

Peer Coaching to Promote Supervised Fitness Training for Older Veterans with Psychotic Disorders

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Disclosures



- ▶ Anjana Muralidharan, Ph.D.
 - I have nothing to disclose.

The views expressed in this presentation are those of the authors and do not necessarily reflect the position or policy of the VA, the U.S. government, or other affiliated institutions.

Outline

- ▶ Why older adults with psychotic disorders?
- ▶ Why supervised fitness training?
- ▶ Who are peer coaches?
- ▶ Development of the intervention
- ▶ Results from an ongoing small open trial

Psychotic Disorders and Medical Comorbidity

My definition of psychotic disorders:
schizophrenia spectrum disorders, bipolar I
disorder, major depression with psychotic
features

Individuals with psychotic disorders:

- ▶ Have higher rates of obesity, diabetes, hypertension, heart disease, respiratory disorders, gastrointestinal disorders, and other medical conditions

SAMHSA, 2011

- ▶ Die, on average, ~10 years younger than the general US population, mostly due to medical illness such as cardiovascular disease

Walker et al., 2015

Psychotic Disorders and Aging

As they age, individuals with psychotic disorders may experience:

- ▶ Increased rates of **life-threatening medical conditions** such as cardiovascular and respiratory diseases increase

Kilbourne et al., 2005

- ▶ Persistent **psychiatric symptoms**

Cohen et al., 2014

- ▶ Persistent **psychosocial impairment** and poor social support

Meesters et al., 2010

- ▶ For some, age-related **cognitive decline and dementia**

Thompson et al., 2013

Early Institutionalization

Individuals with psychotic disorders are at greater risk for early institutionalization:

- ▶ Nearly four times the risk for early (i.e., in their forties/fifties) institutionalization in long-term care, when compared to the general population

Andrews et al., 2009; Miller et al., 2006

- ▶ Three-fifths of individuals with schizophrenia admitted to nursing homes are younger than 65

Aschbrenner et al., 2015

Supervised Fitness Training

Supervised fitness training:

Completing an prescribed set of exercises under the supervision of exercise physiologists

- ▶ Physical activity, mobility function, and fitness are powerful predictors of long-term outcomes among older adults
- ▶ Participation in a VA supervised fitness training program for older Veterans, Gerofit, has significant long-term impacts on mobility function, functional impairment, and all-cause mortality
- ▶ Potential to impact outcomes across domains of functioning

Morey et al., 2002

VA Rehabilitation Research and Development Service

Career Development Award

► Research Goal

Develop and test a peer coaching intervention to promote participation in supervised fitness training for older Veterans with psychotic disorders

► Training Goal

Develop expertise at the intersection of aging and psychotic disorders

Who are the peer coaches?

- ▶ Certified Peer Support Specialists
 - ▶ Providers who are trained to use their recovery story to support the mental health recovery of others
 - ▶ Have their own lived experience of mental illness
 - ▶ In the VA, CPSS are Veterans
 - ▶ In my study, the Peer Specialists are older than 50

CDA Research Aims

- ▶ Aim 1: Develop a group-based peer coaching intervention to promote participant in a supervised fitness training program
 - ▶ Use an iterative process of developing materials and obtaining feedback on drafts from two panels of experts
 - ▶ Expert Advisory Panel: multidisciplinary panel of expert researchers, clinicians, and a Peer Specialist
 - ▶ Veterans Advisory Panel: panel of Veterans with mental illness – a source of consultation and advice at our research center

CDA Research Aims

- ▶ Aim 2: Conduct an open trial of the intervention with older Veterans with psychotic disorders (ages 50 and up; n=6)
- ▶ Aim 3: Conduct a small randomized controlled trial of the intervention with older Veterans with psychotic disorders (ages 50 and up; n=6)

Veterans Advisory Panel

Focus Groups

- ▶ Between 5-9 Veterans with mental health conditions enrolled in VA services
- ▶ 6 males, 3 females
- ▶ Majority were over 50 years old (1 in 40's, 1 did not disclose)
- ▶ Five 90-minute meetings, approximately every two months, over 1 year
- ▶ Different focus in each session
- ▶ Discussion recorded in detailed notes

Veterans Advisory Panel

Focus Groups

- ▶ Session 1: What Helps Veterans Get and Stay Active?
- ▶ Session 2: Initial Engagement
- ▶ Session 3: Overcoming Barriers
- ▶ Session 4: Connecting with Resources
- ▶ Session 5: Feedback on Overall Intervention

Focus Group Themes



- ▶ Finding the Internal Motivation in Each Person
- ▶ Exercise as a Central Tool for Recovery
- ▶ Power in Numbers
- ▶ Making Exercise a Part of Daily Life
- ▶ Encouragement Plus Accountability

Peer Education on Exercise for Recovery (PEER)

Gym Access Throughout the Program

A state-of-the-art gym facility and highly trained exercise experts will help you jumpstart your fitness! You will have access to the Senior Exercise Rehabilitation Center (SERC), the gym on the first floor of the Annex building.

Exercise experts will be there to help you use the machines and answer your questions. The exercise experts will provide you a set of recommended exercises based on your fitness and strength levels. These recommendations will change as you progress and get stronger and more fit.

Phase 1: Get active in the gym!

Weeks 1 to 12

Engagement Session – Week 1

Meet your peer coach!

Group Sessions- Once a week for 12 weeks

Meet with your peer coach and other Veterans!
Share your goals, support one other, work out together!

Work out in the gym as much as you like! Build your confidence!

Phase 2: Get active in your life!

Weeks 13 to 24

Maintenance Session – Week 13

A one-on-one with your peer coach. Plan how you stay active in the gym, and start thinking about how to get active outside the gym!

Peer Coaching Calls – Once a week for 12 weeks

Check in by phone with your peer coach, on your gym attendance and community physical activity goals.

Keep working out in the gym AND start getting active in your community!

End of the Program! Take it on the Road!

STAY ACTIVE in your life!

IMPROVE your health and well-being!

DO MORE of what you care about!

Engagement Session

Benefits of Exercise

Circle the benefits that are most important to you!

Psychological

Reduced depression
Reduced anxiety
Less stress
Better mood

Cerebrovascular

Decreased risk of stroke

Respiratory

Improved respiratory function
Stronger lungs
Increased oxygen uptake

Metabolism

Reduce liver disease
Lose weight
Reduce or help to control Type II diabetes

Digestion

Improved digestion
Decreased constipation

Mobility

Improved coordination, balance, flexibility
Reduced risk of falls, fractures
Improved mobility

Cognition

Improved concentration
Better memory

Sleep/Wake

Better sleep
More energy

Cardiovascular

Improved circulation
Strengthens heart
Lowers blood pressure
Lower risk of heart disease and heart attack

Pain management

Reduce joint pain
Reduce pain due to nerve damage

Muscular

Increased muscle strength
Increased muscle mass
Reduce muscle stiffness



Educational Materials

Exercising Safely with Pain

- Pain is the body's way of warning us something could be wrong
- Remember to listen to your body when you are active
- It is normal to feel some soreness when beginning a new exercise routine
- Learn to distinguish between different types of pain!

TYPES OF PAIN

Soreness	Acute Pain due to Injury	Chronic Pain
<ul style="list-style-type: none">• Dull, achy feeling in muscles• Causes – a new or more difficult workout routine• Starts within a day or two of exercise• A sign that muscles are getting stronger!• Usually goes away within a few days	<ul style="list-style-type: none">• Pain that begins suddenly• Sharp, stabbing pain• Causes – can occur due to injury in muscles, joints, or nerves• May require medical attention• Goes away when body heals	<ul style="list-style-type: none">• Any pain that lasts 3 to 6 months or more• Causes – past injuries or surgeries, nerve damage, chronic health conditions• Can interfere with life• Can be managed with active coping strategies



If I have pain is it safe for me to be active?

YES – in most cases, in spite of having medical problems and pain, most people CAN do some physical activity.

SAFETY TIPS

- Practicing exercise safety is the best way to prevent injury

Prizes!

- ▶ Water bottle for your first group
- ▶ PEER T-shirt for your fourth group
- ▶ Gold star for every goal achieved
- ▶ Every three gold stars = a small prize!
 - ▶ Keychains, sunscreen, chapsticks, lanyards, etc.

Aim 2 Recruitment

▶ Inclusion criteria

- ▶ Chart diagnosis of schizophrenia spectrum disorders, bipolar I disorder, or major depression with psychotic features
- ▶ Age 50 and up
- ▶ Participation in mental health services at the study site
- ▶ Sufficient clinical stability to participate as deemed by a mental health treatment provider
- ▶ Sufficient medical stability as deemed by a medical provider

Aim 2 Recruitment

▶ Exclusion criteria

- ▶ Current participation in a supervised exercise program
- ▶ Medical conditions which would preclude exercise participation
- ▶ Inability to complete the Graded Exercise Treadmill Test
- ▶ Positive cardiac stress test, unless symptomatic coronary artery disease is ruled out by imaging studies
- ▶ Lack of capacity to consent

Aim 2 Screening

- ▶ Chart review/phone screen
- ▶ Informed consent
- ▶ History and physical with a medical provider
- ▶ Graded Exercise Treadmill Test
 - ▶ Screens for cardiac abnormalities which would preclude participation
 - ▶ Establishes approximate peak aerobic capacity to inform exercise prescription

Aim 2 Procedures

- ▶ Once eligible:
 - ▶ Scheduled for one-on-one engagement session with Peer Coach
 - ▶ Scheduled for gym orientation session with exercise physiologist
 - ▶ Granted 24 weeks of access to the gym facility during opening hours
- ▶ Intensive phase:
 - ▶ Attend PEER group sessions, once/ week for 12 weeks
 - ▶ Set weekly goals with peer coach regarding gym attendance
 - ▶ In-person qualitative interview at 12 weeks (60-90 minutes)

Aim 2 Procedures

► Maintenance phase

- Weekly coaching calls with peer coach to set goals regarding gym attendance and community physical activity
- In-person or phone-based qualitative interview at 24 weeks (30-45 minutes)



Participant Stories

Wayne

"I said whatever will help me out mentally and physically because I was becoming a couch potato and that's not good for your mental health."

- 56, divorced
- Lives alone, section 8 housing
- Pleasant, kind, reliable, well-spoken
- Schizophrenia
 - **Symptoms stabilized with long-acting injectable AP**

- Played sports when younger – excited about the idea of getting back to exercise
- Some walking, volunteering – but otherwise little physical activity

Attendance

- GYM
 - Exercised twice a week for the first 12 weeks
- GROUP
 - Attended every group session

Outcomes

- **3 weeks** Feeling more confident – inquired about and obtained employment (where he stays active!)
- **12 weeks** stopped attending gym, now working 6 days/week
- Plans to join a gym with new income
- More active, better sleep, cutting back on smoking, improved diet

Joe

“Like the program said, a few exercises to use the physical activity to help work out my...mental problems. It don’t cure it, it don’t solve it but it help me deal with them better.”

- 60, divorced
- Lives alone, senior housing
- Positive, optimistic, energetic, extremely enthusiastic
- Schizophrenia
 - **Symptoms stabilized on AP medications**

- Volunteered at his church
- Attending classes at his residence—yoga, stretching, and tai chi

Attendance

- GYM
 - Exercised twice a week for the entire study (24 weeks)
- GROUP
 - Attended every group session

Outcomes

- If you ask Joe, this program got rid of his arthritis
- Helps him cope with his mental illness better
- Lost 5 pounds
- Provided source of social support, encouragement, and motivation to keep going
- Feels he has more energy
- Something positive to do to start the day—used to being up early after military service

Dave

"I mean this program has been heaven sent for me because I -- I was really at a low, low point in my -- in my life and I was very, very depressed, but since I've been working out just the last 12 weeks, I feel much better about myself."

- 59, single
- Lives alone
- Soft-spoken, gentle, has 11 grandchildren
- MDD w/ Psychotic

Features

- Severe depression
- Managing with medications, psychotherapy & case management

- Isolated-wants to engage more socially
- Before the study, was struggling with chronic depression and chronic passive suicidality

Attendance

- GYM
 - Exercised 3x a week, every week so far
 - Our best gym attender
- GROUP
 - Consistently attended group on a 4th day, each week

Outcomes

- HUGE behavioral activation effect—participating, making it through, and getting stronger has boosted his mood and confidence
- Change in affect from depressed to euthymic
- Feeling hopeful for the future

"I was very suicidal, depressed, not coming out of the house. When I did come out the house, I didn't went nowhere, maybe just to the corner store and back to the house, so like I said, this here -- this here has been a real -- I keep saying this has been a blessing for me, and it pulled me out of the hole I was in, and I was in a deep hole... A very deep hole... And, it gave me my life back."

Dave

"I'm just happy I had the time, enjoyed to come into this program and be a part of the study. I'm glad, and if I can be a shining light to somebody else because somebody else who come in this program like maybe -- you all might say, well, we had a person in here a while back ago named [Dave]. He did this. He was -- he was depressed, and he was down. He was suicidal, but yet, he came in and he worked the whole program and it was beneficial for him, you know. The first couple of weeks was hard for him, but he got into a pattern and he stayed there, and he stayed positive. He got positive, stayed in that positive mood, and he finished the program, and his life is better -- better than what it was before he started. That's what I want you all to be able to say."

Dave

"You know, I'm not going to forget what I have learned, and what I have known these last couple of months... The positivity... I'm gonna keep that going. I'm gonna keep the positive thinking, the food aspect, keep an eye on what I do -- put in my body... And, knowing -- knowing some of the warning signs when I -- warning signs of being depressed, keep busy. Always -- like I said, positive is the key word today, positive. Stay positive, think positive, always be positive. That's it."

Ed

"I used to get cramps in my legs and they were terrible. Sometimes I'll get a little cramp every now and then in my leg or my foot, but it's subsided now since I been going down there to the gym."

- 71
- Widowed
- Lives alone in his own apartment
- Very social, always joking around, an artist and painter
- Schizoaffective disorder
 - **On injectable APs**
 - **Followed by MHICM program**

- Not physically active prior to study, spends time socializing at neighborhood bar
- Transportation was a barrier to coming more frequently

Attendance

- GYM
 - Once a week, every week so far
- GROUP
 - Attended 11 of 12

Outcomes

- Enjoys the program
- Noticed some physical health benefits
- Liked having something to do
- He learned more about his health

Dylan

"After I started the program I started to get out more. I started to do a little more walking or just walk for sport or something like that. I started building up my strength."

- 60
- Long-term girlfriend
- Lives in house with partner
- Has a payee
- Quiet, kind, always smiling
- Schizophrenia, Substance use disorder
 - **Medication management**
 - **Substance abuse group**

- Likes to take care of his house
- Interested in building up his activity level and strength
- Transportation was a barrier to coming more frequently

Attendance

- GYM
 - Once a week, occasionally twice
- GROUP
 - Consistently attends each week

Outcomes

- Confidence boost—feels like he's achieved something
- Thinking more clearly
- Feels like he is "worth it"
- More willing to do things

Jeff

- 65
- Divorced
- Lives alone
- Soft-spoken, determined
- Schizophrenia with ongoing psychotic symptoms
 - **Engaged in multiple programs and services**

- Significant cognitive impairment and ongoing auditory hallucinations
- Difficult to engage—can't recall days and times of his appointments

Attendance

- GYM
 - Once a week, at times inconsistent
- GROUP
 - Has attended about half
 - Becoming more consistent over time

Outcomes

- Ongoing—in intensive phase
- Peer coaches providing a LOT of hands-on structure and support
- When he comes to group, goes down to gym after

Next Steps



- ▶ Complete Aim 2 – qualitative interviews
- ▶ Use feedback to make changes to the intervention
- ▶ Start Aim 3 trial in March or April 2019

The Study Team!



- ▶ Kinnera Altluri, B.S.
- ▶ Sera Havrilla, M.S., L.G.P.C.
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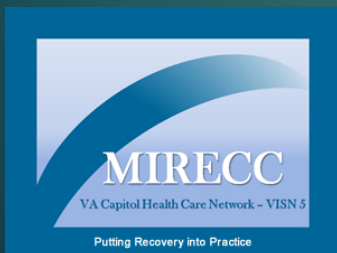
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