

Nursing Care - Parkinson's Disease

Introduction

Parkinson's disease (PD) is a degenerative and chronic disorder, which has no known cause or cure (*Parkinson's Disease Foundation, 2016*). Although there are medications and nursing care treatments to help the patients, the disease worsens over time. PD affects the nerve cells in those regions of the brain that produce dopamine, a substance responsible for enabling human movement and coordination (*Lynn, 2012*). Naturally then, with the loss of dopaminergic cells, PD results in restricted mobility, tremor of body parts, lack of body balance, slow movement (bradykinesia), etc. PD-affected people have a tendency to fall and get injured. This often leads them to avoid social gatherings and hence, they suffer from social isolation as a consequence. As part of their treatment and care, nurses are trained to assess the patient situation on a case-by-case basis and offer help accordingly. The current case discusses two of the major priorities of care pertaining to the case of 77 year old Johann, who suffers from Parkinson's at its degenerative worst and is under nursing care. The chosen patient care priorities chosen are increased risk of fall and injuries, and increased risk of social isolation.

Patient Background

Johann Silvermann, the patient under discussion, is a widower and has been suffering from PD since the last 4 years. He had always lived an independent life, more so after his wife's demise, where he managed his daily life alone from household chores to picking up grocery and others. Even before he have had been diagnosed with PD, he chose a self-sufficient life, in which he does not want to be any kind of a burden to his brother and his family living close by. Nor is he known to have been socially or psychologically dependent on any neighbour or anyone. Therefore, the worsening of his PD condition pushes him further into the increased risks of social isolation and physical fall without anyone to help. Although he takes medicines for the disease, his physical instability has deteriorated to the extent that he needs nursing care and supervision.

As Johann seems a strong man, less willing to remain dependent on anyone, his nursing care priorities need to take this into account and handle his dignity effectively. Although he is originally from Germany, his cultural values will have a lot of this country's influence as he has been long living

here with financial and social independence. The sports and adventure spirit seems strong in him, which leads him to do holidays each year and enjoy life. Unfortunately, he had not been able to do that this year due to an increased impaired mobility. This might be depressing for Johann and the nurse responsible for his care needs to be careful about it. For Johann, the risk of fall and injury, along with that of social isolation is high. Therefore, these are the two of the care priorities chosen for discussion.

Risk of Fall or Injury

Falls are recurring and the commonest symptom of PD (*Contreras & Grandas, 2012*). Many studies have observed that 38% to 87% of PD patients experience falls as the disease progresses (*Gray & Hildebrand, 2000; Ashburn, et. al., 2001; Balash, et. al., 2005; Hely, et. al., 2008*). These falls cause injury that are generally not very severe, but may sometimes even be fatal. Nurses caring for these patients need to understand that these falls are a significant source of morbidity, depression and social seclusion in Parkinson's-affected people. Hence, the treatment should majorly pivot around preventing falls and injuries as much as possible.

Going by Levett-Jones' Clinical Reasoning Framework, Johann's nurse would first need to understand the patient situation as is, gather as much information about him and his illness from his friends and family, process that information and then begin to approach treating the condition. Johann's hand tremors have reportedly gone worse, for which he is unable to cook, tie shoelaces or perform any other tasks involving fine motor skills. It is unknown to what extent his legs are unstable and whether he may need help with walking too. However, the nurse assigned to manage his care in his home must keep assessing his PD condition, identifying problems/issues as per the Levett-Jones' cycle.

Contreras & Grandas (2012) feel that fall prevention has become one of the most essential needs in PD patients and one which has often been left inadequately met. This is because people often tend to focus on the fall and post-fall care than fall-prevention strategies. It is hugely important to identify the risk factors and provide care with focus on how falls and injuries can be prevented for Johann. Fall prevention is necessary in the case of Johann for three primary reasons:

- A fall can injure him badly and reduce his mobility to a large extent (*Hely, et. al., 2008*).

- A fall would land him in a hospital or nursing home, compelling him out of the comforts of his home (*Temlett & Thompson, 2006; Hely, et. al., 2008*).
- A fall would increase his medical costs manifold and therefore, raise the financial burden of treatment (*Spottke, et. al., 2005*).

Therefore, the nurse assigned must assess his instability status from time to time -- a span of 3 to 4 months -- along with other symptoms of the disease progression. Since Johann already has reduced motor skills, chances would be high that his leg movements will be impaired soon (if not already) and he might encounter sudden stiffness of limbs and consequently fall. *Gray & Hildebrand's (2000)* study of PD patients reveal that 59% of the respondents experienced falls, of which 40% of the patients encountered injuries although not severe. But what these falls effectively do is to worsen the case further, generating complications, apart from expenses and morbidity.

As part of her nursing care priority, Johann's nurse should assess his postural instability by:

- Checking his medical history
- Physical examination
- The pull test (*Fernandez, et. al., 2009*)

To manage these risks, the nurse would need to balance the treatment with both medicines and non-medicinal approaches, although medicines do not directly reduce postural instabilities. Nonpharmacological approaches include (*Fernandez, et. al., 2009*):

- Physio-therapists
- Imparting body balance training and exercises
- Teaching how to use assistive devices like walking sticks/walkers
- Home safety initiatives like fitting handrails, enhancing the indoor illumination, clearing the floor clutter, removing throw rugs, etc.

Risk of Social Isolation

Nicholson (2009) defines social isolation as "a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and they are deficient in fulfilling and quality relationships" (p.1346). Naturally then, this 'state' can rob the

meaningfulness of life and push the individual to depression and morbidity as humans are generally social beings and find comfort in human interactions (*Fernandez, et. al., 2009*). Although Johann was not very social even before he was diagnosed with Parkinson's, he still had his social independence intact, where he could walk and do things on his own without having to worry about any embarrassment of falls or motor inefficiencies. Thus, his condition now brings in the risk of social isolation, where he would want to avoid all sorts of human company because he would not want to be known as a diseased, incapable and dependent old man. Johann's nurse would need to handle this psychological aspect of his PD condition with care. His treatment demands dignity as he was, so far, a self-sufficient man who hated to depend on anyone else for financial reasons or otherwise.

There is generally no linearity or predictable pattern of Parkinson's symptoms. They can happen anywhere and anytime. This unpredictability is another reason why PD patients voluntarily avoid social gatherings for fear of unwanted attention and embarrassment (*McComb & Tickle-Degnen, 2005; Wressle, et. al., 2007*). As the disease condition progresses and symptoms become severe, their visitors and social interactions reduce further and they are put under higher levels of care.

A lot depends on the healthcare provider or the nurse who is assigned Johann's care to assess the impact of PD on his ability to socialise, without feeling embarrassed. *Fernandez, et. al. (2009)* observed that patients who are unable to or do not wish to leave home as a result of their Parkinson's symptoms, are more at the risk of social isolation. Following the Levett-Jones' framework, Johann's nurse should first try to assess his cognitive status and the amount of socialisation he engaged in prior to the disease and now. Information that needs to be processed as part of his nursing care are:

- Johann's ability to communicate and convey messages
- Whether Johann had any change in the number of social touch points over time
- Whether Johann have had any phases of depression
- The modes of mobility used by Johann -- walking /car/bus/etc.
- Whether Johann has any access to a support network in or out of his house

In order to manage Johann's risk of social isolation, the nurse might consider adopting an effective, evaluative and evidence-based tool for understanding the amount of social isolation Johann experiences. She might follow up the findings with other healthcare staff to consult and strategise. If

found riskily isolated, the nurse would need to treat Johann both pharmacologically and non-pharmacologically. The non-pharmacological approaches would include (Fernandez, et. al., 2009):

- Support from a counsellor or mental health provider
- Making patient's family, friends and all direct caregivers aware of the limitations of the patient and asking them to interact with some patience, so as not to make the patient conscious of his illness.
- Treat the depression with medications and having regular conversations with the patient.
- Having the patient become a part of some PD support group, and other supportive services so that he does not feel alienated.

Conclusion

There are an estimated over 5 million diagnosed Parkinson's cases across the globe (WHO, 2006) and therefore, the nursing care approaches to this disease are also well developed with lot of research based on several case findings and pharmacology. In Johann's case, the two most important nursing case priorities seem to be related to fall/injury and social isolation. Hence, the nurse appointed for his care must prevent falls and keep him meaningfully engaged in conversations or some safe activities so that he feels socially inclusive. What is most important in this case would be to protect the patient's dignity, without making him conscious of the compromised quality of his life due to Parkinson's.

References

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