Do levels of evidence affect breadth of service? An audit of MATRIX therapies in a service for adults with intellectual disabilities.

Do levels of evidence affect breadth of service? An audit of 'Matrix' therapies in a service for adults with intellectual disabilities.

Eleni Pateraki[1] & Ken MacMahon[1]

Background

The MATRIX (2011) is a Scottish Government/ NHS Education Scotland document that aims to provide Health Boards with information on strategic planning for psychological therapies, governance of delivery of these therapies and a summary of empirically validated psychological therapies. It is aimed at aiding clinicians and service managers focus on the timely delivery of evidence-based psychological therapies to service users, including those with intellectual disabilities (ID).

Although considered a positive development, concern has been raised with the evidence level required for inclusion of studies in the MATRIX. Randomised controlled trials were considered the 'gold' standard with less well controlled studies comprising a lower level of evidence. Observational and single-case studies were excluded. Therapies (for a population with ID) were only considered to meet an appropriate standard for five psychological issues (anxiety, depression, challenging behaviour, anger and psychosis). The reliance upon a single diagnostic category may conflict with psychological assessment and formulation and may not reflect the range of interventions used in psychological services for adults with ID (such as indirect work with carers). This may lead to training and resources being invested only on psychological therapies included in the MATRIX, potentially limiting the range of psychological interventions available.

Objectives

The present audit aimed to investigate the effect of the adoption of a rigid interpretation of a 'Matrix'-based approach to a Psychology Service for adults with learning disability in Scotland. The following questions were addressed:

1. What proportion of clients has an existing diagnosed disorder?
2. What proportion of clients has a referring issue included in the ID section of the MATRIX?
3. What proportion of clients will have more than one referring issue?
4. Are MATRIX psychological therapies sufficient for the assessed needs of clients?

Design

The audit utilised a retrospective review of clinical casenotes.

Method

Fifty percent (N=73) of cases within an Adult Intellectual Disability Service, opened since October 2011 (the date of the publication of the MATRIX), were reviewed. Cases were selected by random number. Assessment-only cases were excluded. The process of case-identification is outlined in Figure 1. Eight files (10.9%) were second-rated by a clinician who was not involved in the design or data-gathering process (see Table 1).

Results

Inter-rater agreement

Table 1. Interrater relia bility scores

	Interrater reliability		
	Kappa	SE	p value
Diagnoses	0.79	0.138	< 0.001
Referring problem(s)	0.68	0.099	< 0.001
Psychological intervention(s)	0.64	0.098	< 0.001

1. *Diagnosis:* 31.5% of cases had a formal diagnosis, excluding a formal diagnosis of ID (see Table 2).

Table 2. Number of ICD-10 diagnoses present within case files

Number of ICD-10 diagnoses	Frequency	Percentage (%)
None	50	68.5
1	12	16.4
2	5	6.8
3	5	6.8
4	1	1.4

2. *Referring Issue:* 90.4% of cases had at least one referring problem included within the MATRIX (see Table 3).
3. *Multiple Referring issues:* 39/1% of cases had a single referring issue, 42.5% had two, 17.8% had three or more.

Table 3. Frequencies of referring problems within case files

Referring problems	Frequency	Percentage (%)
Challenging behaviour *	31	23.7
Anxiety *	19	14.5
Depression *	15	11.5
Anger *	12	9.2
Self-harm	8	6.1
Bereavement	7	5.3
Sleep	5	3.8
Poor emotion regulation skills	5	3.8
Forensic/risk assessment	4	3.1
Psychosis *	4	3.1
Personality disorder	2	1.5
Alcohol/substance misuse	2	1.5
ASD assessment	2	1.5
Neuropsychological assessment	2	1.5
Dementia assessment	2	1.5
Trauma	1	0.8
Memory rehabilitation	1	0.8
Suicidal ideation	1	0.8
Impulse control	1	0.8
Coping with divorce	1	0.8
Isolation	1	0.8
Interpersonal problems	1	0.8
Low self-Esteem	1	0.8
Family relationship problems	1	0.8
Social skills training	1	0.8
Behaviour support for weight	1	0.8

*Referring problem included in the 'Matrix'.

4. *Sufficiency of MATRIX therapies:* 81.8% of cases, even if they were offered a MATRIX- approved therapy, also required an additional intervention (see Figure 2).

36.4% of the cases (n = 24) received one intervention, 13.6% (n = 9) received two, 19.7% (n = 13) received three, 30.3% (n = 20) received four interventions or more.

57.1% (n = 28) of service users that worked with a Clinical Psychologist or a trainee Clinical Psychologist were not offered any psychological therapy included in the 'Matrix'. This compares to only 17.6% (n = 3) of cases managed by Psychological Therapists (Nurse Therapists specialised in CBT and Challenging Behaviour) that used additional therapies.

Figure 1. Flowchart of cases reviewed.

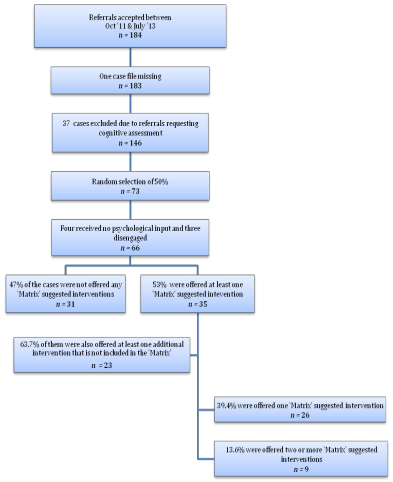


Figure 2. Relative use of 'Matrix'-approved interventions in the Service

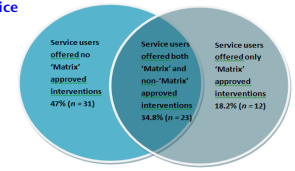
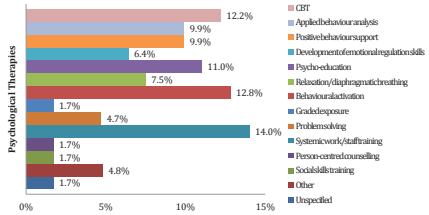


Figure 3. Psychological therapies used across cases



Conclusions

Less than a third of cases had an existing diagnosis, the majority of cases had more than a single presenting issue and the vast majority of cases were considered to require therapies that were not included in the MATRIX. This suggests that current clinical practice contains significant additional input beyond what the MATRIX suggests. People with ID are a heterogeneous group, with significant variations in communication and cognitive skills between individuals. Thus, 'gold-standard' RCTs for therapies for this group are more difficult to conduct and in some cases may be inappropriate. Excessive reliance on such trials as evidence will limit the therapies available to individuals. Applying rigid therapeutic recommendations may limit opportunities for eclectic practice.

Limitations

Retrospective design; moderate agreement between raters.

Acknowledgements

Many thanks to Dr Ewan Culling for assisting in the second-rating of cases.

References

NHS Education for Scotland (NES) (2011) The Matrix: A guide to delivering evidence -based psychological therapies in Scotland. Available at: www.nes.scot.nhs.uk/media/425354/psychology_matrix_2011

[1] Psychological Services for Adults with Learning Disabilities
Learning Disability Service, Kirklands Site, Fallside Road, Bothwell, G71 8BB
01698 855562 k.macmahon@nhs.net