An Australian Government Initiative









DASH to the InfoLine Summary



- Quality of life in Parkinson's disease (PD) is dependent on the physical and non-physical symptoms of the condition
- Symptoms like Depression, Anxiety, Sleep disturbance and Hallucinations (DASH symptoms), as well as cognitive decline (i.e. difficulties with memory and thinking functions), often have a greater impact on quality of life than the physical symptoms of PD
- Cognitive decline can represent the early beginnings of dementia. Throughout this booklet, cognitive decline refers to mild-tomoderate changes in memory and thinking functions. This may lead to a progressive worsening of symptoms that interfere with daily functioning and manifest as dementia
- **DASH** symptoms are often under-recognised and are commonly associated with cognitive decline
- **DASH** symptoms may respond to drug and non-drug treatments
- Treating DASH symptoms should help improve your quality of life and MAY help prevent cognitive decline
- This booklet contains information that will help you to better understand and recognise **DASH** symptoms, and contains a number of helpful tips aimed at improving quality of life
- If you have any further questions or would like more information then you should DASH to the InfoLine (1800 644 189). Trained staff are available on this toll free number and will be able to give you advice on approaches to treatment and where to get further help

Contents

Introduction	4
Recognising Red Flags for Improved Quality of Life in Parkinson's Disease	6
Why bother looking for red flags?	6
What are the red flags?	6
Will treating DASH symptoms help?	6
Are there any treatments for cognitive decline and dementia in Parkinson's disease?	7
What should I do if I am worried that I have DASH symptoms?	7
How can I find out if I have significant DASH symptoms?	7
Where can I find help for my DASH symptoms?	8
Risk Factors for Reduced Quality of Life and Cognitive Decline in Parkinson's Disease	9
'Fixed risks'	9
Age of disease onset	9
Disease duration	10
Predominant physical symptoms	10
'Treatable risks' – DASH symptoms	10
Depression in Parkinson's disease	10
Anxiety in Parkinson's disease	12
Sleep disturbance in Parkinson's disease	14
Hallucinations and psychosis in Parkinson's disease	16
The 'Wearing Off' Phenomenon in Parkinson's Disease	18
Psychological Support in Parkinson's Disease	20
Rating Your Own Symptoms	22
Strategies for Dealing with Cognitive Decline in Parkinson's Disease	23
Other Ways to Promote a Healthy Brain and Mind in Parkinson's Disease	25
Cognitive exercise	25
Physical exercise	26
Summing Up	27
Where to Get Help	28

Authors: Dr Simon JG Lewis and A/Prof Sharon L Naismith

Published 2010, @Brain & Mind Research Institute. This guide has been developed by the Brain & Mind Research Institute in conjunction with Parkinson's NSW and the Commonwealth Government of Australia. Information provided in this publication is intended for educational purposes and does not replace the advice of your healthcare professional. ISBN 978-0-646-52827-4

Introduction



Although every patient with Parkinson's disease (PD) may appear to be very different, with a variety of symptoms and responses to treatment, they all share common concerns.

- How will this disease affect my life?
- How will this condition impact on the people I love?
- Will I lose my independence?
- What will happen to my quality of life?

These questions arise because at the moment there is no cure for PD. Although medications have dramatically improved the outlook for patients with PD and their families over the past 40 years, everyone still appreciates that the condition follows a relentless progression with increasing difficulties over time.



One of the greatest fears faced by people living with Parkinson's (PLWP) is the possibility of developing dementia. Dementia is a progressive brain condition that involves losing 'cognitive' abilities such as memory, problem-solving and word-finding. It is true that PD carries a risk of this type of cognitive decline; however, this is usually a very slow process and may not affect everyone. Given this lingering concern, it is important for PLWP to address the common features that may be associated with cognitive decline. In this regard, considerable scientific data suggest that features such as **D**epression, **A**nxiety, **S**leep disturbance and Hallucinations (DASH symptoms) are associated with cognitive decline. Furthermore, all of these symptoms are known to significantly reduce quality of life; therefore, early recognition and management of these potential 'red flags' is warranted. While we do not know whether addressing these red flags will actually prevent or delay cognitive decline, it is clear that targeting such symptoms should lead to an improved quality of life.

This booklet is intended to foster an awareness of the symptoms of depression, anxiety, sleep disturbance and hallucinations, and to highlight the key issues that promote a healthy brain and mind in PLWP.

Recognising Red Flags for Improved Quality of Life in Parkinson's Disease

Why bother looking for red flags?

In medicine it is widely accepted that 'prevention is better than cure'. This has led to a range of guidelines for various conditions (e.g. breast cancer, meningitis) that are intended to help people living in the community to recognise early warning signs. Therefore, it would seem reasonable that PLWP would like to know about specific 'red flags,' for which treatment could improve their quality of life and possibly reduce the risk or slow the progression of cognitive decline.

What are the red flags?

Red flags are risk factors that are associated with a reduced quality of life and a higher risk of developing cognitive decline in PD (see 'Risk Factors for Reduced Quality of Life and Cognitive Decline in Parkinson's Disease' page 9). Although a number of these identified risk factors represent issues that cannot be addressed, such as age at disease onset and duration of disease, there are a number of symptoms (**DASH** symptoms) that can be addressed with medical and non-medical approaches.

- Depression (page 10)
- Anxiety (page 12)
- Sleep disturbance (page 14)
- Hallucinations and psychosis (page 16)

Will treating **DASH** symptoms help?

Currently, **WE DO NOT KNOW** whether actively treating **DASH** symptoms will delay or prevent cognitive decline in PD. However, it is obvious that improving DASH symptoms should lead to an enhanced quality of life and thus PLWP should be aiming for a healthy brain and mind.

Are there any treatments for cognitive decline and dementia in Parkinson's disease?

A number of medications have been trialled worldwide and some countries have licensed tablets and patches that are believed to help PLWP who have developed dementia. These treatments are not yet available in Australia, as the results of more comprehensive research studies are still to be made available. However, the hope is that more effective agents will continue to be developed over the coming years that will help to prevent cognitive decline.

What should I do if I am worried that I have **DASH** symptoms?

Many PLWP suffer from **DASH** symptoms and are not troubled by cognitive decline. **DASH** symptoms can be improved with specific approaches, and people vary enormously with regard to the symptoms they experience. More detailed information is available in the following sections on **D**epression, **A**nxiety, **S**leep disturbance and **H**allucinations (page 10).

How can I find out if I have significant **DASH** symptoms?

Many PLWP already know how severely they are affected by **DASH** symptoms. However, often the people closest to you will be able to help too. It can be difficult to gauge your own levels of anxiety or sleep disturbance, and those closest to you will be able to help you judge the severity of your **DASH** symptoms. To help you further we have included a section to help you assess your own **DASH** symptoms (see 'Rating Your Own Symptoms' page 22).

Where can I find help for my DASH symptoms?

Recognising **DASH** symptoms at an early stage, before they become problematic, is an excellent first step; but it is also important to then be able to do something about them. The following are valuable sources of help and advice:

- DASH to the InfoLine toll free advice from the InfoLine on 1800 644 189
- Local Parkinson's Australia support groups
- General practitioners
- Specialist Parkinson's nurses
- Specialists such as neurologists or geriatricians
- Psychiatrists and psychologists.

There are a number of ways to gain further information and advice, and some useful details are available from the staff on the InfoLine on 1800 644 189, a toll free number that is dedicated to PLWP.



Risk Factors for Reduced Quality of Life and Cognitive Decline in Parkinson's Disease

Many studies have been conducted to identify the features that tend to be associated with reduced quality of life and cognitive decline in PD. These features are listed below. It should be emphasised that these factors only influence risk, which **DOES NOT MEAN** that if present they will necessarily lead to the development of cognitive decline or dementia.

- Age of disease onset
- Disease duration
- Predominant physical symptoms
- Depression
- Anxiety
- Sleep disturbance
- Hallucinations and psychosis (e.g. paranoia, delusions)

Whereas a few of these factors appear to be 'fixed risks', it is important to note that others may potentially be modified by a variety of interventions.

'Fixed risks'

Age of disease onset

It is perhaps not surprising that patients who develop PD at an older age are more likely to have a reduced quality of life and are at a higher risk of developing cognitive decline. Indeed, the rate of dementia stemming from all causes rises with age. Research conducted on brains of deceased PD patients has shown that they may also have other pathological changes, such as



Alzheimer's disease and strokes. Therefore, older people who develop PD may have 'less reserve' in the system, with a greater risk of disability.

Disease duration

Patients with PD who have had the disease longer (over 15 years) are more prone to have a reduced quality of life and are at a higher risk of developing cognitive decline. This is likely to be related to the progression of their underlying condition, but may also be partially due to the development of additional common conditions, such as heart disease and strokes.

Predominant physical symptoms

A number of research studies have found that patients who are predominantly troubled by symptoms of tremor appear to have less of a reduction in their quality of life, and lower rates of cognitive decline. Conversely, symptoms such as stiffness, slowness and difficulty walking appear to be related to a poorer quality of life and a higher likelihood of developing cognitive decline. These findings are likely related to differing patterns of pathology in the brain and remain the focus of ongoing research.

'Treatable risks' – **DASH** symptoms

Depression in Parkinson's disease

For PLWP, depression is recognised as one of the leading predictors of quality of life and is believed to affect at least 30% of patients. Importantly, depression has also been demonstrated in research studies as having a very high association with the development of cognitive decline in PD.

Although one might reasonably expect that depression occurs as a natural reaction to the physical disability of the disease, it is now

widely accepted that mood disturbances are more likely related to underlying chemical changes that occur in the brain in PD. The incidence of depression in people who go on to develop PD is far in excess of that found in the general population. This suggests that the degenerative changes of PD occurring in the brain may make individuals vulnerable to mood changes before any physical symptoms manifest.

Crucially, the pattern of depressive symptoms seen in PLWP is distinct from that commonly seen in people with 'major depression' who don't have PD. Typically, PLWP are not so troubled by sadness, low mood, guilt and thoughts of suicide. Whilst they do lose their ability to derive pleasure from activities, PLWP often experience more problems with concentration, apathy and fatigue.

Treating depression in PD is of vital importance for improving quality of life, and many therapeutic options exist in addition to medications. In the

Survival tips for depression

- Plan your days and aim to include tasks that give you a sense of achievement and pleasure
- Remain active and continue hobbies, exercise and leisure interests
- Avoid excess alcohol
- Remain engaged with family and friends
- Seek professional help if your mood remains low for longer than 2 weeks

first instance, it is important to identify the presence of depression. Clinicians often struggle to detect psychological problems, focusing instead on physical complaints. In addition, PLWP frequently dismiss



or minimise their own symptoms, making it more difficult for other people to identify the problem. It is important to try to recognise any obvious precipitants that are worsening low mood. On occasion symptoms of depression may be related to inadequate treatment of physical symptoms and there may be a classic pattern of emotional symptoms related to the 'wearing off' phenomenon, in which symptoms become worse towards the end of a medication dose (see 'The 'Wearing Off' Phenomenon in Parkinson's Disease' page 18).

Having excluded any factors that are causing or aggravating depression, it is important to consider treatment. This can be done with medications, which many PLWP find difficult to accept. However, you should bear in mind that these medications are intended to restore the balance of chemicals disrupted by the changes of PD occurring in the brain. The choice of antidepressant medication is something that should be considered on a case-by-case basis with your doctor. Some medications have side effects that might be seen as beneficial, such as drying up excessive saliva, whereas others may complicate other-existing medical conditions, such as irregular heart rhythms and difficulties passing urine.

Depression can also be tackled with a range of non-medication based approaches. It is clear that support systems, where PLWP can discuss their issues, play a major role in maintaining well-being. Under the auspices of Parkinson's Australia, each state has a network of local support groups where PLWP can meet and receive assistance. In addition, the toll free Parkinson's InfoLine (1800 644 189) offers a service where PLWP can access help and advice across a range of complex issues related to PD, including a psychological counselling service (see 'Psychological Support in Parkinson's Disease' page 20).

Anxiety in Parkinson's disease

It is very difficult to identify how many PLWP suffer with anxiety disorder; like depression, it has been a relatively under-recognised symptom.

Survival tips for anxiety

- Don't avoid situations that make you feel anxious – this will only reinforce the anxiety
- Try some relaxation approaches like slow breathing exercises and muscle relaxation techniques
- Exercise regularly to relieve stress and tension
- Try to replace constant worrying with other tasks that engage your mind (e.g. crosswords, sudoku, watching a movie or talking to a friend)
- Seek professional help if you are having panic attacks or are avoiding situations for fear of getting anxious

However, recent research studies have suggested that almost half of all PLWP may be troubled at some time in their illness with some form of anxiety disorder, leading to a reduced quality of life. Furthermore, the presence of anxiety in PLWP has been associated with higher rates of cognitive decline.

PLWP may experience a range of anxiety symptoms. Generalised anxiety is common and includes symptoms such as feeling worried, nervous, stressed or tense. In addition, PLWP may also suffer from panic attacks characterised by physical manifestations such as palpitations, sweating, feeling dizzy and breathlessness. These attacks are commonly provoked by certain environments or situations. Many PLWP prefer to remain within their 'comfort zone', avoiding public places, shopping centres and public transport (agoraphobia) as well as social interactions such as public dining and parties (social phobia). In addition, some patients develop specific periods of anxiety related to particular physical symptoms, such as when they are concerned that they might fall or when they



experience the 'wearing off' phenomenon (see 'The 'Wearing Off' Phenomenon in Parkinson's Disease' page 18).

The treatment of anxiety in PLWP often poses a difficult challenge. As highlighted above, there may be a number of factors contributing to an individual's anxiety and these must be explored and identified so as to mitigate their effects. An example of this would be addressing the end of dose symptoms associated with 'wearing off.'

Early consideration of non-medication based strategies for treating anxiety is very important. The role of psychological therapies for individuals suffering from anxiety should be assessed without delay, as a range of techniques exist that may help symptoms (see 'Psychological Support in Parkinson's Disease' page 20). Such approaches also reduce the risk of possible drug interactions and side effects that can occur with the addition of an antidepressant to a PD treatment regimen.

For many people medications can prove beneficial and need to be carefully selected by a doctor on an individual basis. Similar to the treatment of depression, the choice of medication for anxiety may be considered with the other possible benefits derived from a particular drug. For example, medications for anxiety may also help with reducing tremor or coexistent symptoms of sleep disturbance.

Sleep disturbance in Parkinson's disease

Recently there has been a dramatic increase in our appreciation of sleep disturbance in PD and it is believed

Survival tips for sleep disturbance

- Reduce daytime naps to less than 30 minutes and remain active during the day
- · Avoid hot baths or vigorous exercise at least 2 hours prior to bedtime
- Aim for a routine with a regular bedand wake time
- Avoid caffeine in the afternoon and evening
- Sometimes getting up for 30–60 minutes when you can't sleep can help you feel more comfortable and allow you to return to sleep
- Seek professional help if you have vivid dreams, act out your dreams or if sleeping problems persist

that as many as half of all PLWP suffer from interrupted sleep.

These disturbances take many forms, which can coexist and may even pre-date the emergence of physical symptoms of PD. Various research studies have identified that both night and daytime sleep disturbances are associated with a reduced quality of life and higher rates of cognitive decline in PD.

The common sleep disturbances in PD are:

- Insomnia
- Rapid eye movement sleep behaviour disorder (RBD)
- Excessive daytime sleepiness (EDS).

PD patients commonly suffer problems initiating sleep at the beginning of the night or falling back to sleep after waking in the night (insomnia). Arousals from sleep are often the result of physical discomfort, or due to the need to use the bathroom overnight. These issues need to be thoroughly explored when trying to improve insomnia with the exclusion of specific medical problems (e.g. bladder and prostate symptoms). The assessment of specific therapies (e.g. improving overnight physical PD symptoms) and the consideration of non-medication based approaches, such as selfdirected relaxation techniques, can be beneficial.

The phenomenon of RBD is common in PD and usually occurs during the second half of the night. During normal sleep, people pass through different phases in which activity in the brain changes. Rapid eve movement (REM) sleep usually occurs during the second half of the night and is associated with the period of dreaming. In healthy individuals the body is not permitted to move during this phase of sleep due to a complex network of



connections that are active in the brain. In PD these control networks break down and PLWP are able to enact their dreams whilst asleep. Therefore, RBD may be associated with such behaviours as screaming, punching and kicking that can lead to physical injury not only to the patient but also to their bed partner. Interestingly, the occurrence of RBD in later life may pre-date the emergence of physical PD symptoms by several years. It is important to recognise that most patients with RBD respond very well to medication and this will hopefully lead to an improved sleep quality.

The emergence of EDS may also pre-date the physical symptoms of PD. Symptoms may be aggravated by disturbance in overnight sleep quality and also by the medications commonly used in the treatment of PD (notably dopamine agonists). Thus the treatment of EDS should focus on the improvement of sleep habits and may necessitate a careful

review of all medications being used, given the side-effect profile of many common non-PD medications.

Hallucinations and psychosis in Parkinson's disease

The frequency of visual hallucinations and psychosis (which commonly manifest as paranoid behaviour or delusions) dramatically rises in advanced PD. These symptoms usually have an insidious onset over months and years. However, if they begin abruptly there is often a precipitating factor, such as the development of an infection or the introduction of a new medication. The emergence of visual hallucinations has reliably been demonstrated in

Survival tips for hallucinations and psychosis

- Try to record any factors that trigger hallucinations or disturbing ideas, or times of the day when they are most prominent
- Avoid unfamiliar environments and ensure good lighting with minimal clutter to reduce visual misperceptions
- Don't ignore these symptoms discuss them with your friends and family as this can often help to reassure you
- Challenge your thoughts and try to rationalise what you are experiencing so that you avoid becoming frightened
- Seek professional help as soon as you notice visual hallucinations, have thoughts that people are out to harm you, or if you notice other odd thoughts

numerous research studies to be a leading cause of a reduced quality of life in PLWP, and is the strongest predictor of the development of cognitive decline.

There is generally a progression of symptoms in PLWP who suffer from hallucinations. These range from having vivid dreams to the development of frank paranoid psychosis, when patients may be very agitated and aggressive. Patients commonly pass through initial stages during which they are aware of 'something out of the corner of their eye' or experience a 'trick of the light' and misperceive objects (e.g. a hat stand being momentarily mistaken for a person). When PLWP experience benign hallucinations they often see friendly people (e.g. children) or animals, and may even recognise them as familiar, such as a spouse who may have passed away. Difficult management issues arise when such visual hallucinations become threatening, and patients can become suspicious and paranoid. Caregivers who administer multiple dose medication regimens are often targeted, and a common theme to the paranoia is that intruders are trying to break into the home.

The common progression of hallucinations and psychosis in PD

Vivid dreams \rightarrow Misperceptions \rightarrow Benign Hallucinations \rightarrow Paranoid Psychosis The management of hallucinations and psychosis in PD requires specialist clinical assessment and ideally should

occur as early as possible. Reducing medications or adding specific medications will often improve symptoms; however, these changes can also result in a worsening of physical symptoms, and therefore need close medical review.

The 'Wearing Off' Phenomenon in Parkinson's Disease

As most PLWP will know, the major change that affects the brain in PD is the loss of the chemical dopamine. Although this lack of dopamine does not explain all of the **DASH** symptoms, it is clear that many patients experience a worsening of some of these features at times when their dopamine medications drop below the optimal level, otherwise known as the 'wearing off' phenomenon. This is most obviously seen with regard to physical symptoms in PD. Patients often feel that their tablets lose effect towards the end of a dose period and they will experience a significant increase in symptoms, such as slowness and tremor. During this state patients are said to be 'switched off' and commonly lose their physical independence.

With regard to **DASH** symptoms, some PLWP who are taking dopamine medication are clearly aware of increased levels of depression and anxiety in the period leading up to their next dose of medication. Similarly, sleep disturbance may also be made worse by the physical discomfort of entering a 'switched off' state. There are also data to suggest that various aspects of cognition such as concentration, memory and speed of thought may also vary between 'on' and 'off' states.

Conversely, hallucinations and psychosis may be worsened by dopamine medications, and these symptoms can respond to reducing the dose of these medications. However, smoothing out the dopamine stimulation in PLWP who have developed hallucinations can often alleviate some of these symptoms too. Thus, treatment that attempts to maintain a more steady state of dopamine in the brain can be helpful, rather than constantly moving between 'switched on' and 'switched off' states.

Therefore, when encountering **DASH** symptoms, it is very important for PLWP to identify whether they are experiencing the 'wearing off' phenomenon, as this may help their treating clinician to decide the best medical approach. The questionnaire on page 19 is intended to help PLWP identify if they have developed the 'wearing off' phenomenon, so that they may discuss this with their doctor.

Wearing-off question card ^{†*}

Parkinson's Australia

How to complete this question card:

In the **'Experience symptoms'** column, please tick any symptoms that you currently experience during your normal day. If this symptom usually improves or disappears after your next dose of Parkinson's Medication, Please also tick in the **'Usually improves after my next dose'** column.

Mary's example	Experie	nce symptoms	otoms Usually improves after my next do		
	I.Tremor	During ha	normal day,		
	2. Difficulty with speech	🛚 🗹 🦳 Mary exper	iences both difficulty with	Tremor improves after her next dose	
	3.Anxiety	speech	aijjicuity with	<i>of medication</i>	
	Experier	ice symptoms	Usually impr	oves after my next dose	
I.Tremor					
2. Difficulty with spee	ch				
3.Anxiety					
4. Sweating					
5. Mood changes					
6. Weakness					
7. Problems with balar	nce				
8. Slowness of movem	nent				
9. Difficulty using hand	ds				
10. Numbness					
II. General stiffness					
12. Panic attacks					
13. 'Cloudy mind', dull	thinking				
14.Abdominal discom	fort				
15. Muscle cramps					
I6. Difficulty getting o	out of a chair				
I7. Feeling hot and co	ld				
18. Pain					
19. Aching					

Are you troubled by any other symptoms (i.e. other than those above)? If yes, please list:

Please list the symptoms you find most troublesome, and rate how much they bother you.

Totally control my life	Very troublesome	Slightly troublesome	Don't bother me much
 _			

Reprinted with the kind permission of Prof Peter A Silburn.

* Adapted from: Silburn PA, Mellick GD, Viera BI et al. Utility of a patient survey in identifying fluctuations in early stage Parkinson's disease. Journal of Clinical Neuroscience 2008; 15: 1235–1239. † Endorsed by Janet Doherty, Parkinson's disease nurse specialist.

19

Psychological Support in Parkinson's Disease

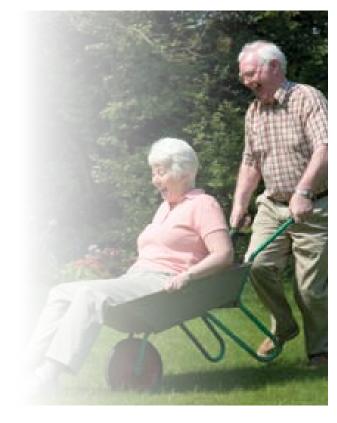


There can be little doubt that most PLWP do not want to be taking more medications when they are faced with new symptoms. Although medications can be very helpful in treating the **DASH** symptoms, sometimes people prefer to avoid taking complicated tablet regimens, especially as the addition of medications can be associated with interactions and side effects.

For many patients, obtaining psychological support can be very effective in treating **DASH** symptoms. This can be achieved in many ways, depending on the nature of your symptoms. It can be as simple as speaking to a counsellor who knows about PD and is able to provide you with information and resources, or be a source of support. More information about counselling services is available by calling the toll free Parkinson's InfoLine on 1800 644 189.

In other instances, it may be appropriate to seek referral to a psychologist. Psychological services for symptoms such as depression and anxiety are now covered by Medicare. The psychologist will conduct an assessment of your symptoms and will usually provide 6–12 sessions of focused psychological strategies that will give you the skills and knowledge to remain well in the longer term. Groupbased sessions may also be available and allow an opportunity to share common experiences.

To access clinical psychologists in your area, speak to your general practitioner or contact the Australian Psychological Society (www.psychology.org.au/FindaPsychologist/), or phone toll free 1800 333 497.



Rating Your Own Symptoms



Performing an assessment of your own symptoms is <u>NO</u> replacement for having a professional consultation with a specialist. However, there are many well-validated self-rating questionnaires available for a wide variety of symptoms in PD. The table below is a very simple guide that is intended to help you identify whether you may have significant **DASH** symptoms that warrant a more detailed evaluation.

Over the last few weeks have you				
D	Felt depressed			
Α	Felt anxious			
S	Had difficulties sleeping at night or have fallen asleep unexpectedly during the day			
Η	Had vivid (distressing) dreams or hallucinations			

	Never	Occasionally	Sometimes	Often	Constantly
D	/ $/$				
Α	$\langle \rangle$				
S		1.0			
Н					

If you scored 'Often' or 'Constantly' for any of these items, we would encourage you to seek further advice and help (see 'Where to Get Help' back cover).

Strategies for Dealing with Cognitive Decline in Parkinson's Disease

Difficulties with cognition (i.e. memory or other thinking functions) can be a major cause of concern and frustration for many PLWP, leading to a reduced quality of life. However, the nature and pattern of cognitive difficulties commonly seen in PLWP is initially different to those seen in other conditions affecting memory and thinking. Specifically, cognitive change in PD includes difficulties with concentration, problem-solving or word-finding, and feelings of slowed thought. Memory issues are often due to difficulties 'absorbing' new information, but once it is absorbed it is generally stored quite well.

Even if PLWP do not have significant cognitive decline, they may have mild changes in their memory or thinking functions that have an impact on daily living. If this occurs, it is a good idea to have some strategies in place to help you adapt to or compensate for cognitive difficulties. These strategies will help you to maintain a healthy brain and mind and retain your independence and confidence.

Most cognitive strategies aim to take the 'strain off the brain'. In this way, they make it easier for the brain to process information. Some examples of strategies that may be useful are:

- Ask people to slow down when speaking to you
- Focus on only one task at a time
- Break down complex tasks into smaller steps and tackle only one task at a time
- Give yourself extra time to complete tasks

- Give yourself frequent breaks when completing challenging tasks
- Complete difficult tasks at the time of the day when you feel most alert
- Reduce distractions in your environment when trying to concentrate - for example, turn off the radio or TV, and clear away visual clutter
- Use repetition: many causes of memory problems are due to difficulties 'absorbing' information in the first instance
- Write down important information
- Ask for assistance when generating ideas or alternative solutions to complex problems, and write a list of pros and cons for the solution
- Use a diary, whiteboard or calendar. These can help you to remember appointments, plan and organise your days, and can also be used to store important information
- Use a list or checklist for things you need to do in the future
- Try to establish a routine and try to keep things in the same place.

Most importantly, don't stress! Stress, depression and feelings of anxiety can make cognitive difficulties appear much worse than they really are.

There are many other books and materials available with extensive advice on techniques to help your cognition. Please ask the Parkinson's InfoLine staff for further details on 1800 644 189.

Other Ways to Promote a Healthy Brain and Mind in Parkinson's Disease

Research indicates that ongoing cognitive and physical exercise is good for a healthy brain and mind, contributing to a higher quality of life. Even in people who have cognitive decline or dementia, data show that both ongoing mental stimulation and physical exercise may work in different ways to enhance cognitive function. While we are not exactly sure how this works, it is thought that such approaches may:

- Help the brain cells to develop richer, more extensive connections with each other
- Help to promote protective chemicals in the brain
- Allow the brain cells to receive important nutrients and oxygen.

Cognitive and physical exercise may be even more effective when you engage in both activities and have a healthy balance between the two. They are likely to provide you with a buffer or 'reserve' against cognitive decline and possibly dementia. In fact, the earlier you start the better!

Cognitive exercise

Cognitive exercise can be achieved in many ways but data show that activities that require your active participation are likely to be most beneficial. This can be as simple as reading a book, socialising with others, learning a new language or learning to play a musical instrument. Playing boardgames, sudoku or completing crosswords are also examples of activities that challenge your mind, although activities where



you are passive (such as watching television) are less likely to be helpful. Playing computer games that are novel and challenging may also improve cognition, and many websites have developed packages that offer a range of cognitive tasks.

Physical exercise

In addition to being beneficial for our bodies, physical exercise seems to improve cognition and mood, and reduces tension and anxiety. Current guidelines for older people suggest that physical exercise should be conducted five times per week and include a combination of aerobic, muscle strengthening and flexibility exercises. For PLWP, regular exercise may improve physical symptoms of the disease. There is evidence that tailored exercise programs prescribed by a physiotherapist can improve freezing, general mobility, muscle strength, endurance and may reduce the risk of falls. Additionally, exercise can assist with sleep, although it should be completed at least-2 hours prior to bedtime.

If you have mild PD and a history of regular exercise, a fitness expert at the local gym should be able to devise a program that is appropriate for you. If you have not exercised recently and/or you experience significant slowness of movement, stiffness or freezing, consultation with a physiotherapist with experience in neurological rehabilitation is recommended. A physiotherapist will be able to prescribe and monitor an appropriate exercise program that targets your movement problems. If you have other medical conditions, such as heart disease, arthritis or diabetes, you should also consult your medical practitioner to ensure that moderate-intensity exercise is appropriate for you. Physiotherapists with experience in prescribing exercise programs for PLWP can be accessed in the following ways:

- Get a referral from your local doctor for a physiotherapy rehabilitation outpatients department at a local public hospital (check to ensure the department caters for people with neurological conditions)
- Contact the Australian Physiotherapy Association (www.physiotherapy.asn.au and click on the red 'Find a Physio' button on the right of the screen) and request the contact details of physiotherapists in your local area with an interest in neurology or aged care (geriatrics).

SUMMING UP

We hope that you have found the information in this booklet helpful. The key points to remember are:

- **DASH** symptoms are common and often ignored
- Drug and non-drug treatments are available for all **DASH** symptoms
- Improving **DASH** symptoms will improve your quality of life and should lead to a healthy brain and mind in PD.

Do you need more 'Survival Tips'? DASH to the InfoLine on 1800 644 189 For toll free advice from experienced staff

Where to Get Help?

Parkinson's InfoLine: 1800 644 189

Trained staff are available on this toll free number and will be able to give you advice on approaches to treatment and where to get further help.

Acknowledgements

This publication was made possible in part by the generous support of Perpetual Funding.

Perpetual

The authors acknowledge the input of the Parkinson's NSW Scientific Advisory Committee and all the Parkinson's State and Territory organisations.



A Dementia Community Grant Project



Published 2010, ©Brain & Mind Research Institute Published by Lifeblood, 100 Mallett Street, Camperdown NSW 2050, Australia