

Evidence-based interventions for dementia in general practice



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Dementia is a common presentation in general practice, particularly with an ageing population, and requires a rational approach to management.

CASE STUDY

Mr X is a 65-year-old man who was brought to the general practitioner by his wife stating that she had observed changes in his memory and behaviour. Mr X did agree that his memory was failing in that he would go to the shop and forget what he was supposed to buy. He often misplaced his car keys. His wife also reported that he was irritable and had outbursts of anger for no good reason. What had actually made her decide to bring him was the fact that the previous day he had been apprehended shoplifting.

Dementia, which is a progressive failure of most cerebral functions, is a syndrome which may be caused by a number of different illnesses. It is not a part of normal ageing.

What is the most likely diagnosis?

This patient is suffering from dementia, which is a progressive failure of most cerebral functions. It is a syndrome which may be caused by a number of different illnesses. It is not a part of normal ageing. It is rare in people under 60 years and increases in prevalence at later ages.¹

Common symptoms of dementia:

- difficulty with learning and retaining new information
- repetitiveness
- trouble remembering recent conversations and misplacing objects
- difficulty with handling complex tasks like balancing a cheque-book or cooking a meal
- inability to reason and to respond with a reasonable plan to problems
- difficulty with spatial ability and orientation — having trouble finding his/her way around familiar places
- increasing difficulty in finding the words to express what he/she wants to say or in following conversations
- the patient appears passive, less responsive, more irritable, more suspicious and misinterprets visual and auditory cues.¹

THE DSM IV CRITERIA FOR DEMENTIA

- The development of multiple cognitive defects manifested by both memory impairment and one or more of the following: aphasia, apraxia, or agnosia.
- There is also disturbance in executive functioning and the cognitive deficits cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.
- These features do not occur exclusively during the course of delirium. There must also be evidence from the history,

physical examination or laboratory tests of a specific organic factor/s judged to be aetiologically related to the dementia. In the absence of such evidence, an aetiological organic factor can be presumed if the dementia cannot be accounted for by any non-organic mental disorder (e.g. major depression).²

The common causes of dementia can be summarised using the mnemonic AID ME TV:

Anoxic: carbon monoxide poisoning, attempted suicide by hanging, chronic obstructive airways disease, congestive cardiac failure

Infective: HIV, meningo-encephalitis, tuberculous meningitis

Degenerative: Alzheimer's, Pick's, Huntington's disease

Metabolic: hypoglycaemia, renal failure, liver failure

Malignancy: meningiomas, non-metastatic manifestations of malignancy

Endocrine: Cushing's disease, hypothyroidism, hypoparathyroidism

Epilepsy: status epilepticus

Trauma: subdural haematoma

Toxins: lead poisoning, alcohol

Vascular: multi-infarct dementia, diabetic microangiopathy

Vitamin deficiency: nicotinic acid,³ thiamine.³

All the above causes of dementia are reversible except the degenerative and vascular. Although delirium and dementia are two distinct entities, many of the above causes may also result in delirium.

STRATEGIES FOR MANAGING DEMENTIA IN GENERAL PRACTICE

General practitioners have a central role in the diagnosis and management of dementia. Despite this, they receive little training in the management of dementia, which means that some patients may pose particular difficulties. The follow-

ing guidelines for referral are useful:

- continuing uncertainty about the diagnosis after initial assessment and follow-up
- request by family or patient for second opinion
- not responsive to treatment
- lack of response to disease-specific pharmacotherapy
- need for additional help for patient management or caregiver support
- need to involve other health professionals, voluntary agencies or local service providers
- when genetic counselling is indicated
- when research studies into diagnosis or treatment are being carried out.⁴

Intervention strategies for dementia in general practice may be non-pharmacological or pharmacological. This paper will only deal with the non-pharmacological interventions.

NON-PHARMACOLOGICAL INTERVENTIONS

The consensus statement of the American Association for Geriatric Psychiatry, the Alzheimer's Association and the American Geriatrics Society states that non-pharmacological treatment is the most appropriate first step to treating behavioural disturbances in patients with dementia.⁵

Behavioural disturbances such as depression, agitation, aggression, wandering about and sleep disturbances affect most if not all patients at some point in the course of the disease. Empirical data from clinical trials are few but accumulating, indicating that behavioural problems in dementia can be effectively managed with non-pharmacological treatment. These disturbances are associated with functional impairment in the

patient and increased burden in the caregiver.

Non-pharmacological treatments are often recommended as the most appropriate initial strategy for managing behavioural disturbances in persons with dementia. The risk of adverse side-effects is eliminated. Providing education, support and advice to help families better understand and cope with the disease process has a long clinical history and often represents the core of any treatment, be it pharmacological or non-pharmacological.

THE SEATTLE PROTOCOL

This is a comprehensive behavioural programme with a systematic approach called 'ABC of Behaviour Change', where **A** is the antecedent or triggering event that precedes the problem behaviour, **B** is the behaviour of concern and **C** is the consequence of the behaviour. Once the caregiver understands and can identify the ABCs of a problem, a step-by-step problem-solving strategy is implemented involving five steps:

- identifying the problem
- gathering information about the circumstances surrounding the problem
- setting realistic goals and making plans to achieve those goals
- encouraging rewards for the patient and caregiver
- continually evaluating and modifying plans.

MANAGING SPECIFIC BEHAVIOURAL PROBLEMS

Depression

- Increase and encourage enjoyable activities, help patients to rid themselves of depressing thoughts.
- Increase social activities.
- Eliminate sources of conflict and frustration.
- Treat the caregiver's depression.

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Agitation

- Early intervention.
- Remain calm as you strive to calm the patient.
- Approach the patient slowly from the front.
- Distract the patient with questions about the problem.
- Get help immediately.

Wandering

- Environmental modification — visual cues and labels can be used to direct wanderers in a particular direction or away from potential dangers.
- Provide activities to avoid boredom and loneliness.
- Install electronic alarm system — these alarms do not prevent wandering but alert caregivers.
- Have a safety plan — keep a current photograph, have the person

wear an identification bracelet and labels on clothes.

Sleep disturbances

- Strive for consistent bedtimes and rising times.
- Limit daytime napping.
- Restrict use of alcohol and caffeine.
- Eliminate or reduce nuisance factors — outside traffic noise, snoring caregiver, barking dogs, etc.
- Avoid changes in daily routine.⁶

In addition to treating the cognitive symptoms of dementia, good medical care to treat or prevent other common age-related illnesses can help the demented person remain functional for as long as possible. For example, falls and fractures can precipitate a downhill spiral that may result in death. Referral to a physiotherapist for an

appropriate exercise programme to maintain physical strength, balance and endurance may reduce the risk of fall-related injuries. It may also ameliorate sleep disturbance, depression and motor restlessness.

CAREGIVER ISSUES

Most community-dwelling dementia patients are cared for by family members in their own home. Family caregivers are often 'hidden patients', with health care needs that are neglected or ignored because the patient's needs are so overwhelming. Caregivers are at significant risk for both psychiatric and physical morbidity. Increased rates of exhaustion, hypertension, weight gain, frequency of infections, illness, sleep disturbance, decreased immune function, depression, use of psychotropic

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medications and elevations in insulin and glucose levels have all been described in the literature.

Routine monitoring of the health care needs of caregivers is essential to good dementia care as they implement the physician's

response, and report on any negative treatment effects. Caregivers who are themselves physically sick or emotionally overwhelmed may not be able to function effectively in this collaborative care role. One important aspect of keeping caregivers physically and emotionally healthy involves talking with them about the availability of additional support services.⁷

OTHER FORMS OF MANAGEMENT

The majority of the studies report improvement in disruptive behaviour as a result of practical, clinical and educative interventions. Studies which altered the physical environment by blocking exits which are not used frequently and making living areas more stimulating and congenial were relatively

inexpensive to implement and required little staff time.

Activity programmes also proved successful but the interventions varied greatly in style and content. It is unclear, therefore, how much of the reported benefits derived from a programme's special content and how much from the stimulation, diversion and social engagement implicit in any structured pastime.

Music, which is offered in most residential communities, has been studied relatively intensively. Personalising music to reflect individuals' tastes and cultural backgrounds appears promising, but given the demands that this entails for staff, it will be of value to compare generic with individually selected music, live with recorded music, music heard alone with

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music heard in company and so on.

Audiotapes of relatives recounting family stories and reciting familiar poems and prayers help to maintain a link between residents and family members and allow families to contribute actively to the relief of distress and behavioural disturbance.

Exposure to bright light appears to decrease day-time sleep, decrease sun-downing and increase night-time sleep in people with moderate to severe dementia. Light therapy shows promise as nocturnal disturbance is a major source of stress to carers and co-residents.⁸

CONCLUSION

There are evidence-based reports in the literature showing that non-pharmacological interventions in dementia are effective and can easily be administered by caregivers under supervision of a general practitioner.

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IN A NUTSHELL

Dementia is a progressive failure of most cerebral functions. It is a syndrome which may be caused by a number of different illnesses. It is not a part of normal ageing. It is rare in people under 60 years and increases in prevalence at later ages.

General practitioners have a central role in the diagnosis and management of dementia. Despite this, they receive little training in the undergraduate curriculum in the management of dementia. Therefore, they sometimes face difficulties in the management of some patients.

Non-pharmacological intervention strategies for dementia in general practice are important.

Behavioural disturbances such as depression, agitation, aggression, wandering about and sleep distur-

bances affect most if not all patients at some point in the course of the disease.

Empirical data from clinical trials indicate that behavioural problems in dementia can be effectively managed with non-pharmacological treatment.

Family caregivers are often 'hidden patients', with health care needs that are neglected or ignored because the patient's needs are so overwhelming.

Caregivers are at significant risk for both psychiatric and physical morbidity.

The majority of the studies report improvements in disruptive behaviours as a result of practical, clinical and educative interventions which can be undertaken by general practitioners.