

The POWER Bedside Teaching Model

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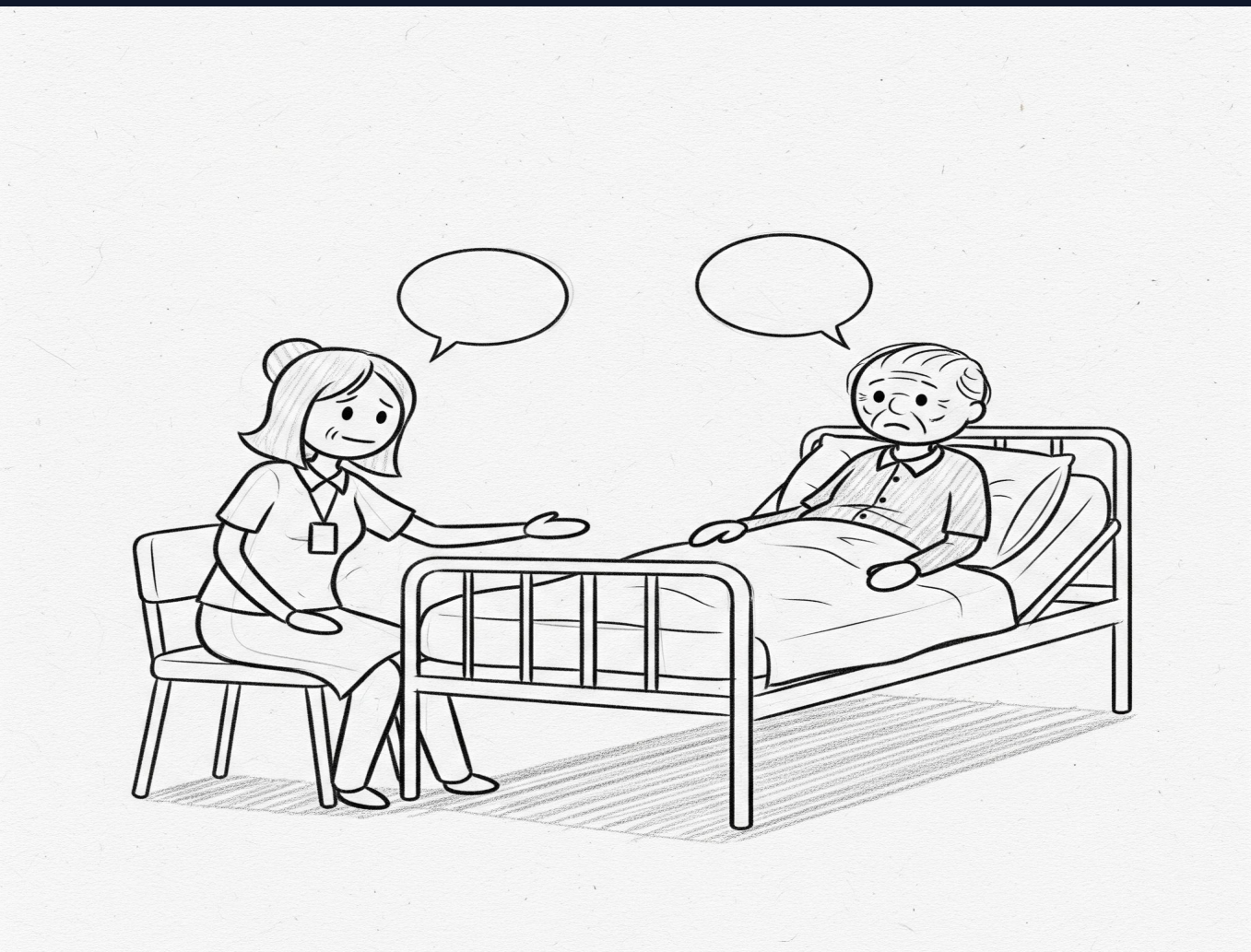
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What does POWER stand for?

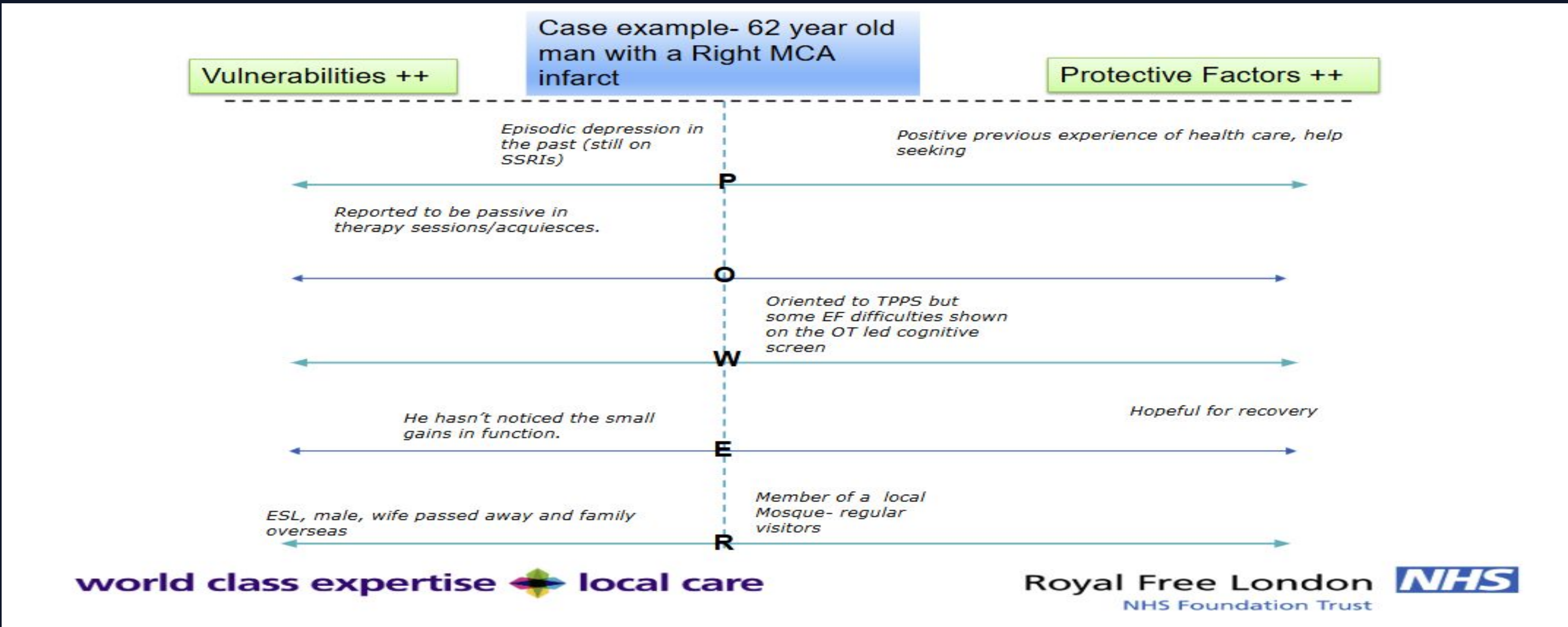
1. Pre-hospitalisation mental health (P): Assessing premorbid stability of mood, anxiety, and lifetime trauma.
2. Onus of control (O): Evaluating patient self-efficacy, motivation, and coping strategies.
3. Wits (W): Cognitive screening and observation of objective and subjective cognitive complaints.
4. Engagement (E): Relational factors, optimism, rehabilitation expectations, and clinical goal-setting alignment.
5. Resources (R): Leveraging social support networks and caregiver environment scaffolding.



BACKGROUND/AIMS: A need was identified for a pragmatic framework to guide trainee psychologists in conducting rapid, holistic, and evidence-based neuropsychological assessments and formulations for very frail and unwell acute stroke patients. Clinical demands, including infection control protocols and rapid patient turnover, often necessitate assessments at the bedside without the ability to write notes or engage in lengthy discussion. There are examples of similarly principled rapid intervention models in the psychotherapeutic sphere (Single Session therapy, W Dryden) but we are not aware of any similar ‘1 session’ holistic models in neuropsychological settings. Rather, rapid assessment has traditionally involved psychometric mood or cognitive screens which require follow-up assessment, and are not always feasible due to rapid discharge. The model's primary aim is to ensure that trainees are formulating based on key evidence-based psycho-social prognostic factors to inform meaningful clinical recommendations. This framework is designed to encourage trainees to consider the interaction and differential weighting of these factors for each patient, supporting the MDT’s understanding of complex needs and directing pathways for onward specialty care.

METHOD: The POWER model was developed as an innovative teaching tool, utilising a memorable acronym to serve as a shorthand for five key psychological, social, and behavioural factors known to predict stroke outcome at 12 months. While primarily a framework for collecting ‘bedside’ information directly from the patient, trainees are encouraged to ‘triangulate’ bedside findings with their observations on the ward, and to collect collateral information from other sources, as appropriate. Once information is collated, the tool may be visually constructed to place each factor on an axis of risk vs protection (see poster case example). This visual use of the tool is designed to support face validity with the patient and the wider systems that may be involved.

RESULTS & CONCLUSIONS: The POWER model has been informally surveyed by trainee psychologists within an NHS acute stroke ward service in North London. Formal results are pending a planned service audit with a formulation self efficacy questionnaire as the main outcome measure. Efforts to communicate the model widely to other psychologists working with stroke populations is important to refine the model further, and scrutinise its utility and generalisability to other settings. Outcome measure may also include evaluation of consistency in clinical notes, contact time efficiencies, and a shared use of language to describe neuropsychological formulations across the MDT.



Trainee Feedback

Strengths "A helpful foundation to use when ensuring that the relevant information is being gathered" Previous trainee reported that the POWER framework helped the interview stay "on track" when infection control procedures restricted note taking	Areas for development "Its effectiveness is reliant on the clinician having experience in conducting psychological assessments otherwise it can be confusing." "Risk assessment its not explicit and doesn't tell you what you need to check in with" Supervision discussions suggest it is difficult to strike the balance when using the model to be helpfully prescriptive AND expansive, i.e. providing direction whilst enabling clinicians to use the framework in alignment with current formulation competence and preferences.
Action Continue to network with research and clinical psychologists working in acute stroke to determine what important prognostic factors are missing from the model!	Action/Considerations - Consider the development of 'prompt questions' for trainees (is this restrictive or supportive?) - Promote "multiple sourced" nature of the tool to limit perceptions of this as a 'reductive', 'clinical' interview tool - Supporting the trainee to use the "vulnerability weightings" for trainees to support risk assessment. Mood screens/'present mood' assessment is not excluded by the model.

Note: Feedback will be being continuously collected on placements to refine the framework further

References

Selected literature supporting the POWER Bedside Teaching Model

Chaturvedi, P., et al. (2020). Depression impedes neuroplasticity and quality of life after stroke. *J Family Med Im Care*.

Colantonio, A., et al. (1993). Psychosocial predictors of stroke outcomes in an elderly population. *J Gerontol*.

Della Vecchia, C., et al. (2023). Factors associated with post-stroke social participation. *Ann Phys Rehabil Med*.

Je Berker, H., et al. (2021). Pre-stroke disability and stroke severity as predictors of discharge destination. *Clin ed*.

Je Graaf, J. A., et al. (2022). Influence of psychological stress and mood on participation after stroke. *Disabil Rehabil*.

Berafi, J., et al. (2017). Neglect and aphasia in the acute phase as predictors of functional outcome. *Eur J Neurol*.

Breenop, K. R., et al. (2009). Premorbid personality traits and post-stroke functional symptoms. *Int Psychogeriatr*.

Broeneveld, I. F., et al. (2019). Patients' outcome expectations in multidisciplinary stroke rehabilitation. *Ann Phys Rehabil Med*.

Karadag-Saygi, E., et al. (2024). Barriers and facilitators of physical activity after stroke. *Int J Rehabil Res*.

Lowder, R. J., et al. (2022). Cognitive impairment predicts engagement in inpatient stroke rehabilitation. *Int J Rehabil Res*.

Marcassoli, A., et al. (2023). Psychosocial factors as main predictors of quality of life 5 years after stroke. *Int J Rehabil Res*.

Meyer, M. J., et al. (2015). Multivariable models to predict functional outcomes: A systematic review. *Disabil Rehabil*.

Silva, S. M., et al. (2019). Social participation following a stroke: ICF assessment. *Disabil Rehabil*.

Sloane, K. L., et al. (2023). Associations of optimism with functional outcomes after stroke. *J Am Heart Assoc*.

Stein, J., et al. (2003). Patient knowledge and expectations for functional recovery after stroke. *Am J Phys Med Rehabil*.

Tan, Y. Y., et al. (2025). Impact of early cognitive and psychological status on return to work. *J Neurol Sci*.

van Mierlo, M. L., et al. (2014). Psychological factors and health-related quality of life after stroke. *Int J Stroke*.

Wiles, R., et al. (2004). Discharge from physiotherapy following stroke: management of disappointment. *Soc Sci Med*.