

# Promoting safety in the home:

The home-based Memory  
Rehabilitation Programme  
for persons with mild Alzheimer's  
disease and other dementias

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Alzheimer's disease is the most prevalent form of dementia in persons over 65 years of age.<sup>1</sup> The core syndrome of this progressive neurodegenerative disease includes a disproportionately severe impairment of recent memory, mild to moderate language abnormalities, and visiospatial disturbances. Deficits also occur in the performance of instrumental activities of daily living (IADLs) such as managing finances, shopping and meal preparation, and in personal activities of daily living (PADLs) such as washing and eating. These difficulties, together with behavioural problems, often result in caregiver burden.<sup>2</sup>

It is estimated that there are 800,000 people currently with some form of dementia in the UK at a cost of approximately £23 billion per year. This cost is expected to rise to £27 billion by 2018.<sup>3</sup> To date, there is no cure for Alzheimer's disease; symptoms are controlled using the acetylcholinesterase inhibitors donepezil, galantamine, and rivastigmine, and the NMDA receptor antagonist memantine.<sup>4</sup>

In the Memory Clinic of Belfast City Hospital, a combination of the memory drugs and a home-based Memory Rehabilitation Programme is offered to many people diagnosed with early-stage Alzheimer's disease (AD) and other dementias. The Programme aims to teach people strategies to compensate for their everyday memory difficulties in order to preserve their independence and to reduce caregiver burden.

## **The Memory Rehabilitation Programme (MRP)**

Memory rehabilitation was developed as part of the cognitive rehabilitation approach<sup>5</sup> for the treatment of people with acquired brain injury, but it has been found to be equally appropriate for the rehabilitation of cognitive deficits,

including memory difficulties due to early-stage AD.<sup>6-8</sup> The use of external memory aids is perhaps one of the most important approaches in memory rehabilitation.<sup>9</sup> The MRP is an evidence-based, occupational therapist-led, six-week customised programme which takes place in the person's own home with a designated caregiver, where possible.<sup>10</sup> It aims to teach the person to compensate for their memory deficits and includes minor adaptations to the home environment to support these strategies.

## **Compensation strategies commonly used in the MRP**

- Customised Medication Checklist
- Memory book (A5 – wire-backed)
- Memory board (split white/cork board)
- Printed customised Daily Schedule
- Printed customised Safety Checklist (safe night-time routines)
- Post-it notes
- Alarm clock
- Calendar
- Telephone message prompt card by phone
- Pocket notebook

These strategies serve as external cues providing a high degree of memory retrieval support, or as cueing devices for carrying out routine daily tasks.<sup>7</sup>

## **Safety**

The ability to live independently at home for as long as possible is the desired outcome. Therefore, the management of risk is a very important component of the MRP. The two compensation strategies that specifically address safety are the Medication Checklist (Figure 1) and the Safety Checklist (Figure 2).

# Medication Checklist

Figure 1. Medication Checklist

<b>MEDICATION CHECKLIST</b>			Week beginning						
			/ /						
TIME	DRUG	DOSAGE	MON	TUE	WED	THUR	FRI	SAT	SUN
<b>After Breakfast</b>	Esomeprazole	1 Tablet 20 mg							
	Memantine (Ebixa)	1 Tablet 20 mg							
	Bisoprolol Fumarate	1 Tablet 2.5 mg							
	Furosemide	1 Tablet 2.0 mg							
	Dabigatran Etexilate (Pradaxa)	1 Capsule 110 mg							
	Galantamine (Zeebral XL)	1 Capsule 24 mg							
	Fybogel	1 Sachet							
<b>After Supper</b>	Dabigatran Etexilate (Pradaxa)	1 Capsule 110 mg							
	Simvastatin	1 Tablet 20 mg							
<b>Pain Relief</b>	Co-codamol Late evening	2 Tablets 8-500 mg							
	Paracetamol Early morning	2 Tablets 500 mg							

**Every evening cross the day off your calendar**

<b>INSTRUCTIONS:</b>	✓	<b>Take each tablet as shown on checklist</b>
<b>TAKE &amp; TICK</b>	✓	<b>Each day tick the box after each tablet is taken</b>

The taking of medication is an activity of daily living (ADL) task that requires assessment and intervention, similar to other ADLs such as bathing and dressing. The occupational therapist can work effectively in adapting medication routines that promote safe, accurate, and independent drug use.<sup>11</sup> The Medication Checklist is a customised “Take and Tick” system. The person is trained to take one tablet at a time and to tick the appropriate

box before progressing to the next tablet, thus helping to avoid the double-dosing that can occur if the person is interrupted when taking their tablets. This also has undoubted benefits for general health and wellbeing. Furthermore, the loss of self-confidence that a person often experiences when they have to rely on others for taking their tablets can be restored.

## Safety Checklist

Figure 2. Safety Checklist

<b><u>SAFETY CHECKLIST</u></b>	
<b>Lower Hall:</b>	<input type="checkbox"/> Check door is locked <input type="checkbox"/> Check gates are closed <input type="checkbox"/> Check garage is locked
<b>Utility room:</b>	<input type="checkbox"/> Check back door is locked <input type="checkbox"/> Check utility room door is locked
<b>Kitchen:</b>	<input type="checkbox"/> Check back kitchen door is locked <input type="checkbox"/> Check windows are closed <input type="checkbox"/> Check kettle is unplugged <input type="checkbox"/> Check TV is unplugged <input type="checkbox"/> Check microwave is unplugged <input type="checkbox"/> Close kitchen door
<b>Dining room:</b>	<input type="checkbox"/> Check windows and balcony door are locked
<b>Sitting room:</b>	<input type="checkbox"/> Check windows are closed <input type="checkbox"/> Check TV is unplugged
<b>Garden room:</b>	<input type="checkbox"/> Check garden room door is closed
<b>Hall:</b>	<input type="checkbox"/> Check front door is locked <input type="checkbox"/> Check vestibule door is locked <input type="checkbox"/> Check storeroom window is closed <input type="checkbox"/> Check storeroom door is locked <input type="checkbox"/> Check both cloakroom doors are locked

We all have a routine that we follow before we go to bed at night, involving checking the house is secure and that appliances are switched off. This is especially important in the case of someone with AD who lives alone. However, even if the person lives with a caregiver, the routine may have been their responsibility in the past, and its preservation is most important. The Safety Checklist is a customised list of tasks in the order that they are normally carried out. It is usually laminated and placed at the top of the stairs or on the person's bedroom door. If they don't remember doing any of the tasks, the list helps to remind them.

## Conclusion

With the numbers of people with dementia in all its forms expected to rise, and in view of the limitations of the current licensed medications, the development of patient-centred programmes that strive to maintain independent and safe living at home and prevent the rise of caregiver burden must be supported.

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