arthritis & Osteoporosis Survey (MDAOS)**
  2,656 completed interviews - oversampled age 45+, African-Americans and Hispanics

- Used same survey organization for data collection and similar sample design for each survey.

- Confidence intervals were calculated and tests of significance were performed using SUDAAN (Release 9.0.1) to account for the complex sample design.
Persons with doctor-diagnosed arthritis (DDA)

(In both surveys) Responded “Yes” to “Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?”
Prevalence (%) of Dr-Diagnosed Arthritis
By Survey (MDAOS & MBRFS), Michigan Adults, 2005

- 2005 MDAOS: 31.5%
- 2005 MBRFS: 30.9%
Prevalence of Dr-Diagnosed Arthritis by Age and Survey (MDAOS & MBRFS), Michigan Adults, 2005

![Graph showing prevalence of Dr-Diagnosed Arthritis by age and survey for Michigan adults in 2005.](image-url)
Prevalence of Dr-Diagnosed Arthritis by Gender and Survey (MDAOS & MBRFS), Michigan Adults, 2005

- Male: 27.7% (2005 MDAOS) vs. 26.3% (2005 MBRFS)
- Female: 35.0% (2005 MDAOS) vs. 35.2% (2005 MBRFS)
Prevalence of Dr-Diagnosed Arthritis by Race-Ethnicity and Survey (MDAOS & MBRFS), Michigan Adults, 2005

Bar chart showing the prevalence of Dr-diagnosed arthritis by race/ethnicity and survey (MDAOS & MBRFS) for Michigan adults in 2005. The chart compares White-NH, Black-NH, Other-NH, and Hispanic populations.

- White-NH: 31.4% (2005 MDAOS), 30.0% (2005 MBRFS)
- Black-NH: 29.9% (2005 MDAOS), 29.3% (2005 MBRFS)
- Other-NH: 26.2% (2005 MDAOS), 30.0% (2005 MBRFS)
- Hispanic: 14.6% (2005 MDAOS), 21.5% (2005 MBRFS)
Arthritis self-help program use/participation

Responded “Yes” to “Have you ever taken an educational course or class to teach you how to manage problems related to your arthritis or joint symptoms?”

(Source: MI BRFSS, 2005)
Interest in arthritis self-help course

Responded “Yes” to third question below:

“Now I’m going to ask you about treatments for arthritis that were not provided by a physician. If any of these were available near where you live or work, would you go to:

- Warm water exercise class (Y/N?)
- An arthritis support group (Y/N?)
- Classes on arthritis and how to manage it (Y/N)
- Yoga classes for arthritis (Y/N?)
- Tai chi for arthritis (Y/N?)
- Other (specify) (Y/N?)”

(Source: MI DAOS, 2004-5)
Proposed Analysis

- Prevalence of arthritis self-help program use/participation by sub-groups
- Prevalence of program interest by sub-groups
- Differences in program use among groups (e.g., age groups)
- Differences in program interest among groups
- Differences between use and interest for particular groups (e.g., age 45-64)
Results
12.5% of all Michigan adults with doctor diagnosed arthritis in 2005 reported that they had taken an “educational course or class to teach them to manage problems related to their arthritis or other joint symptoms.”

2005 BRFSS median for 18 states: 10.7%
"If any of these were available near where you live or work, would you go to ... 

(% saying "Yes" by program)

Michigan Adults With DDA, 2005

- Warm water exercise: 61.2%
- Self-management classes: 47.5%
- Yoga classes: 35.8%
- Tai chi classes: 28.6%
- Arthritis support group: 27.7%
- Other treatments: 28.7%

Source: MDAOS
Self-Help Course Participation and Interest, Michigan Adults With DDA, 2005

Use Interest

Source: MBRFS
Source: MDAOS

Use: 12.5%
Interest: 47.5%
Use and Interest in Arthritis Self-Help Course by Age, Michigan Adults With DDA, 2005

Source: MBRFS

Source: MDAOS

Use

Interest

10.5
13.6
12.1
2 v 3, p < .01
46.5
54.2
37.9
Use and Interest in Arthritis Self-Help Course By Gender, Michigan Adults With DDA, 2005

Source: MBRFS

Source: MDAOS

Use

Interest

Use: 10.1
Interest: 45.4

Use: 14.2
Interest: 49.0

p < .05
Use and Interest in Arthritis Self-Help Course by Race-Ethnicity, Michigan Adult With DDA, 2005

Use and Interest in Arthritis Self-Help Course by Race-Ethnicity

White, Non-Hisp
Black, Non-Hisp
Other, Non-HISP
Hispanic

BN-H vs WN-H, p < .001
BN-H vs ON-H, p < .01
BN-H vs H, p < .05
WN-H vs BN-H, p < .05

Source: MBRFS
Source: MDAOS
Use and Interest in Arthritis Self-Help Course by Education, 
Michigan Adults With DDA, 2005

Source: MBRFS
Source: MDAOS
Use and Interest in Arthritis Self-Help Course by Income, Michigan Adults With DDA, 2005

Source: MBRFS

Source: MDAOS
## Summary

<table>
<thead>
<tr>
<th>Group Characteristic</th>
<th>Lower Use</th>
<th>Higher Interest</th>
<th>Higher Gap Between Interest &amp; Use</th>
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<tbody>
<tr>
<td><strong>Age</strong></td>
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<td>45-64</td>
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<tr>
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<td>BN-H</td>
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<td></td>
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<td><strong>Income</strong></td>
<td>≥ $75K</td>
<td>&lt; $35K</td>
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Source: MBRFS  
Source: MDAOS
## Summary

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Source: MBRFS  Source: MDAOS  Source: MBRFS
Limitations

- All data based on self-reports
- Unable to identify specific types of self-management programs, e.g., AFSHP or CDSMP
- Unable to differentiate among or make inferences to specific types of arthritis
- Didn’t ascertain reason for non-use of or non-interest in classes
- Survey biases due to non-response and non-coverage
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