

## **Dancing and Movement for Those with Parkinson's Disease**

Marge Sklar and Ruth Almen

Imagine you are Dr. Rafi Eldor, Ph.D. and professor of Economics at Tel Aviv University. The year is 2008 and your doctor has just told you that you have Parkinson's Disease and will need nursing care within five years. Where do you go from here? Dr. Eldor had an interesting response. In order to stave off the effects of the disease and lead as normal a life as possible, he picked up his dancing shoes and became a ballroom dancer. Eight years later, Dr. Eldor is still teaching and dancing. And, no, he does not need nursing care.

### **What is Parkinson's Disease?**

Parkinson's disease (PD) affects over one million Americans, with approximately 280 in Marquette County. PD is a disorder of some parts of the brain that control movement. The nerve cells that normally produce dopamine in the brain stop functioning normally and some die prematurely.

Dopamine is a chemical in your brain that affects your emotions, movements and your sensations of pleasure and pain. Dopamine neurotransmitters are located in the deep middle region of your brain called the substantia nigra. Dopamine is not only responsible for physical movement, it also affects how someone learns and behaves.

People living with PD commonly have uncontrollable tremors, suffer from kinetic problems, such as sudden freezing, or not being able to maintain their movement; slower movements, postural imbalance, lack of control over the facial muscles and are subject to falls more so than the average person. Non-motor symptoms, such as depression, loss of sense of smell, gastric problems, cognitive changes can also be caused by PD. <sup>1</sup> While dopamine normally decreases as people age, PD disables the nerve cells that produce dopamine, so it is lost at a much faster rate than normal aging.

Many of those with PD must replace dopamine for to keep the symptoms under control. Proper drug dosages are difficult to assess initially and even when the correct dosage is found, there is no guarantee that the drugs will work as desired. After time, the drugs can stop working effectively, causing a need to increase dosage. However, there is a maximum amount of the drug that the body can take, and some with PD reach a maximum dosage and the drugs can no longer control the symptoms. The drugs used to treat PD can also have unpleasant side effects, such as drowsiness, nausea, lightheadedness, confusion and rapid heartbeat.

PD itself is not fatal, but its complications and side effects make it rank within the top fifteen causes of death in the United States. Parkinson's disease usually affects people over the age of 60, but it can occur in people in their twenties.

### **Can anything be done to ease PD symptoms?**

"Motion is lotion" is a common adage heard from physical therapists and other practitioners who deal with movement difficulties. This certainly holds true for those living with PD. At a recent symposium held in Kingsford, the speakers reiterated this message over and over again. "You may have Parkinson's, but Parkinson's doesn't have you," keynote speaker and director for



*Dances can be done either standing or seated*

Southwest Parkinson Society, Jo Bidwell said. "We want you to live that quality of life with Parkinson's. And if they do things like exercise and take their medication properly, they can live that quality of life."<sup>2</sup> According to the Michael J. Fox Foundation, "exercise can ease several of the motor symptoms of Parkinson's disease, including balance, flexibility and gait speed."<sup>3</sup>



MARK MORRIS  DANCE GROUP  BROOKLYN PARKINSON GROUP

The Mark Morris Dance Group in Brooklyn initiated the Dance for PD program in 2001; there are now centers across the world teaching dance based on the Mark Morris program. Teaching workshops and dance classes for those with PD are currently offered in Argentina, Australia, Belgium, Canada, China, France, Germany, India, Ireland, Israel, Italy, Luxembourg, Netherlands, New Zealand, Portugal, Russia, South Africa, Sweden, United Arab Emirates, United Kingdom and the United States<sup>4</sup>

### Why dancing?

It turns out that dancing is very, very good for you. Dancing engages both mind and body. The Albert Einstein College of Medicine conducted a 21-year research program, and concluded that "Dancing Makes You Smarter," and enumerates the long-term cognitive benefits of dancing.<sup>5</sup> While this research focuses on the ability of dance to help stave off Alzheimer's and other age-related cognitive functions, there is an expanding body of research in exercise programs to improve quality of life for those with PD. Studies indicate that Dance for PD taught by professional dancers and dance teachers positively affects both motor functions and quality of life aspects. The Journal of Neural Transmission reports that balance, tremor, gait and depression scores improved after an 8-week session of weekly dance classes. Several of the participants continued to attend dance classes four years later. In post-class interviews, participants reported physical, emotional and social benefits in post-class interviews. This was true of caregivers as well as participants with PD.<sup>6</sup>

A study performed in Japan randomly assigned people with PD into three groups: one group attended a weekly dance class; a second group attended a PD weekly exercise group; the third group was asked to continue their normal activities. The exercise and dance groups met for one hour per week for 12 weeks. Dance was more effective in improving motor function, cognitive function, and mental symptoms than were either of the other two options. The study concluded that dance is an effective method for rehabilitation in PD patients.<sup>7</sup>

Other studies show similar outcomes. Dancing can: improve quality of life; improve balance, gait and postural stability; decrease or lessen severity of tremor; reduce the likelihood of



*Across the floor in Brooklyn*

falls; decrease rigidity often associated with PD; improve control over hand and facial muscles. Furthermore, the benefits of dance carry over into everyday life competencies. Benefits are reported to be long-term following participation in a 10-week dance class led by professional dancer/teachers. There is evidence that dancing gives better outcomes than other types of exercise. This may be due in part to the social aspects of dance. In short, dancing is good for you and especially good for those with motor/cognitive disorders.

### **How does a Dancing for Parkinson's class differ from regular dancing classes?**

Often, those with PD suffer from impaired gait, poor balance, tremors and slower movement. Some with PD use walkers or wheelchairs. Teacher training focuses directly on the motor and non-motor symptoms. Teacher trainees undergo a series of learning experiences designed to teach them about the disease and to make their choreography and teaching specific to dancers with PD. All the movements used in a PD dance class are designed to be done from either a seated or a standing position. This helps ensure that everyone is included in the class.

### **So, what can I expect in a Dancing for Parkinson's class?**

A typical class is structured as follows: first there is a sequence of upper body stretches followed by a series of lower body movements; next comes a seated full-body workout; then the dancers use a barre or a chair back to perform standing exercises; finally, there are some across the floor movements. Even the across the floor dancing incorporates seated dancers. "Whatever can be done standing can be done seated" is a maxim taught to the dancer leaders/teachers from the first day. The music can be classical, jazz, rock, ballroom, folk and everything in between.

Marge Sklar, owner of and instructor at Dance Zone, recently completed the on-line Dancing for PD course and also attended two workshops at the Mark Morris Dance Studio in Brooklyn. The workshops were intense; there were classes in Ballet, Modern, Tap,

## WHY DANCE FOR PARKINSONS?

**The ten points below explain why dance is particularly beneficial for people with Parkinson's disease. They are demonstrated in the "Why Dance for Parkinson's Disease?" DVD**

**(<http://danceforparkinsons.org/resources/video-resources>)**

- 1. Dance develops flexibility and instills confidence.**
- 2. Dance is first and foremost a stimulating mental activity that connects mind to body.**
- 3. Dance breaks isolation.**
- 4. Dance invokes imagery in the service of graceful movement.**
- 5. Dance focuses attention on eyes, ears and touch as tools to assist in movement and balance.**
- 6. Dance increases awareness of where all parts of the body are in space.**
- 7. Dance tells stories.**
- 8. Dance sparks creativity.**
- 9. The basis of dance is rhythm.**
- 10. The essence of dance is joy.**

**<http://danceforparkinsons.org/resources>**

Jazz, Afro-Caribbean dance styles; there were also classes in Tai Chi, Somatics, Rhythm, Music and Clowning. After each lesson, the dancers were taught how to apply what they learned to a Dancing for PD class, especially how to design dance choreography so that all students, no matter what their abilities, are included. Marge found it challenging but invigorating to keep pace with the professional performing dancers after all these years. It was certainly encouraging to be included among these professionals with one goal – to help those with PD take control.

Dr. Rafi Eldor certainly did take control. *“I decided I’m going to be a dancer rather than a Parkinson’s disease patient.”* “When I discovered I have Parkinson’s disease, my doctors predicted I will need nursing by now. Surprisingly, my condition is constantly improving, and I continue living my life regularly as an economics professor and a family man. I owe this mainly to ballroom dancing and the people around me. Dancing enabled me to challenge myself and overcome symptoms of Parkinson’s disease, and changed my life drastically for the better.

It is important to me to share my experience for other patients’ benefits, and to remind ourselves that we can take our fate in our own hands.”<sup>8</sup>

### **Where can I find a Dancing for PD class?**



*A Dance for PD class in the Philippines*

Michigan has seven locations that offer dance classes for those with PD. The newest offering is right here in Marquette. The class is sponsored jointly by Lake Superior Hospice and Dance Zone. The class is based on the techniques and principles learned from the Mark Morris Dance for PD program. Instructor Marge Sklar has taught ballroom, square, contra and social dancing in the area for around 30 years and has undergone special training for dancing for PD. Make no mistake; you will work in this class. But you will also have fun! We gear

the class toward the participants and adjust the day’s lesson plan as necessary to meet the abilities of the dancers present. Class meets Tuesdays and Fridays from 10-11:15 AM and Saturdays from 1-2:15 PM. We incorporate everything from slow arm warmups to ballroom and tap dancing. (Yes, you CAN tap dance while seated; you can do seated plies, too!) Class is open to those with PD, caregivers, family and friends. Class is free, but donations to support the program are gratefully accepted. Absolutely no dance experience is necessary. Two left feet? Don’t worry. You can’t trip while dancing in a chair.

### **Are there other support options for PD in the area?**

Yes, the Negaunee Senior Citizens Center holds the Parkinson’s Support Group on the fourth Monday of each month. There will be a special showing of Dave Iverson’s award-winning film, *Capturing Grace*, on Monday, February 27, 2-3:30 PM at the center. This film shows the daily lives of several dancers with the Mark Morris Dance for PD program and their preparation for a public performance. Marquette’s YMCA offers a Pedaling for Parkinson’s class. Classes are seven weeks long and meet 3 afternoons per week. No experience is necessary.

## So, what are you waiting for?

Take control! Get to the Y or Dance Zone for a Parkinson's movement class. The Pedaling for Parkinson's is offered as a class, with scheduled beginning and ending dates. The Dance and Movement for Parkinson's is an ongoing class; feel free to come to any class session; no need to register in advance.

### For more information, see:

National Parkinson Foundation: <http://www.parkinson.org/>

Michigan Parkinson Foundation: <https://www.parkinsonsmi.org/parkinson-facts/general-pd-information>

Michael J. Fox Foundation: <https://www.michaeljfox.org/>

YMCA of Marquette County Pedaling for Parkinson's program:

<http://www.ycamqt.org/participate/healthy-living/pedaling-for-parkinson%E2%80%99s%E2%84%A2.html> 1420 Pine Street, Marquette, 906 227-9622

Negaunee Senior Citizens Center: 10 Jackson St, Negaunee, 906 475-6266

Lake Superior Hospice: 914 W. Baraga Ave, Marquette, 906-225-7760, Ruth Almen, Director of Community Relations and Program Development/ Adult Day Services, [ralmen@lakesuperiorhospice.org](mailto:ralmen@lakesuperiorhospice.org), <http://www.lakesuperiorhospice.org/>

UPHS Rehab Services | Marquette | LSVT BIG and LSVT LOUD, 555 County Rd HQ, Marquette, MI 49855. 906-225-5900 <http://uprehab.com/treatment-conditions/lsvt-parkinsons-program/>

Dance Zone: 1113 Lincoln Ave, Marquette, 906-236-1457, [marge@dancezonemqt.org](mailto:marge@dancezonemqt.org)

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<sup>1</sup> <http://www.parkinson.org/sites/default/files/Parkinsonism.pdf> - 1/3/17

<sup>2</sup> <http://www.uppermichiganssource.com/content/news/Living-With-Parkinsons-Disease-Symposium-397015771.html>

<sup>3</sup> <https://www.michaeljfox.org/foundation/news-detail.php?getting-started-exercise-and-parkinson-disease>

<sup>4</sup> <http://danceforparkinsons.org/find-a-class/class-locations>

<sup>5</sup> <http://thealzheimersproject.org/2014/12/ballroom-dancing-and-alzheimers-can-dancing-make-you-smarter/>

<sup>6</sup> Journal of Neural Transmission (2015, 122:1263–1270)

<sup>7</sup> *Complementary Therapies in Medicine*. 2015 Apr;23(2):210-9. doi: 10.1016/j.ctim.2015.01.010. Epub 2015 Jan 16.)

<sup>8</sup> <https://www.youtube.com/watch?v=QzHh07KK-1o>

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