

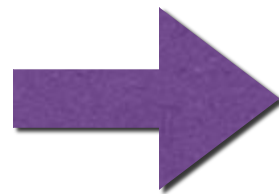
Recognising and managing mental health conditions in those affected by a brain tumour

Dr. Ally Rooney

ST5 liaison psychiatry / Honorary Fellow

NHS Lothian / University of Edinburgh

Talk outline



Background

Depression and anxiety

Delirium and cognition

Personality change

“Positive framing”

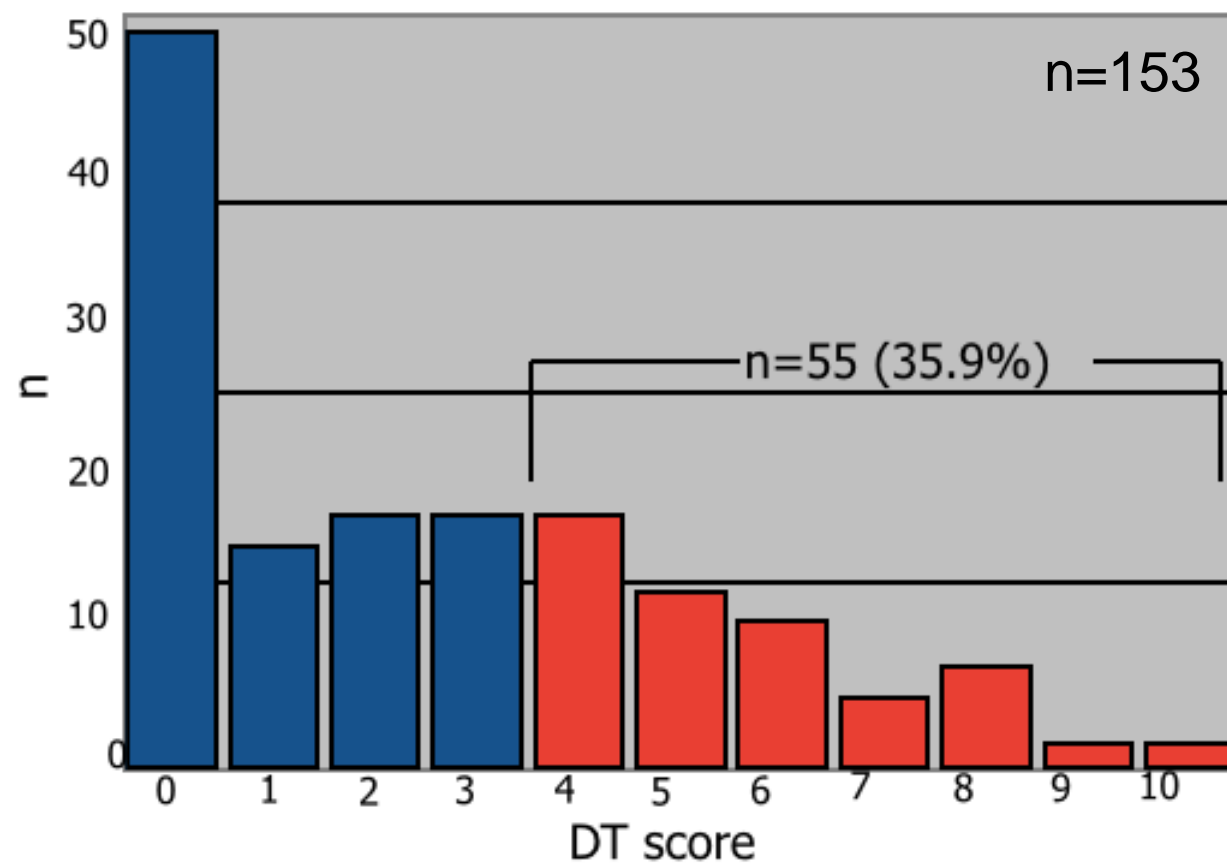
Frequency >population norms

Frequency >some other cancers (but not all)

Highest risk for psychiatric contact pre-cancer diagnosis

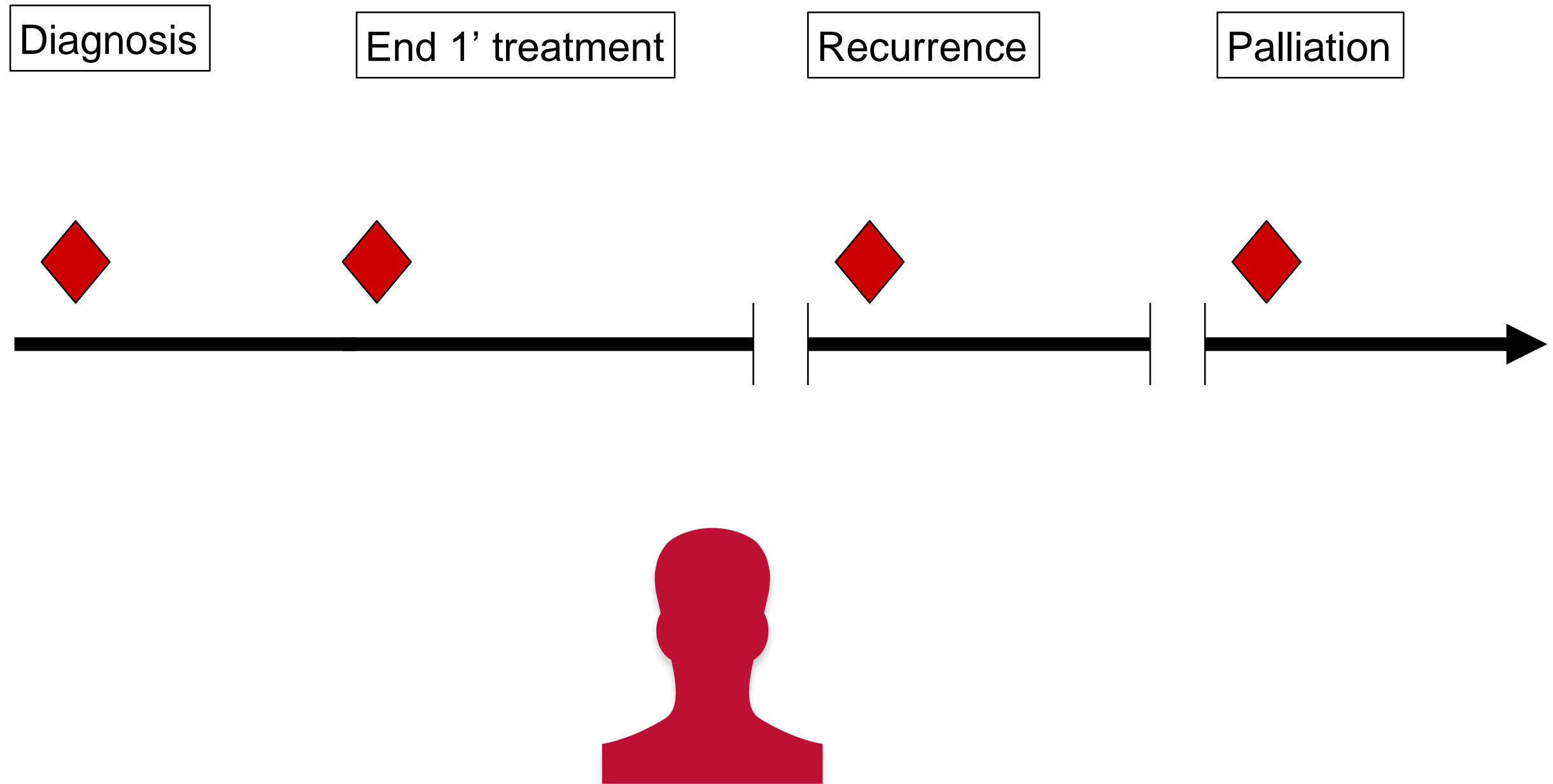
3rd highest risk of suicide post-cancer diagnosis

Distress is common and persistent following brain tumour diagnosis



Poor function
Younger age
Epilepsy
Depression

Distress may peak at several points after diagnosis



Distress is multifactorial

*“I feel like I’m a burden.
I’m no longer the capable
man I once was.”*

64 year-old man with a high grade tumour

*“I feel frightened by how I
behave sometimes. It’s like
it isn’t really me.”*

45 year-old woman with a low grade tumour

*“Seizures have made me lose all
my confidence. They make me
scared to be alone and I have
huge anxiety problems.”*

55 year-old man with a high grade tumour

*“I split from my partner of five
years following diagnosis.
It put so much strain on our
relationship and we were
unable to deal with it.”*

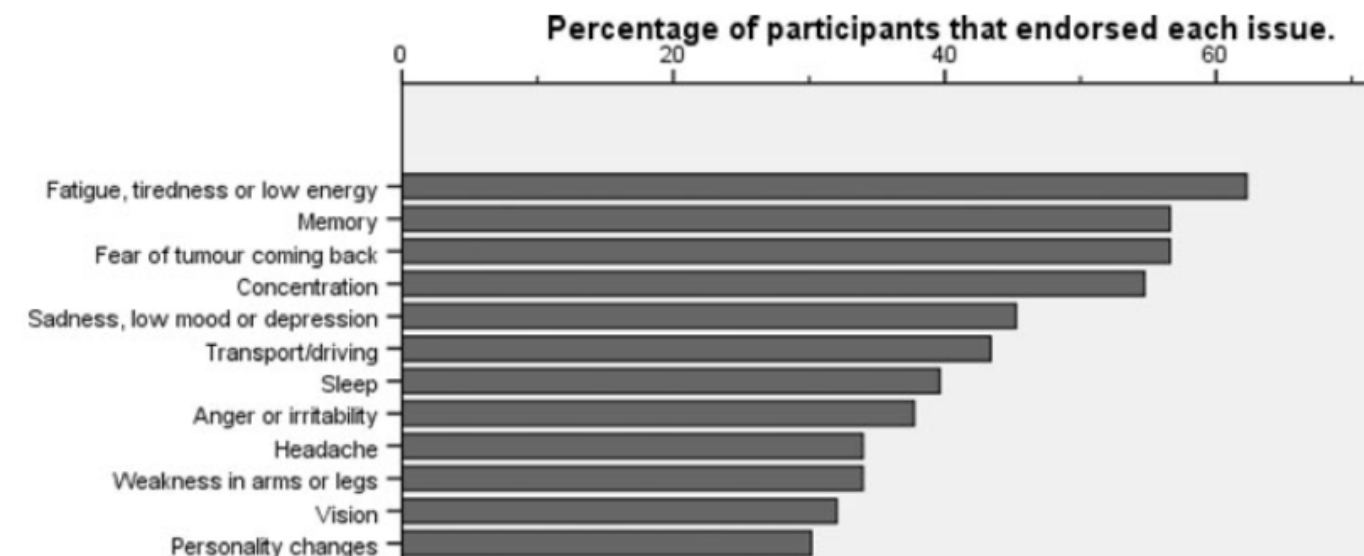
39 year-old woman with a low grade tumour

Patients have multiple concerns and unanswered questions

BRAIN TUMOUR CLINIC "PATIENT CONCERNS INVENTORY"

1 Please tick any issues that have been a concern for you recently.

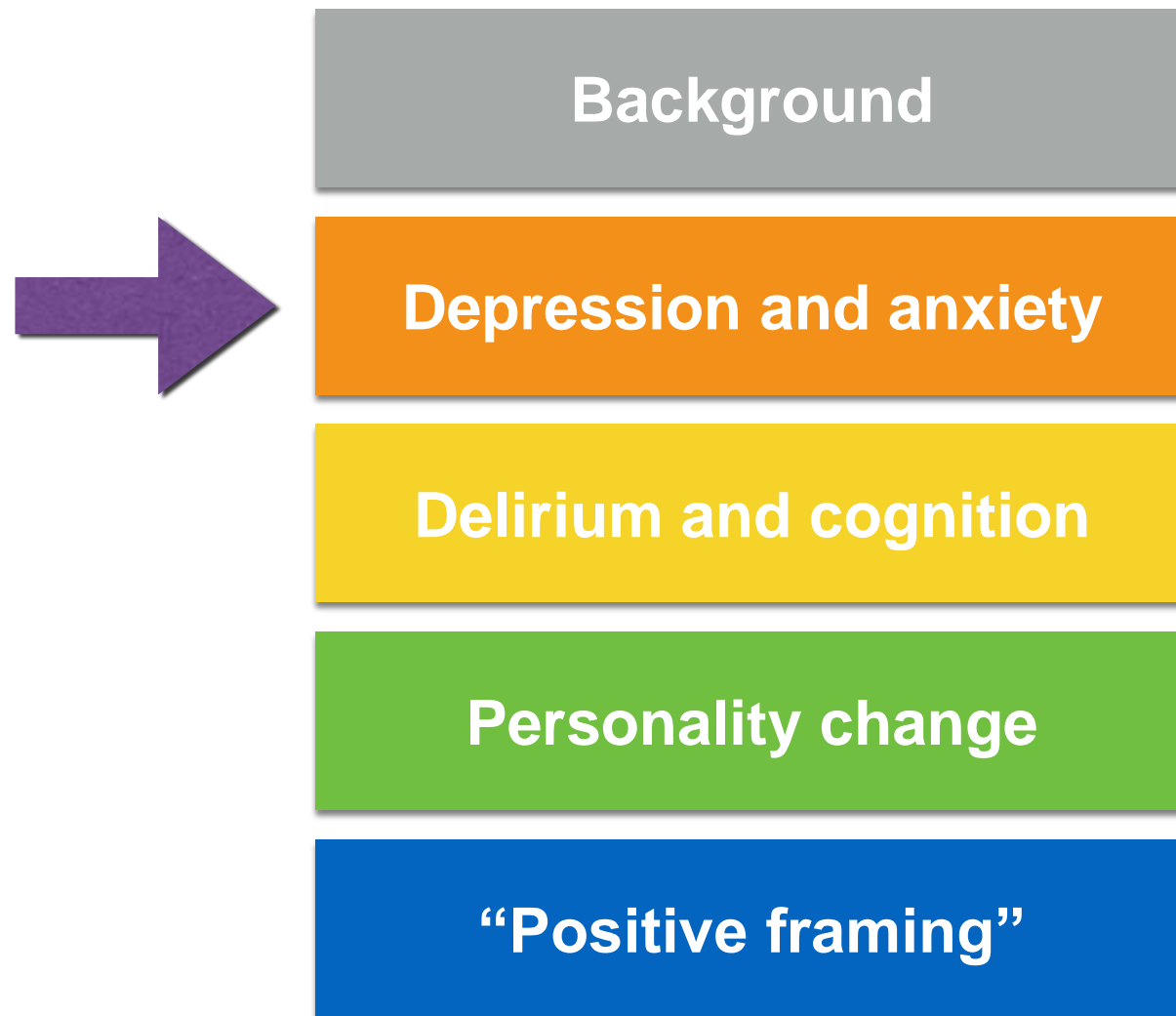
PRACTICAL	PHYSICAL
<input type="checkbox"/> Child care <input type="checkbox"/> Financial benefits <input type="checkbox"/> Holidays <input type="checkbox"/> Housing <input type="checkbox"/> Insurance <input type="checkbox"/> Recreation <input type="checkbox"/> Transport or driving	<input type="checkbox"/> Appearance <input type="checkbox"/> Appetite or eating <input type="checkbox"/> Bathing or dressing <input type="checkbox"/> Breathing <input type="checkbox"/> Changes in urination <input type="checkbox"/> Concentration <input type="checkbox"/> Constipation <input type="checkbox"/> Co-ordination <input type="checkbox"/> Diarrhoea <input type="checkbox"/> Epilepsy, or seizures <input type="checkbox"/> Fatigue, tiredness or low energy <input type="checkbox"/> Feeling swollen <input type="checkbox"/> Fever <input type="checkbox"/> Headache <input type="checkbox"/> Indigestion <input type="checkbox"/> Memory <input type="checkbox"/> Metallic taste in mouth <input type="checkbox"/> Mobility/getting around <input type="checkbox"/> Mouth sores <input type="checkbox"/> Nausea or vomiting <input type="checkbox"/> Nose dry/congested <input type="checkbox"/> Pain (apart from headache) <input type="checkbox"/> Sex or intimacy <input type="checkbox"/> Skin dry, or itchy <input type="checkbox"/> Sleep <input type="checkbox"/> Speech <input type="checkbox"/> Tingling in hands or feet <input type="checkbox"/> Vision <input type="checkbox"/> Weakness in arms or legs <input type="checkbox"/> Weight change
FAMILY	
<input type="checkbox"/> Dealing with children <input type="checkbox"/> Dealing with partner <input type="checkbox"/> Ensuring support for family	
EMOTIONAL	
<input type="checkbox"/> Anger or irritability <input type="checkbox"/> Fear of tumour coming back <input type="checkbox"/> Other fear, anxiety or worry <input type="checkbox"/> Personality changes <input type="checkbox"/> Sadness, low mood or depression	
SPIRITUAL	
<input type="checkbox"/> Difficulty relating to God <input type="checkbox"/> Loss of faith <input type="checkbox"/> Loss of meaning to life	



Theme of patients' questions

Symptoms or social issues
73/105 (69.5%)

MRI / recurrence / prognosis / surgery
20/105 (19.0%)



Clinical depression is a huge hidden morbidity

6-month prevalence 21% in UK = over 2000 depressed new patients per year

Persists for >3 months in most cases

Well-known adverse modulator of QoL



Depression is a syndrome - diagnosis requires multiple symptoms



“Looks like it could be depression.”

“I’d be depressed if
I had a brain tumour!”

Depression is a syndrome - diagnosis requires multiple symptoms



“Looks like it could be depression.”

Depressed mood

Loss of interest

Appetite changes

Sleep changes

Fatigue

Concentration problems

Guilt

Physical/mental slowing

Suicidal thoughts

What we call 'depression' is really a heterogeneous syndrome



'Heatmap' of symptoms present (green) or absent in individuals with depression

Diagnosing depression is a matter of clinical judgement

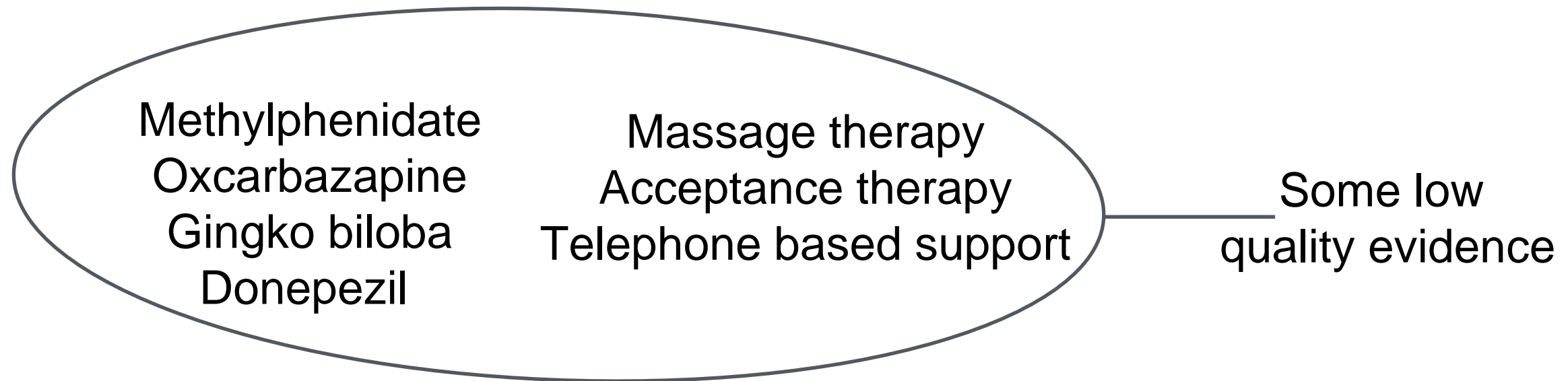
- Wait at least one month from diagnosis
- Focus on *severity* and *persistence* of symptoms
- Grief comes in waves; depression is pervasive
- Some degree of loss of interest and guilt is normal
- Suicidal thoughts are rare - always take seriously
- **Get a collateral history**

Screening

- HADS
- PHQ-9
- DASS-21

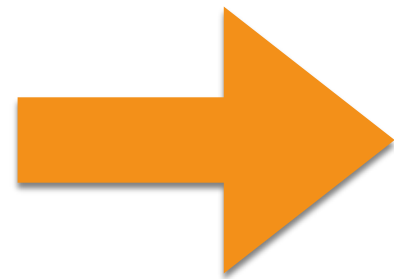
Adjustment disorder
Delirium / cognitive impairment
Organic personality change
Anaemia, thyroid, pituitary,...

NO RCT-proven effective treatments in clinically depressed brain tumour patients



Internet-based guided self-help: negative RCT (but underpowered)

Tailored, multicomponent psychosocial intervention: some RCT evidence for reducing depressive symptoms measured by rating scale



Antidepressants
Talking therapy
Exercise?

Background

Depression and anxiety

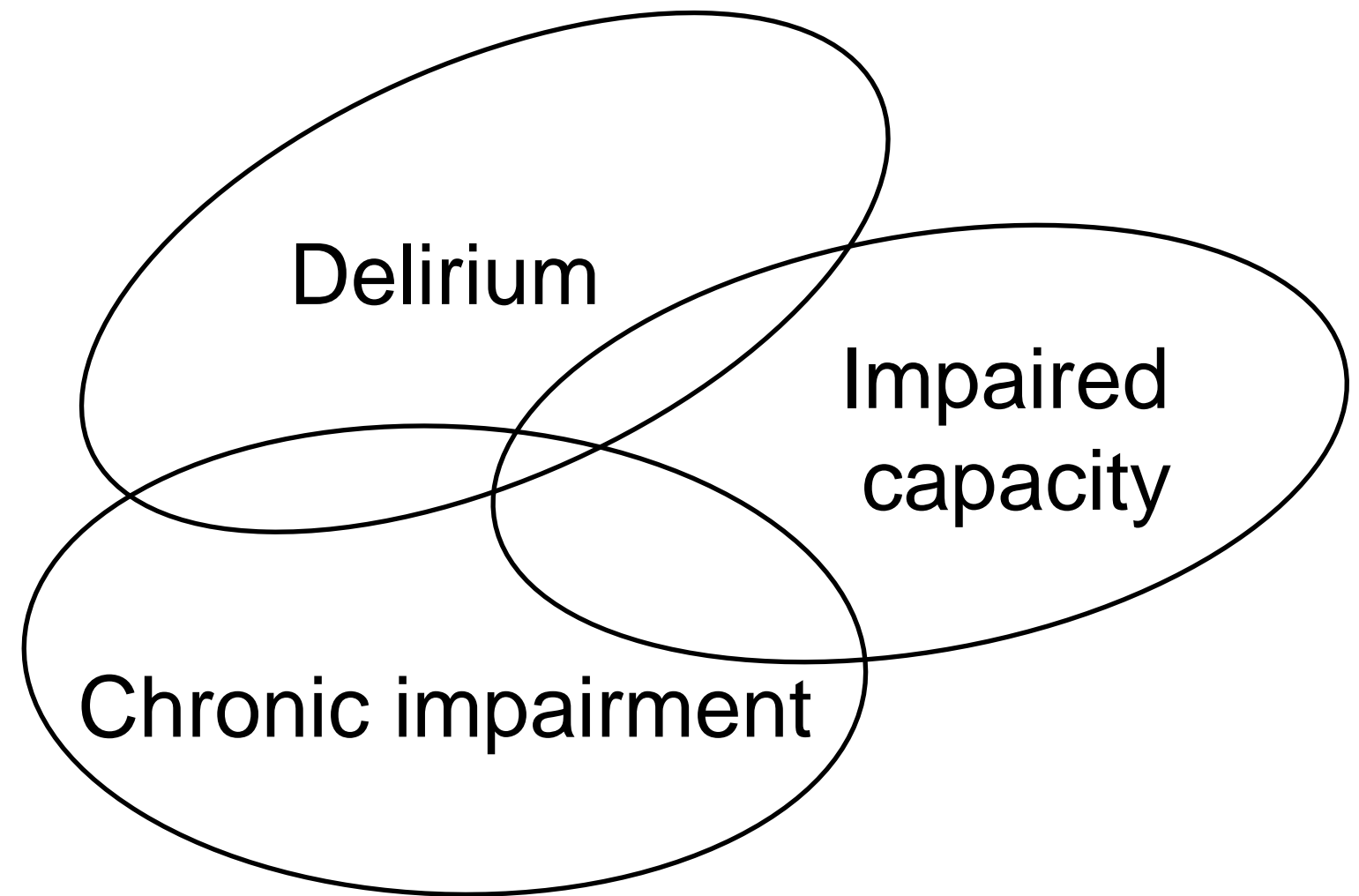
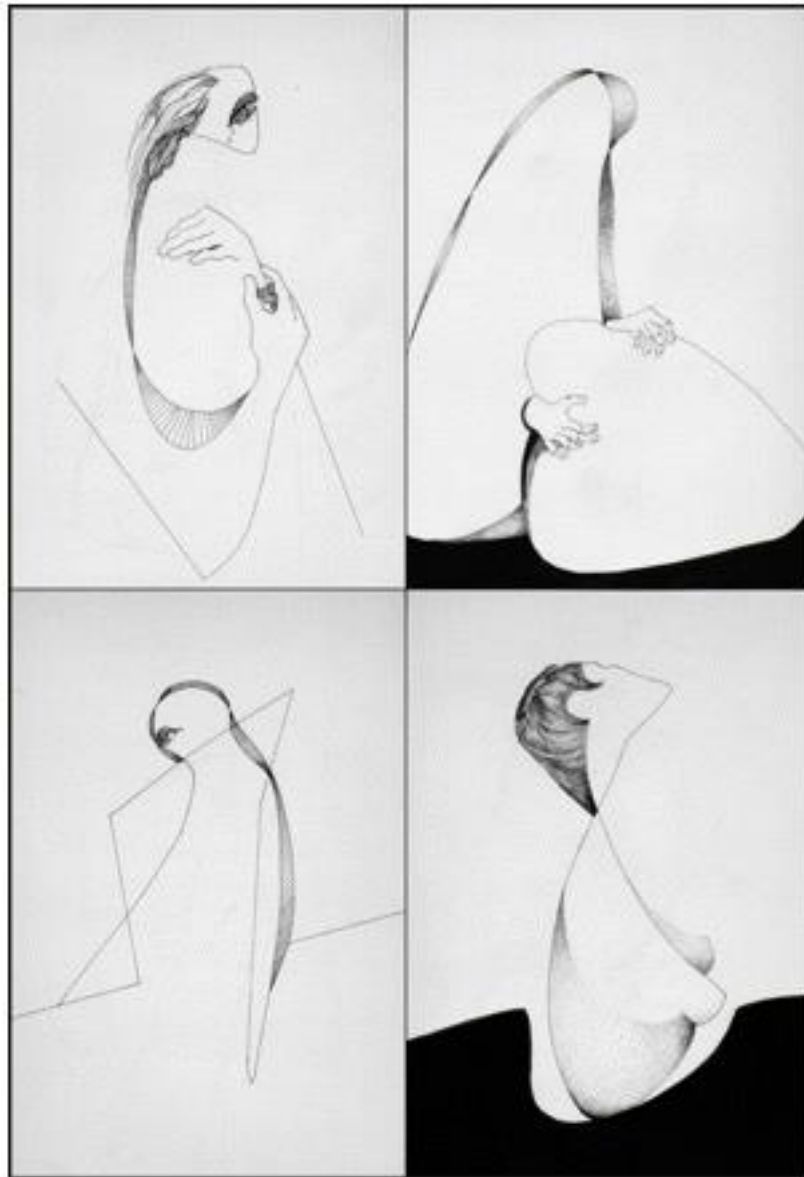


Delirium and cognition

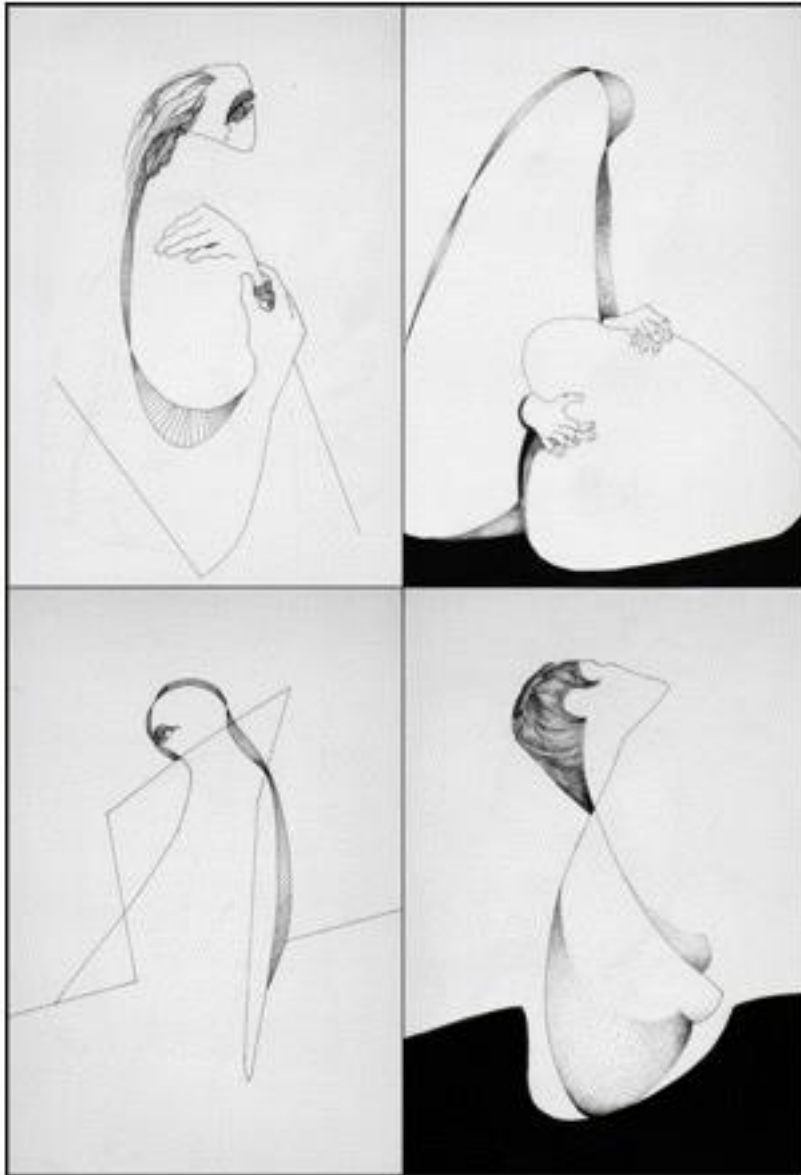
Personality change

“Positive framing”

Cognitive impairment is common and takes different forms



Cognitive impairment is common and takes different forms



Delirium

**Sudden onset
fluctuating
confusion**

Screen using 4AT

Delirium

Soon after diagnosis



End of life phase

*post-op
steroids
infection
radiotherapy*

*steroids
infection
opiates
disease progression
catheterisation*

**Older age
Cognitive impairment
Infection
Medications
Immobility
Catheter**

Treat the cause



Non-pharmacological supportive measures

Side-room

Well-lit

Clock / calendar

Sensory aids

Rationalise medication

Well-known staff / carers

Familiar objects from home

Medication (where necessary to maintain safety)

Low-dose regular antipsychotic (e.g. haloperidol 1mg, or olanzapine 2.5mg)

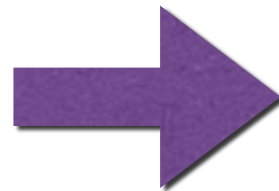
Avoid benzodiazepines

Stop opiate and anticholinergic meds

Background

Depression and anxiety

Delirium and cognition



Personality change

“Positive framing”

Personality change is a challenging complication for families



“How can we understand each other’s point of view?

...

Why do the problems cause strain on partnerships?

...

Why do we hurt the people closest to us?

...

Why can’t we ask them to help?

...

Do I say too much or not enough?”

For answers... come to BNOS

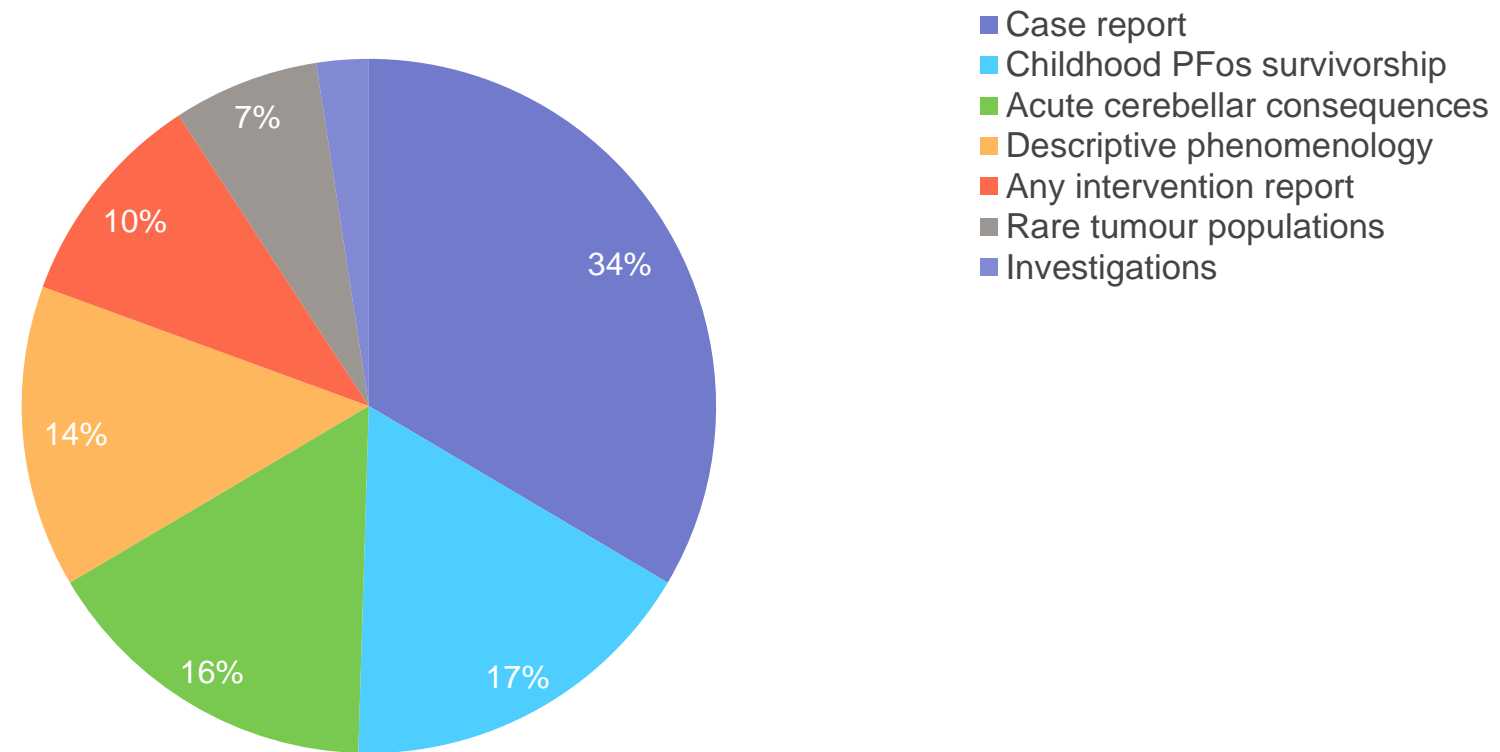


British
Neuro-Oncology
Society

Personality change is frequent and cross-cuts histological diagnoses

First author	Year	In a nutshell
Herrlinger	1999	Up to 73% with personality change at presentation with PCNSL
Allam	2000	16% reported behavioural changes at presentation with oligodendroglioma
Davies	2005	Personality change independently predicted lower QoL for carers of patients with HGG
Wilne	2007	Marked irritability in 24% of children aged <4yrs presenting with BT
Tiemensma	2010	More apathy and irritability than controls 13 years after treatment for NFPMA
Gofton	2012	61.9% with cognitive / personality changes in palliative care primary / metastatic BT
Sterckx	2013	Several qualitative studies highlight personality change as of significant impact
Collins	2014	Significant cognitive /behavioural change at presentation = OR 3.1 (1.9-4.5) for death without being discharged from hospital

There is little evidence to guide management in adults



Tamara Ownsworth



MSoBT program

- Individually tailored
- Psychoeducation
- Cognitive rehabilitation
- Psychotherapy
- Couple and family support

Ownsworth (2014 - the only RCT)

Siew Koh



Behavioural consultancy

- Home-based psychoeducation
- Communications skills
- Relaxation techniques

Carer training workshop

Whiting (2012)

Functional Analysis in dementia

- Antecedent - Behaviour - Consequence (ABC)
- Probably effective as part of a multicomponent intervention

Drug treatment of agitation and aggression in ABI

- Best evidence is for beta blockers (propranolol)
- Antipsychotics etc - last resort; a few case reports for Risperidone in BT

Cognitive reframing for carers in dementia

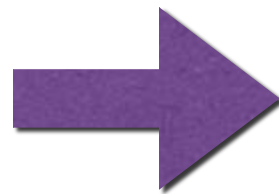
- Targets distressing cognitions about patient behaviours / carer role
- Significantly reduced anxiety (SMD -0.21) and depression (SMD -0.66)

Background

Depression and anxiety

Delirium and cognition

Personality change



“Positive framing”

“A state of *well-being*
in which every individual *realises their potential*,
can cope with the normal stresses of life,
can work productively and fruitfully,
and is able to *make a contribution* to her or his community.”

Do we take a positive approach to mental health in brain tumours?



Examples

Do we help patients realise their potential after treatment?

To cope adaptively with the daily stress of having cancer?

To work (or function) productively?

To make a contribution to their community?

- Neurorehabilitation? (see Ref #15)
- Screening for mental distress?
- Carer support?
- Research funding?



Obstacles

Summary

- Having a brain tumour increases the risk of mental ill-health from diagnosis to palliation.
- Clinical depression should be diagnosed by clinical interview. Antidepressants are empirical first-line treatment.
- Delirium presents with acute onset and fluctuating confusion. Treatment consists of reversing likely underlying causes.
- Personality change may be amenable to behavioural management strategies.
- A positive goal of achieving “mental health” may trump one of treating “mental disorder”.

References

1. Rooney AG. The neuropsychiatry of brain tumors. In: Kaplan and Sadock's Comprehensive Textbook of Psychiatry, 10th Ed. 2017, Lippincott, Williams, and Wilkins.
2. Krebber AMH, Buffart LM, Kleijn G, et al. Prevalence of depression in cancer patients: a meta-analysis of diagnostic interviews and self-report instruments. *Psychooncology* 2014; 23(2):121-130.
3. Benros ME, Laursen TM, Dalton SO, et al. Psychiatric disorder as a first manifestation of cancer: a 10-year population-based study. *Int J Cancer* 2009; 124(12):2917-2922.
4. Fang F, Fall K, Mittleman MA, et al. Suicide and cardiovascular death after a cancer diagnosis. *N Engl J Med* 2012; 366:1310-1318.
5. Rooney AG, McNamara S, Mackinnon M, et al. The frequency, longitudinal course, clinical associations, and causes of emotional distress during primary treatment of cerebral glioma. *Neuro-Oncology* 2013; 15(5):635-43.
6. Murray SA, Kendall M, Grant E, et al. Patterns of social, psychological, and spiritual decline toward the end of life in lung cancer and heart failure. *J Pain Symptom Manage* 2007; 34(4):393-402.
7. The Brain Tumour Charity. *Losing Myself: The reality of life with a brain tumour*. 2015, The Brain Tumour Charity.
8. Rooney AG, Netten A, McNamara S. et al. Assessment of a brain-tumour-specific Patient Concerns Inventory in the neuro-oncology clinic. *Supportive Care in Cancer* 2014;22(4):1059-1069.
9. Rooney AG, McNamara S, Mackinnon M, et al. Frequency, clinical associations and longitudinal course of Major Depressive Disorder in adults with cerebral glioma. *Journal of Clinical Oncology* 2011; 29:4307-4312
10. Rooney AG, Brown PD, Reijneveld JC, et al. Depression in glioma: a primer for clinicians and researchers. *Journal of Neurology, Neurosurgery and Psychiatry* 2014; 85(2):230-235.
11. Rooney A, Grant R. Pharmacological treatment of depression in patients with a primary brain tumour. *Cochrane Database Syst Rev* 2013, May 31;5:CD006932. doi: 10.1002/14651858.CD006932.pub3.
12. European Association of Neuro-Oncology Palliative Care Clinical Guidelines group. 2017; submitted.
13. Ownsworth T, Chambers S, Damborg E, et al. Evaluation of the making sense of brain tumor program: a randomised controlled trial of a home-based psychosocial intervention. *Psychooncology* 2015; 24(5):540-547.
14. Simpson GK, Tate RL, Whiting DL, et al. A multi-tiered intervention to address behavioural and cognitive changes after diagnosis of a primary brain tumour: a feasibility study. *Brain Inj* 2012; 26(7-8); 950-961.
15. Khan F, Amatya B, Ng L, et al. Multidisciplinary rehabilitation after primary brain tumour treatment. *Cochrane Database Syst Rev* 2015, Issue 8. Art. No.:CD009509.

Thankyou

Useful links

Screening for depression or anxiety: http://www.bgs.org.uk/pdfs/assessment/hads_mood.pdf

Screening for delirium: <http://www.the4at.com> (free download)

MSoBT manual: <http://www.assbi.com.au/making%20sense.html> (\$100)

ally.rooney@ed.ac.uk