Utilization of Exercise Prescriptions for Older Adults

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OBJECTIVE

- This study was conducted to investigate
  1) Providers’ knowledge and physician attitude about Exercise and Physical activity (PA) recommendations for Older Adults (OA)
  2) Frequency of utilizing written exercise prescriptions
  3) Barriers to using exercise prescriptions in primary care practice
  4) Providers’ interest in learning about and utilizing exercise prescriptions

BACKGROUND

- 5 leading risk factors for death (WHO) ¹
  - High blood pressure (13% of total death)
  - Smoking (9%)
  - High blood glucose (6%)
  - Physical inactivity (6%)
  - Obesity (5%)

- 3.2 million death each year - attributable to physical inactivity

- More than 60% of American adults over the age of 50 years failed to achieve the recommended activity levels.

- Less than 20% of older adults over the age of 65 years achieves ACSM/AHA physical activity recommendations for OA

- Reduce all-cause mortality and risks of developing conditions
- Improves physical and functional independence
- Improve auditory attention and cognitive processing speed
- Reduce risk of developing cognitive impairment

- Clinical benefit of physical activity and exercise in OA ²³⁶

ACSM/AHA physical activity recommendations for OA ²³⁴

Aerobic exercise

- Frequency: At least 3–5 days/week
- Intensity: Moderate to Vigorous
- Time: At least 30 min/day (Moderate, 150-300min/week)
- Type: Walking, Aquatic exercise, Stationary cycle

Resistance exercise

- Frequency: At least 2 days/week
- Intensity: Moderate to Vigorous
- Time: At least 10 min/session
- Type: 8-10 exercises involving all major muscle groups

Flexibility exercise

- Frequency: At least 2 days/week
- Intensity: Moderate to Vigorous
- Time: At least 10 min/session
- Type: Stretching for each major muscle group, yoga

Balance exercise for frequent fallers

- Reduce and prevent falls (at least 2-3 days/week) (Minimum 50 hours to be effective) ⁵

- Only 2/3 of patients who visited their PCP receive advice about physical activity from their PCP. ⁶
- Fewer family physicians promote physical activity by utilizing a prescription for physical activity. ⁸

METHOD

- Study design and methods
  - Survey was distributed primary care providers (Residents, fellows, nurse practitioners, and attending physicians) in the Department of Family and Community Medicine at Thomas Jefferson University.

- 11 questions in the questionnaire
  1) Knowledge and attitudes towards recommending exercise
  2) Practice habit utilizing exercise prescriptions
  3) Barriers to using exercise prescriptions
  4) Interests in learning and utilizing exercise prescriptions for OA

RESULT

- Knowledge & attitudes toward recommending exercise

- Practice habit on exercise prescriptions

- Barriers to using exercise prescriptions

- Interest in learning and utilizing exercise prescription

DISCUSSION

- Enablers to overcome barriers to prescribing exercise ⁸
  - Awareness
  - Attitudes
  - Habitual practice
  - Resources
  - Patients’ reaction

- Implementation of findings for quality improvement

- In our practice, we have developed and provided our providers with Exercise prescription booklet for providers

- Exercise exercise handout with illustrations for patients

- 50-minute lecture and workshop for residents and medical students on exercise counseling and exercise prescriptions for older adults

- Sample exercise prescription for older adults

CONCLUSION

- Primary care providers agreed exercise is beneficial for older adults.
- Only 1/3 were well aware of exercise recommendations for OA.
- Fewer reported using exercise prescriptions with their older patients.
- Barriers to using exercise prescriptions were (1) lack of knowledge about exercise prescriptions, (2) lack of time, (3) lack of exercise prescription pads and (4) lack of exercise handout.
- Most providers were interested in receiving education and utilizing exercise prescriptions for older adults.

REFERENCE

2. ACSM Position Stand – Exercise and Physical Activity for Older Adults, ACSM, 2009
3. ACSM’s Exercise for Older Adults, Chodzko-Zajko, AM College of Sports Medicine, 2014
4. Prescribing Exercise in Primary Care—Ten practical steps on how to do it, Khan et al, EMJ 2011;343
8. Family Physicians’ Perceptions toward Writing Physical Activity Prescriptions: I Tell Patients it’s Like the Super Pill! Belanger et al, Quality in Primary Care 2005;3(2):119-123

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