



What do mental health difficulties look like, in life after stroke?

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Conflict of interest

There are no conflicts of interest to declare

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Plan: three topics in 15 mins

1. Psychological features of adjustment to stroke
2. Clinical changes – Poststroke depression
3. Anxiety disorders in stroke

(emphasising importance of this issue to whole stroke community, and offering guidance on what to expect/look for, and when seek help)

Key Messages



Mood and emotion problems are a *common* feature of living with stroke, including in carers (and often go unaddressed)



c. 80% referrals for mood and emotional diffs

Feeling overwhelmed

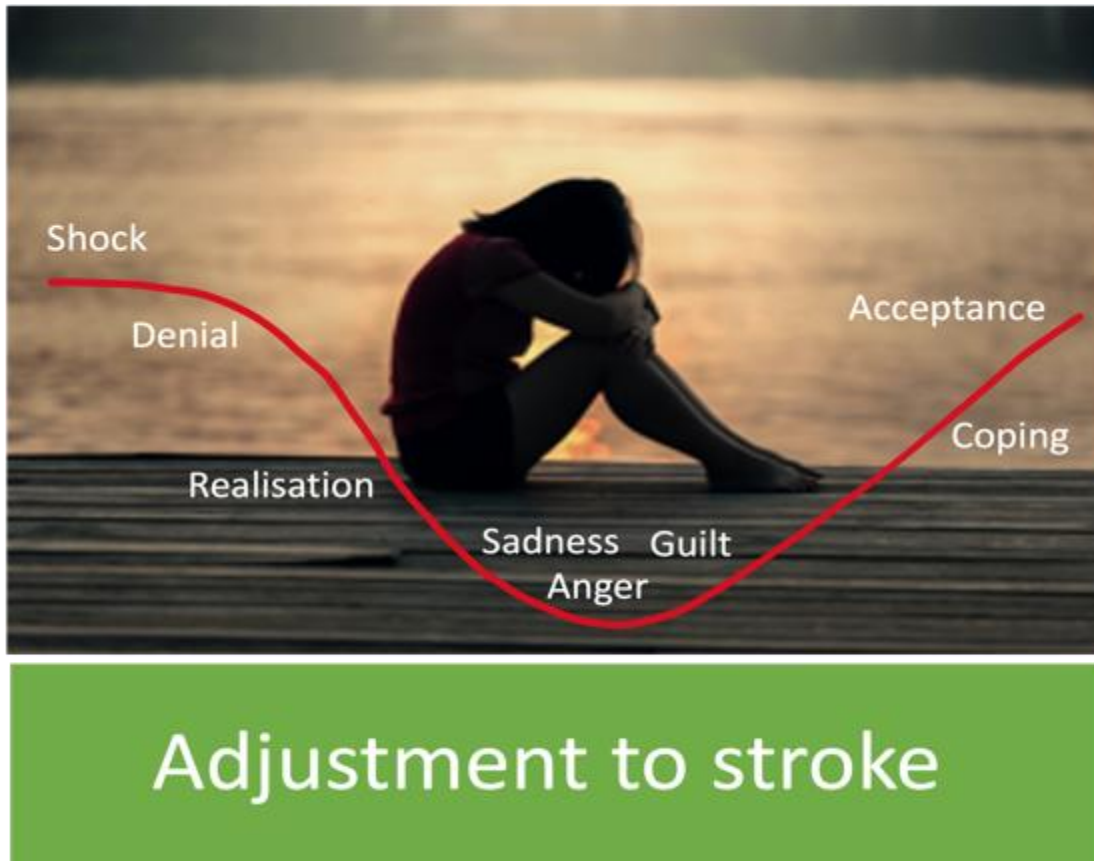
The emotional impact of stroke

Lived experience data

N = 2700 UK stroke survivors +
carers (Autumn 2012)

- 67% feelings anxiety, 59% depressed mood
- Over half no information, advice or support to help
- Carers: 79% anxiety, 56% depressed

Stroke is universally stressful



Acknowledgements and thanks to Dr Dryden Badenoch for the original image concept and pesels-pixabay for the photograph

1. Louie et al 2022. 2. Simpson et al 2021. 3. Flowers et al 2016

- Stroke = occurs suddenly, confers profound life changes
- Leading causes disability Europe
- 44% impairment to lower limb; 40% impairment to upper limb
- 30% aphasia¹⁻³
- Permanent vision, attention, cognition problems also possible

Adjustment Distress

- Anxiety, anger, sadness = **normal** (healthy) distress
- Just as we see in grief
- Expect transient feelings in people 'adjusting' to stroke
- As they make sense of the permanent changes



Adjustment to stroke

But not everyone adjusts...



Maree Hackett, Pickles K.

Frequency of depression after stroke: An updated systematic review and meta-analysis of observational studies. *Int J Stroke* 2014; 9: 1017-1025.

<u>Stroke sample</u>		<u>Proportion depressed</u>
Population based	Acute	32%
	Medium	35%
	Long-term	25%
Hospital based	Acute	24 %
	Medium	36 %
	Long-term	31%
Rehabilitation based	Acute	36%
	Medium	33%
	Long-term	35%

“61 studies including 25 488 people with prospective consecutive recruitment and quantification of depression...the pooled estimate is 31% of stroke survivors experience depression”

Diagnosing post-stroke depression



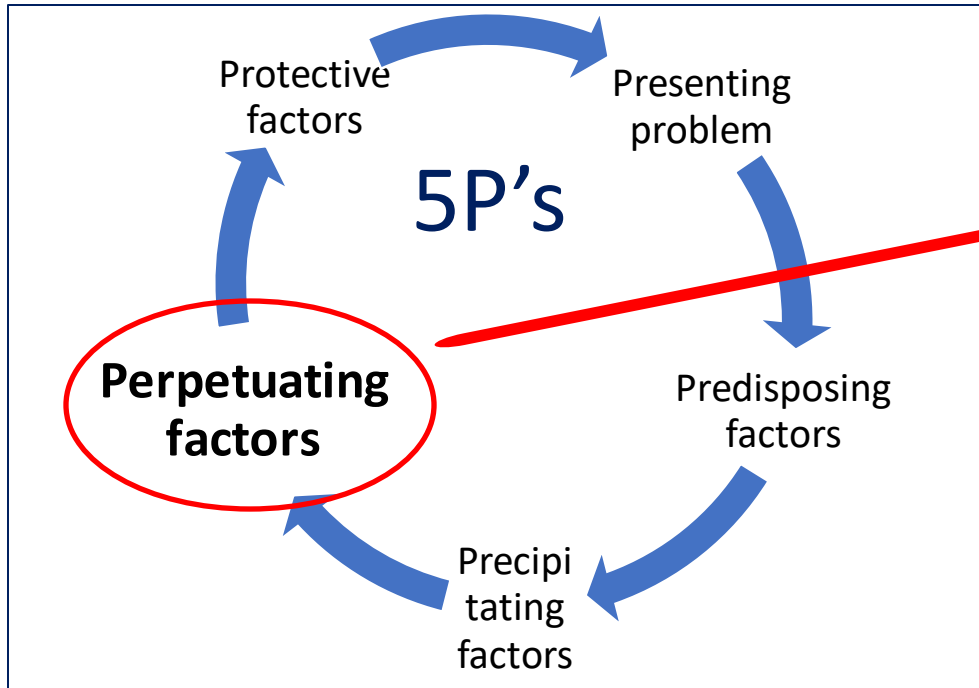
- **Depressed mood** and/or **loss of interest, pleasure usual activities**, for at least two weeks, and with four of:

Cognitive	Psychological	Somatic
Reduced concentration	Worthlessness Guilt Hopelessness Thoughts death/suicide	Insomnia Appetite change Psychomotor agitation Fatigue

→ **Lui 2023 (76 studies): PSD usual onset by 3 months, high-risk persistence**

→ **Blake 2023 (12 studies): PSD symptoms similar to depression general popn (but be aware overlap **direct stroke effects**)**

Formulating 'reversible' maintaining factors



McNeil et al 2012

Sense permanent inadequacy, being a burden, due to stroke

Anxious rumination (on stroke recurrence, recovery)

Behavioural inactivation (doing much less)

Heightened social withdrawal and disengagement

Unhelpful negative thinking: 'I must always be independent', 'I should recover from stroke quickly'

Cognitive impairment, impairing flexible problem solving

1. Chun et al, 2022 2. Taylor et al 2011 3. Broomfield et al, 2011

If you or your patient may be experiencing PSD, please seek specialist help, starting with family doctor

Suicidality

- Stroke significantly increases suicide ideation, and risk death by suicide¹⁻³
- Greatest risk < 60 yrs old, if hospitalised short time, in first two years since stroke, if depressed⁴
- No strategy screen/treat suicidality, including in aphasia^{5,6}
- Always ask (intention, actual plan, hx self-harm)



Post-Stroke depression and emotionalism

- Under-recognized, neurologic disorder of emotional expression (c. 20% prevalence)
- Uncontrollable crying, not under usual social control ¹⁻⁴
- Is overlap depression, and anxiety follows it
- Easy confuse depression - 'tears without inner sadness'
- If suspect PSE, specialist advice + use TEARS-Q



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Plan

1. Psychological features of adjustment to stroke
2. Clinical changes - Post-stroke depression
3. **Anxiety disorders in stroke**



Clinical anxiety also common

Peter Knapp, Dunn-Roberts A, Sahib N, Cook L, Astin F, Kontou E & Thomas S.

Frequency of anxiety after stroke: An updated systematic review and meta-analysis of observational studies. *Int J Stroke* **2020**; 15

“From **97 published studies** involving **22,262** people...the overall **pooled estimate** of anxiety on clinical interview is **18.7%** ...and **24.2%** for anxiety assessed by rating scale”

Anxiety After Stroke

The Importance of Subtyping

Ho-Yan Yvonne Chun, MBBS, William N. Whiteley, PhD, Martin S. Dennis, MD, Gillian E. Mead, MD, and Alan J. Carson, MD

Stroke anxiety often phobic, not generalised



- N = 175 prospective, SCID 3 months
- Phobic anxiety commonest subtype (not worry)
- Situational avoidance linked fear stroke recurrence (being alone, crowds, exertion, rehab)¹
- Avoidance maintains anxiety
- Clinical anxiety often co-presents clinical depression²

Remember why this important



If missed or untreated, clinical depression/anxiety:

1. Lengthens hospital stays
2. Disrupts rehabilitation efforts (embarrassment, lowered motivation, therapy avoidance)
3. Erodes functional outcome/ADLs completion
4. Reduces social participation and QoL
5. Increases risk stroke recurrence + all cause death

Always ask your patient

Or if you are suffering, speak to someone you trust



PEXELS-ALEXANDRE-SARAIVA-CARNIATO

1. Sugawara et al 2015 2. Blochl et al 2019 3. Bartoli et al 2013 4. Wu et al 2019.
5. Ayerbe et al 2014. 6. Kim et al 2018. 7. Silva et al 2016 8. Chun et al 2018. 9.
Colamonic et al 2012. 10. Choi-Kwon et al 2021. 11. Wijeratne & Sales 2021.

‘What to look for/expect, when to seek help’

- **Stroke is universally stressful.** So transient mood changes can be normal, like in grief
- But not everyone adjusts. **Clinical depression** occurs in **30%** of people with stroke
- Low mood, **sense of inadequacy/burden** and social withdrawal are typical features
- **Suicidality is heightened**, there may be **overlap with phobic (avoidant) anxiety** linked to fear of stroke recurrence
- These changes can be ‘invisible’, **so always ask about mood, or seek help if it is you**
- **Talking will assist** to make sense of the changes, and **sometimes that is all that is needed**
- If problems last to 3 months, or emerge later but don’t settle, **seek specialist assessment**
- This is v. important for **people with aphasia**, who may find it hard to communicate distress
- **Family members and carers** have to adjust too, so always ask, or seek help if it is you

Thank you for listening

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