



TRACS Community of Interdisciplinary Practice
for People with Dementia

Theoretical Models of BPSD

*Models that help guide your thinking to help minimise
or resolve BPSD
(Weeks 5 and 6)*




TRACS
Community of Interdisciplinary Practice
for People with Dementia

Learning Objectives

- Describe the principles of *person-centred care*
- Detail and describe the Need-driven Behaviour Model
- Detail and describe the *Progressively Lowered Stress Threshold* model of dementia
- Detail and describe the *PIECES* frame of reference for the assessment of BPSD
- Detail and describe the *A-B-C* frame of reference for the assessment of BPSD
- Describe how these models can be used separately, or in combination, to help assess for and understand BPSD


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Why are Theoretical Models Important?

- Dealing with BPSD can be difficult – particularly when you are in the presence of a person with dementia expressing a BPSD
- As has already been highlighted, BPSD increases carer stress and there are often multiple factors that may be impacting on the person, making it difficult at times to think about the behaviour objectively
- The complexity of factors associated with BPSD might result in a carer being unsure about what to do or even unsure about how to start addressing the problem
- So in the moment it can be difficult and you might think “what do I do?”


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Why are Theoretical Models Important?

- Having a theoretical framework helps to address this problem as it helps to guide your thinking to develop a relevant and workable plan.
- A model or framework provides organising principles and memory aids to help you sort through the underlying causes. It also helps you be systematic in the process of your thinking. And it helps do this in a relatively timely manner to promote quick treatment decisions.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Why are Theoretical Models Important?

- A theoretical framework can also help you conceptualise and share your understanding of the presenting problem with other people e.g., other staff, family, etc... Remember that BPSD can be upsetting, particularly for family members. Therefore, to be able to explain to them what is causing the BPSD can be very empowering and help them to understand the issue(s) rather than not know what is happening.
- At a more fundamental level, theoretical models also help to explain why people behave in a particular way or why people behave in a way that defies social norms or creates distress for other people.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Person-Centred Care

- Any theoretical framework needs to be utilised alongside the principles of person-centred care, even if these principles are not directly stated within the framework.
- The reason being that person-centred care promotes the idea that a person with dementia is someone to be respected, is an individual with needs, and deserves to have those needs met (or as best as they can be) to encourage quality of life and a good sense of wellbeing.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Models of BPSD

- We will now be reviewing a range of models that will help you to conceptualise BPSD in a person with dementia
- All models presented have at their core a person-centred approach to BPSD although this may not be explicitly stated
- These models can be used in conjunction with each other or can be used in isolation
- We encourage you to familiarise yourself with each of these models as you may find one to be more effective at one time and others to be more effective at other times


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- The need-driven behaviour model assumes that for multiple reasons (e.g., something to do with the dementia or something to do with the environment), the behaviour is the person with dementia's way of communicating that they have a need or needs that is/are not currently being met.
- It therefore characterises the behaviour as an expression of need.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- For example:
 - Wandering might be the result of some form of neurophysiological deficit that has caused an impairment in communication abilities, so excessive walking might represent a need to go to the toilet
 - Vocalisations might represent the person saying they are experiencing pain and they would like some help with it
 - BPSD might be expressed as a result of a need for companionship
 - BPSD might be expressed as a result of boredom


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- Persons with dementia frequently lose language abilities and therefore are not able to express needs in the same way that people with intact levels of cognitive ability would be able to
- Again, it is really important to view BPSD as occurring within the context of compromised cognitive function therefore the person is unable to communicate their needs in a way they would have prior to the onset of dementia (e.g., saying to a carer “can you take me to the bathroom.”)


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- So the need-driven behaviour model suggests that as a dementia develops, the person becomes less able to meet their own needs, and therefore becomes more reliant on carers to help them meet their needs
- More specifically, due to decreased cognitive function, the person may be less able to problem solve how to address an unmet need
- The emphasis is therefore placed on the notion that BPSD are not 'disruptive' behaviours or behaviours with an intent to cause trouble – rather they are understandable behaviours within the context of an individual's experience of dementia and an unfulfilled need
- As will be discussed later, often simple changes to the care environment can reduce these behaviours and decrease the persons levels of distress


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- The need-driven behaviour model focuses on the interaction between the life history of the person with dementia, their current dementia compromised cognitive abilities, and the current environment; and how the interaction between these variables may explain the BPSD being observed
- So rather than being viewed as “problematic behaviours” or behaviours with deliberate intent to make cares difficult, BPSD reflect the person with dementias most meaningful way of saying they have an unmet need or needs.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Need-Driven Behaviour Model

- The following articles located on the Learning Modules page will help you become more familiar with the need-driven behaviour model:
 - Need-driven dementia-compromised behavior.
 - Wandering and the physical environment.
- Questions to guide your learning:
 - List and describe background factors in the need-driven behaviour model
 - List and describe proximal factors in the need-driven behaviour model
 - Based on this model, describe how you would characterise the reason(s) for the expression of BPSD
- Use the Forum to interact with other clinicians and discuss your thoughts on the need-driven behaviour model


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



PIECES Framework

- PIECES framework
 - P = PHYSICAL HEALTH – so for the BPSD of interest you might want to evaluate whether there might be a physical cause underlying that symptom. Is the person in pain or do they have a UTI or other form of infection that might be causing delirium, for example?
 - I = INTELLECTUAL HEALTH – are there cognitive factors (e.g., memory, planning, problem solving, visual perception, etc...) underlying the behaviour? Limited cognitive capacity resulting in everyday difficulties (e.g., unable to perceive how to correctly get a jumper over his/her head) might result in the expression of BPSD (in this case it might be agitation or aggression) from being unable to complete the task.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



PIECES Framework

- PIECES framework
 - E = EMOTION HEALTH - this includes current emotions. For example, is the person anxious or depressed? Are current circumstances troubling them? Are they experiencing some form of grief or loss process associated with the loss of a loved one or the loss of independence due to a recent move to an aged care facility? Do they have a history of trauma and are having trouble coping with that at the moment?


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



PIECES Framework

- PIECES framework
 - C = CAPABILITIES – what is the person capable of at the moment and are there simple things you can do to help maximise their current capabilities? It's always easy to be supportive in your care role and inadvertently foster dependence by doing tasks for the person with dementia. However this may lead to frustration on the part of the person with dementia from no longer being allowed to contribute, via even the smallest task, to their own sense of well-being. This lack of a sense of independence can actually contribute to the displaying of BPSD. So helping the person do some things on their own can actually help to settle them down.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



PIECES Framework

- **PIECES framework**
 - **E = ENVIRONMENT** – so you need to consider all parts of the environment. Is the environment confusing – are all the hallways painted the same colour? Are there large windows that cause glare? Remember that people with dementia can have trouble interpreting their surroundings. Maybe there is not enough light? Are there appropriate signs to help orient the person within their environment?
 - The environment also refers to the emotional and social environment. Even if the person with dementia isn't able to understand every word spoken to them, they can usually pick up on the tone in a person's voice. This means that if people speak harshly, the person with dementia will pick up on this, think there is something wrong, and the only way they can express their feelings may be to display BPSD to avoid feeling threatened.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



PIECES Framework

- **PIECES framework**
 - **S = SOCIAL EXPERIENCE AND CULTURAL EXPERIENCE** – does the person come from a cultural background where accepted behaviours in Australian culture are not acceptable for the cultural background of the person with dementia? What is acceptable in their culture? It can be difficult for us to think about changing the way we think about and do things. Imagine how difficult this could be for someone with dementia – so getting a cultural and social history for the person can be really important.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



A-B-C Analysis

- The A-B-C analysis is another person-centred frame of reference describing a structured way of gathering and assessing information that occurs within the context of BPSD
- It focuses on understanding what types of factors co-occur with BPSD – specifically what happened just prior to the onset of BPSD and following the BPSD?


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



A-B-C Analysis

- A = antecedents of the behaviour – this refers to what was happening immediately before the display of a behaviour that may have acted as a trigger for that behaviour. Behaviours might also be triggered by occurrences in the person's life too – where they have been, what they have done and what their whole life experience has been. So look at the precipitants – is the person in pain? Do they have an undiagnosed pressure area? Have they had a fall? Believe it or not, fractured hips can sometimes get missed. Are they constipated? Have they started or stopped taking a medication?


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



A-B-C Analysis

- B = behaviour – what’s actually happening – what is the behaviour, who is it a problem for, when did it start, how often, how severe, and for how long?
- C = consequences – so what happens after the behaviour. How do people respond to the behaviour? And how does the person themselves feel about that? If they can’t communicate this, how would you feel if people responded to you in that way? Consequences may be inadvertently encouraging the behaviour to keep happening.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



A-B-C Analysis

- So this is a way of identifying whether common triggers impact the expression of BPSD across multiple observations
- Behaviour charts are a good way of helping to gain this information across multiple staff members on different shifts


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



A-B-C Analysis

- Use the Forum on the website to talk about:
 - How could you apply this model to a BPSD?
Maybe using an example from your experience.
 - What were the antecedents?
 - What was the behaviour?
 - What were the consequences?


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- As dementia progresses, the person tends to find it difficult to deal with situations where there is too much, or not enough, stimulation.
- So, as the dementia progresses, the person with dementia is less able to manage stress
- As humans develop in normal development – growing from a child to an adult – we get better at dealing with low stimulus environments such as boredom and high stimulus environments like a busy bus or train


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- Some people with dementia can't cope with under-stimulating or over-stimulating environments though – at least for a long period of time
- Limiting exposure to extremes of these sorts of situations is important, as is lowering stress for the person with dementia so that they are not being provoked unnecessarily


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- The PLST model describes how the expression of BPSD may be attributable to the decreased ability of the person with dementia to cope with external or internal stressors
- This ability, like others, further deteriorates across the course of the disease
- The PLST model therefore focuses on supporting the person with dementia through building on their intact abilities, and changing the environment and care factors in order to help reduce their exposure to stressors


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- The expression of behaviours are linked to the person with dementia's remaining abilities to help themselves alleviate the stress.
- For example, early in the disease the person might try to lower the stress around them by isolating themselves within a quiet area of the facility or trying to exit the facility. Later in the disease process – and as the person's cognitive ability to solve problems on their own decreases – the person with dementia might become aggressive and hostile in trying to manage the stress they are experiencing.


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- So this model suggests that if the care person can provide interventions to keep stress levels low, the expression of BPSD should be lower
- The model also suggests that if a BPSD is observed in a person with dementia, trying to think about what stressors may be present – and subsequently reducing them – may help to reduce the BPSD


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- Identification of stressors will be most effective when the carer uses a person-centred approach (i.e., who is this person, what did they do in their lives, what were their likes and dislikes, what salient events in their lives may be linked to this situation?)
- So, the PLST model helps care staff to organise the available information in the moment and guide thinking to help develop an evidence-based approach to managing the BPSD


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Progressively Lowered Stress Threshold Model (PLST)

- The “History development and future of PLST”, “Best practice for the management of older people”, and “Psychotic events in Alzheimer’s disease” articles offer good descriptions of potential uses of the PLST model
- Here are some questions to guide your learning:
 - Describe the key features of the PLST model
 - Describe how this model conceptualises BPSD, looking to the articles for inspiration in applying the PLST model to other forms of BPSD


TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Summary of Models of BPSD

- It is important to think of these models not as separate entities, but as approaches that might be used individually or in various combinations to help treat BPSD.
- For example, a person with dementia may be experiencing an unmet need of some form, in which case the need-driven behaviour model may be appropriate. Alternatively, the environment may also be stressful and so the PLST model may also be useful to consider.
- The important thing to remember with these models is that they offer various ways of thinking about the causes of BPSD and therefore help to guide how best to manage BPSD. Just like medication, sometimes one type is sufficient to treat the medical issue, other times a combination of drugs is required.

TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



Further Questions to Guide Learning

- To help you conceptualise how you might use these models in practical ways, think about how you would respond to the following examples and discuss your thoughts via the Forum. Use examples from your workplace to help discuss the ideas:
 - In what way could you combine the need-driven behaviour model and the PLST model?
 - In what way could you combine the need-driven behaviour model and the PIECES frame of reference?
 - In what way could you combine the A-B-C frame of reference and the PLST model?
 - In what way could you combine the A-B-C frame of reference and the need-driven behaviour model?

TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program



TRACS
Community of Interdisciplinary Practice
for People with Dementia

References

- Algase, D., Beck, C., Kolanowski, A., Whall, A., Berent, S., Richards, K., & Beattie, E. (1996). Need-driven dementia-compromised behavior: An alternative view of disruptive behavior. *American Journal of Alzheimer's Disease and Other Dementias*, *11*, 10-19.
- Algase, D., Beattie, E., Antonakos, C., Beel-Bates, C., & Yao, L. (2010). Wandering and the physical environment. *American Journal of Alzheimer's Disease and Other Dementias*, *25*(4), 340-346.
- Algase, D., Antonakos, C., Beattie, E., Beel-Bates, C., & Song, J. (2011). Estimates of crowding in long-term care: Comparing two approaches. *Health Environments Research and Design Journal*, *4*(2), 61-74.
- Beck, C., & Bogelpohl, T. (1999). Problematic vocalisations in institutionalized individuals with dementia. *Journal of Gerontological Nursing*, *25*, 17-26.
- Chenoweth, L., King, M., Jeon, Y., Brodaty, H., Stein-Parbury, J., Norman, R.,...Luscombe, G. (2009). Caring for Aged Dementia Care Resident Study (CADRES) of person-centred care, dementia-care mapping, and usual care in dementia: A cluster-randomised trial. *Lancet Neurology*, *8*(4), 317-325.
- Cunningham, C. (2006). Understanding challenging behaviour in patients with dementia. *Nursing Standard*, *20*, 42-45.
- Kolanowski, A. (1999). An overview of the need-driven dementia-compromised behavior model. *Journal of Gerontological Nursing*, *25*, 7-9.
- Lindsey, P., & Buckwalter, K. (2009). Psychotic events in Alzheimer's disease: Application of the PLST model. *Journal of Gerontological Nursing*, *35*(8), 20-27.
- Moyle, W., Olorenshaw, R., Wallis, M., & Borbasi, S. (2008). Best practice for the management of older people with dementia in the acute care setting: A review of the literature. *International Journal of Older People Nursing*, *3*, 121-130.
- Smith, M., Hall, G., Gerdner, L., & Buckwalter, K. (2006). Application of the Progressively Lowered Stress Threshold Model across the continuum of care. *Nursing Clinics of North America*, *41*(1), 57-81.
- Teri, L., Logsdon, R., Whall, A., Weiner, M., Trimmer, C., Peskind, E., & Thal, L. (1998). Treatment for agitation in dementia patients: A behavior management approach. *Psychotherapy*, *35*(4), 436-443.

TRACS: Community of Interdisciplinary Practice for People with Dementia (CIP-D) Program