

Sleep and dementia

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Dementia is the name for symptoms that occur when someone is affected by the acquired irreversible neurological deficit caused by one of more of a range of diseases, the commonest of which is Alzheimer's disease. It is common to have Alzheimer's disease mixed with vascular disease, the second most common cause of dementia. The majority of people with dementia are living at home and community nurses have an important role in sustaining them there for as long as possible. This is national and local health and social care policy but also what patients more often say they want (Thomas, 2016). Delaying institutionalisation will save money for the family and the statutory services, but the national reduction in residential bed availability means that there would not be enough for all those with dementia, even if it was affordable. Staff shortages contribute to this limitation of service provision. In dementia, having a carer living with you makes you twenty times less likely to be admitted to care (Banerjee et al, 2003). Community nurses support the whole system by helping those caregivers to cope. Sleep disturbance, which is common in dementia, is exhausting for carers who live in the same house, so it can precipitate a move into care. Promoting a good nights' sleep therefore contributes financially, psychologically and organisationally to the care of people affected by dementia.

Why don't people with dementia sleep well?

Most people with dementia are older, and older people have different sleep patterns. Adults usually sleep between 7 and 9 hours each day, but almost half of older people have at least one nap every day, for at least half an hour, so they don't have all their sleep at night. Over the age of 80, people are more likely to nap for more than an hour. Older people take longer to get to sleep, particularly women. They tend to wake up more and have less deep, refreshing sleep, probably due to changes in the hormone melatonin. Painful medical problems cause the person to stir more at night. The conditions that affect sleep in older people include arthritis, osteoporosis, Parkinson's disease, incontinence, indigestion, heart disease and lung diseases (such as asthma or chronic obstructive pulmonary disease). Medicines for these conditions may also interfere with sleep. A quarter of all older people have sleep apnea or periodic limb movement disorder.

The sleep disturbances caused by anxiety and depression may also affect people with dementia at any age in addition to the specific sleep problems that dementia may present.

The person may be anxious if they wake at night, and get up to explore their environment, which may no longer feel familiar or safe. The urge to sleep is reduced in people who do not have enough exercise and many people with dementia don't merely lose motivation to exercise, but are actively discouraged from taking exercise by risk-averse families or others (Morgan et al, 2003). The hormone melatonin is influential in the sleep-wake cycle and it is metabolised by access to daylight or blue spectrum light, so exercise in daylight in the early part of the day is most valuable.

What can be done to support a good night's sleep at home?

Dementia-sensitive advice is based on three levels of evidence. In order of rigor they are:

- ♦ Research involving people with dementia, which is unfortunately rare but provides the strongest evidence
- ♦ Extrapolation from what works for sensory and physical impairment because the person is probably older but with a reduced capacity to adapt to change
- ♦ International expert consensus, which relies on good advice from experienced people even if the rigorous clinical trials are not yet completed or are impossible

One very important element is 'what works', based on an intimate knowledge of the patient – the sort of thing that only a family member could know or suggest.

Carer anxiety

Reducing carer anxiety is important, because it may unsettle the person with dementia causing a spiral of agitation in the household. The carer may be 'hyper-alert' at night, concerned about the danger of 'wandering'. This term is avoided by many professionals as it implies that there is no sense in the behaviour, but it is the term most often used by family carers and their understanding is paramount here. The use of movement sensors can reduce carer anxiety by allowing them to relax and sleep deeply, knowing, for example, that if the person with dementia gets up and about, they will be woken by a buzzer under the pillow. Information about movement sensors and other assistive technology can be found at www.ATdementia.org.uk

The bed

Sometimes a frail older person is given a different hospital-style bed to sleep in at home or the bed has been moved to a different room. There is not a lot of research on what makes

the best bedding. Familiarity is best in dementia so changing both things can give rise to problems, and the risk should be considered carefully. In some places the local continence service will supply clean sheets.

Management of continence

Getting up to use the toilet is common, or being wakened by the feeling of having wet the bed, if the person is incontinent. All continence issues should be referred for specialist assessment (Andrews, 2017). Good quality, long-lasting continence products can aid an uninterrupted night for a person who is confirmed as being incontinent. Drinking any fluid close to bed time may increase the need to get up in the night. Limiting fluids to some extent in the late evening makes sense, but only if the person is well hydrated throughout the rest of the day, which is not always the case in dementia care. Families need to know they must pay particular attention to daytime hydration if they are going to rely on nighttime dehydration to promote continuous sleep. It is common sense advise to avoid eating and drinking close to bedtime, but be aware of the risk of a 12-hour fast from supper to breakfast, which is known to assist with intended weight loss. Many frail older people with dementia have unintended weight loss so something like a little milk and a biscuit at bedtime might be advisable, as well as having food available for nighttime snacking. Carers who understand the 'wake-up' effect of caffeine in coffee may not be aware of other sources, such as tea or cocoa.

Medication

The use of sedative medication is always a concern in dementia both because of hangovers the following day leading to napping, falls and continued sleep pattern disruption, and because of the mortality and morbidity risks presented by some psychotropic medication. If every other method has been tried, it may be necessary and prescribers are advised to start at the lowest possible dose, to aid a natural sleep pattern at night and avoid daytime drowsiness.

Rules of the bedroom

Some useful rules include:

- ♦ Keep the room as dark as possible during the night, as this affects the basic human sleep pattern. Increase the light when you want the person to wake, even if it is still dark outside, and vice versa.
- ♦ People will sleep better in a warm bed in a cooler room. It is important to be able to individually control the temperature in the bedroom.
- ♦ Good air quality is vital, and so being able to open a window to allow this within safety parameters is crucial
- ♦ When the person gets up to use the toilet, movement sensors can switch the appropriate lights on. An ensuite toilet is ideal, where the toilet seat can be seen from the head of the bed, but without that, lighting and familiarity with the layout can help
- ♦ There is a danger of falls at night, so it is important to have a smooth, matte surface to walk on. Consider movement sensor lights, and avoid hazardous slippers

Sleep hygiene

It is important to slow down the activities of the day in the time leading up to bedtime. Television or using computer screens is known to stimulate wakefulness. This is not just because of the excitement of any content, but also because the spectrum of light from the screen affects melatonin metabolism.

Keep daytime 'signals' to the minimum by keeping outdoor clothes and shoes in a different place. Keep the bedroom for sleeping only. In some care homes now, night staff wear pajamas and dressing gowns so that if they are seen by residents who leave their beds, a visual clue is offered that it is nighttime. This strategy may work at home if everyone gets dressed for bed, even if they are not planning to go there at the same time as the person with dementia.

Every house has nighttime rituals, such as switching off electrical sockets and lamps, putting things away, and letting the dog out for the last trip to the end of the garden. Make the most of those signals to create a rhythm that the person will instinctively follow. If the person has a faith, prayer or meditation at this time may bring a natural and familiar end to the day.

Agitated and aggressive behaviour at night

The behaviours that are hardest for carers to live with are not the memory problems. They include aggression and agitation which can be expressed by shouting, or moving about, which are particularly difficult to cope with at night. All difficult behaviour in dementia can be thought of as an expression of distress, and the aim of the carer should be to reduce stress. This is a tall order, but the person living alongside the patient is probably best equipped to say what would help them to be calm. There are no hard and fast rules, but it helps if the nurse can remind them of some basics. For example, don't argue, even if the person is wrong. You will not persuade them and may upset them more. Try to be relaxed yourself, as your own tension will increase the stress in the situation. More help can be found on websites of national Alzheimer's organisations such as www.alzheimers.org.uk and other useful publications (Andrews and House, 2015).

Conclusions

Living with dementia is exhausting, for both the patient and the carer. The quality of sleep is crucial for keeping both of them well, and there is a role for the community nurse in offering advice and support for this. Ultimately the patient may transfer to institutional care, but the benefit of delaying this event, even by a short time, is huge.

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