Parkinson’s symptoms and consequences of this neurodegenerative

Parkinson’s disease is one of the most complicated and challenging health conditions in elderly people. In 2000, an estimated one million people in the U. S. suffered the symptoms and consequences of this neurodegenerative disorder (Baatile, Langbein, Weaver, Maloney & Jost, 2000).

According to Parkinson’s Disease Foundation (2011), approximately ten million people all over the world live with Parkinson’s disease. The risks and incidence of PD increase with age. Much has been written and said about the incidence, prevalence, physical and neurological factors of Parkinson’s disease. Unfortunately, little is known about the emotional and spiritual implications of PD for the quality of life and wellbeing. The future research must focus on the analysis of the spiritual and emotional aspects of Parkinson’s disease and possible ways to improve psychological, emotional, and spiritual wellbeing of elderly people with PD.

Parkinson’s Disease (PD): A Brief Overview

Parkinson’s Disease (PD) is a serious neurodegenerative disorder that affects approximately one million people in the U. S.

(Baatile et al, 2000; Parkinson’s Disease Foundation, 2011). “ The disease is usually characterized by the following symptoms: impaired gait, bradykinesia, rigidity, tremors, diminished expression, kyphotic posture, seborrhea, and sialorrhea (Baatile et al, 2000, p. 529). PD is the disease of elderly people, since its early onset usually happens between 40 and 60 years of age (Baatile et al, 2000). However, one form of PD can be particularly dangerous for teens (Baatile et al, 2000). PD is believed to be caused by the lack of dopamine in the human brain (Baatile et al, 2000). In

rare cases, head trauma can trigger the development of PD (Baatile et al, 2000). Scientists were able to identify and describe the genetic factors and predictors of PD, but the exact mechanisms of PD, especially in teens, remain unknown (Baatile et al, 2000).

PD is a complex disorder that affects all spheres of life and produces heavy influences on physical, emotional and spiritual wellbeing. Given the complexity of the disorder and its effects on patient wellbeing, its physical, neurological, emotional, and spiritual aspects need to be better understood.

Parkinson’s Disease: Physical Aspects

There is an emerging consensus that physical difficulties, including movement disorders, are a hallmark of PD; they severely reduce individuals’ ability to function and cope with even the simplest physical tasks, for example, walking, turning around, writing, etc. (Morris, 2000). The past years witnessed a rapid growth in professional understanding of movement disorders in PD patients (Morris, 2000). Of these, bradykinesia (reduced speed and amplitude of movements) is the most common physical symptom affecting more than 80% patients with PD (Morris, 2000). Other movement disorders include akinesia, freezing episodes, impaired postural control, tremor, and numerous adaptive responses that manifest through muscle weakness, reduced activity, and reduced aerobic capacity (Morris, 2000). Movement disorders in PD subjects are caused by disruptions of the neurotransmitters responsible for the functioning of motor cortical regions in the human brain (Morris, 2000).

Low levels of dopamine disrupt the activity of supplementary motor areas and make motor activity in individuals with PD extremely problematic. They may feel that the speed and size of their movements have reduced. They may fail to initiate movement or cease it. Difficulties with terminating movements are the major predictors of slips and falls in people with PD (Morris, 2000).

Anhedonia is another problem – PD subjects experience low levels of physical pleasure (Isella et al, 2003). Again, the lack or absence of physical pleasure in individuals with PD is caused by the disruptions in neurological mechanisms (Isella et al, 2003). Simultaneously, the psychological and emotional consequences of anhedonia cannot be overstated, since PD subjects who cannot experience physical pleasure also feel apathy and lack motivation to improve their physical and emotional condition (Isella et al, 2003). Physical therapy strategies have a potential to reduce the severity of movement disorders in people with PD. Physical therapy does not influence the disease process per se but can help to improve the lives and wellbeing of PD patients through teaching and training (Keus et al, 2007). Researchers suggest that physical therapy and exercises, in particular, increase the levels of dopamine and speed up its metabolism; consequentially, functional independence of patients with PD increases (Baatile et al, 2000). This is, probably, why the neurological aspects of Parkinson’s disease need to be better understood.

The Neurological Aspects of Parkinson’s Disease

Parkinson’s disease (PD) is a neurological disorder, which is caused by the disruptions in neurotransmitters and low levels of dopamine metabolism.

The growing evidence suggests that the motor impairments in PD patients are accompanied by progressive neuropsychological impairments (Mattay et al, 2002). It is generally believed that degeneration of the substantia Ingra pars compacta (SNpc) with subsequent depletion of dopamine in the putamen and resulting disruption of basal ganglia-thalamocortical loops results in the classical motor signs and symptoms of PD. (Mattay et al, 2002, p. 156) Dysfunctional changes in supplementary motor areas (SMA) lead to akinesia, whereas neurological changes in the motor cortex lead to the development of bradykinesia (Mattay et al, 2002). Whether or not all these changes develop simultaneously or follow a coherent sequence is difficult to define (Braak et al, 2003).

Braak et al (2003) suggest that neuronal damage preceding the development of PD physical, neurological, and cognitive symptoms follows a predetermined sequence. Although neurological mechanisms predetermine and predict the development of PD in elderly patients, the emotional and spiritual aspects of the disease deserve particular attention.

Parkinson’s Disease: A Matter of Emotions

That Parkinson’s disease (PD) is the source of multiple emotional problems and complications is a well-known fact. Emotional functioning is one of the most problematic areas in professional PD research. On the one hand, elderly people with PD experience significant difficulties with interpreting emotional information and expressions of others (Clark, Neargarder & Cronin-Golomb, 2008). On the other hand, depression and apathy are the most common emotional products of PD. Unfortunately, emotional

recognition impairments in PD patients are poorly understood (Clark et al, 2008).

Depression is believed to be one of the most complex emotional complications of PD. Depression in PD subjects is more frequent than in the age-matched population (Schrag, Jahanshahi & Quinn, 2001). Depression in PD subjects is a complex product of multiple factors and influences.

Statistically, 19. 6 percent of patients with PD experience the signs and symptoms of depression (Schrag et al, 2001). Disease severity contributes to depression in individuals with PD (Schrag et al, 2001). The percentage of depressed patients at initial stages of PD is lower than that at later stages (Schrag et al, 2001). PD subjects with cognitive impairments and akinesia are more susceptible to the risks of depression than individuals without these symptoms (Schrag et al, 2001). Postural instability is a frequent factor of depression in PD subjects (Schrag et al, 2001). Patients who experience a recent deterioration in their condition report higher levels of depression and apathy (Schrag et al, 2001).

However, that the severity of depression in PD subjects depends on the way patients themselves interpret the severity of their health condition (Karlsen, Larsen, Tandberg & Meland, 1999; Schrag et al, 2001). These emotional difficulties are further accompanied by sleep disorders, emotional distress, and the lack of emotional energy and motivation (Karlsen et al, 1999). All these difficulties reduce the quality of life in elderly people with PD. Apparently, PD is not merely a matter of neurology but a serious factor of emotional difficulties in elderly people. Therefore, it is imperative that

emotional consequences and inconsistencies of Parkinson’s disease are examined and understood.

Parkinson’s Disease: Reconsidering Spirituality

Unfortunately, little is known of the spiritual aspects of Parkinson’s disease (PD). McNamara, Durso and Brown (2006) suggest that patients with PD express low interest in spiritual development and religiosity.

In the meantime, PD brings profound spiritual and psychological meanings into the lives of adult children, whose parents were diagnosed with PD (Blanchard, Hodgson, Lamson & Dosser, 2009). It seems that children of PD patients are more vulnerable to spiritual changes than their parents with PD. Like any chronic illness, PD affects family relations and changes family members’ perceptions about the entire family landscape (Blanchard et al, 2009). Surprisingly or not, PD diagnosis helps children to improve their relations with elderly parents (Blanchard et al, 2009).

However, spiritual concerns of PD subjects need to be better understood. The gap in research regarding the effects of PD on patients’ spirituality continues to persist. The future research must focus on the analysis of the emotional and spiritual issues of PD and the development of effective methods of coping with the spiritual and emotional complexities of Parkinson’s disease.

Conclusion

Parkinson’s disease is a serious neurological disorder. PD affects an estimated ten million people worldwide.

PD is a disease of elderly, since its early onset usually happens between 40 and 70 years. The most common symptoms of PD include muscle weakness, reduced activity, and reduced aerobic capacity. That disruptions of neurotransmitters and low levels of dopamine are responsible for the development of PD has been abundantly established.

Simultaneously, little is known of the emotional and spiritual aspects of PD. PD subjects experience depression and apathy. They express low interest in spirituality and religiosity.

The future research must focus on the analysis of the spiritual and emotional aspects of Parkinson’s disease and possible ways to improve psychological, emotional, and spiritual wellbeing of elderly people with PD.

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