

CBT in Occupational Health



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- Impact of work related stress
- CBT service for occupational mental health
- Service evaluation
 - Economic analysis
 - 5 year outcomes

Acknowledgment

Mr David Hitt

Mr Lyndon Davies

Dr Srinavasa Lanka

Mrs Jo Delahay

Mr Chi Hoong Sin - Office for Public Management

Number of working days lost in UK per year through sickness absence?

- A. 100s
- B. 1000s
- C. 10,000s
- D. 100,000s
- E. 1,000,000s
- F. > 10,000,000s

Knapp et al (2011)

In 2008-09

- 11.4 million days
- 27.3 days per worker / year

Per day sickness cost

Office of National Statistics (2009)

£117.46 / per sickness day

Average healthy employee is off sick on average
5 days per year

Work-related stress, depression and anxiety are one of the most prevalent causes of work-related ill-health and absenteeism

Melchior *et al.* 2007; Rustle, Edimansyah and Naing L., 2008

- “Work-loss costs for those in employment with mood disorders (the vast majority of which were depressive disorders) **\$11.5 billion**” (Druss *et al.* (2001))
- Economic cost of mental health problems to society in England in 2002/2003 amounted to **approximately £77 billion** (SCMH, 2003)
- When costs were adjusted to include only depression and chronic anxiety they totalled **£12 billion a year** (CEP, 2003)
- The direct cost to UK employers of mental health problems has been estimated at approximately **£26 billion** (SCMH, 2007)

In UK

- Depression and anxiety are commonplace and affect 20% of the UK working population (Mind, 2005)
- Up to half of all long-term sickness absence is as a result of mental health problems costing an estimated 26 billion pounds to the economy (SCMH, 2007).

Psychological distress

Multi-factorial:

- A fear of returning to work
- Disturbed relations with colleagues and superiors
- Work stress caused by multiple factors
- Possible job loss or a threat

City of Cardiff

- The occupational health service identified inability to address the needs of employees
 - Psychological health conditions as a result of complex work and personal concerns
 - Sickness through psychological reasons.

Teacher

- Long history of depression/anxiety.
- Problems
 - at work school dealing with other people
 - nature of work.
- Other complex problems within her background
- Symptoms of depression with suicidal ideation.

Children's social worker

- Traumatic stress issues around a particular case.
 - Intrusive imagery
 - Avoidance
 - Hyper-arousal
- Improvements made via counseling but residual nightmares and intrusive thoughts



Services in Wales

- No Occupational Mental Health Services
- No IAPT
- Long waiting times in NHS for psychological intervention

Concern

- No evidence for intervention based on RCTs
- No economic evaluation



PRUDENT HEALTH CARE WORKSHOP, UHW
CHRONIC PAIN SERVICES

PRUDENT HEALTH MINISTER

PRINCIPLES...

1 "DO NO HARM"
OBLIGATION ACTION!

2 TREATMENT...

❌ WHAT CAN I DO FOR YOU
✅ WHAT CAN WE DO TOGETHER

3 EQUALITY

MATCHING NEEDS + SPENDING

BEING PRO-ACTIVE
MINDSET (OLDER GEN)
PATIENT SUPPORT

- 1 COLLABORATION
- 2 CONSISTENCY
- 3 EMPOWERMENT

THANK YOU!
REMAINING POSITIVE
WHAT ARE THE CHALLENGES?

FEEDBACK...
MAKING USE OF SERVICES

NOT RATIONING BUT... RATIONALISATION

EFFICIENT SERVICES
CONSIDER MESSAGES

HARM COSTS MONEY
USING THE SAME LANGUAGE

HOW MUCH TIME IN HOSPITAL ADDS VALUE?

1/6 TAKING DRUGS
LIFESTYLE CHOICES
DOCUMENTING HARM

1000 LIVES OF YMYTHAU

EVIDENCE

WE NEED TO BETTER UNDERSTAND THE PROCESS IN SERVICES

WHERE WE'RE GOING WRONG
SYSTEM PROBLEMS

WHAT ARE THE CHALLENGES?

WASH HANDS

THROMBOSIS

SCREENING PEOPLE AFTER THEY'VE BEEN DISCHARGED

WHAT ARE THE TARGETS?

DESIGN TO HELP BEHAVIOUR

CONSENSUS (ACHIEVE) THIS
HOW DO WE CHANGE OUR SYSTEM?



Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Partnership possibilities

- Address the lack of availability of the service
- Overcome delays in the waiting time for CBT
- Offer support from an established service
- Proactive approach in dealing with occupational and non-occupational mental health issues
- Offer an evidence based approach

Opportunity

Developing business

- Team
- Time
- Money

The Team

- Consultant
- Trainee (CT3 +/- ST)
- Liaison Nurses
 - 1.4 Poisons and 0.1 HIV Liaison nurse
 - 3 full time A & E Liaison UHW
- Cognitive Behaviour Therapist
 - 2.5 days Liaison, 1.5 days PTSD, 1 day SWFS
- Team administrator
- Secretary

Referrals to Dept. of Liaison Psychiatry

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total</u>
Liaison Psychiatry	1599	1665	2,251	2,675	2,656	10846
Old Age Liaison	1302	1407	1328	1232	1282	6551

CMHTs

Amy Evans	816	816	826	987	1,017	4462
Hafan Dawel	346	336	351	349	317	1699
Hamadrayd	806	824	942	996	1,033	4601
Links	1107	1203	1169	1,344	1,248	6071
Pendine	567	653	1,574	875	853	4522
Pentwyn	757	628	637	710	941	3673
Gabalfa	670	699	736	733	936	3774

Total	7970	8231	9,814	9,901	10,283	46,199
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Costs

- Time limited (3 years - with yearly review)
- Set up costs
- Direct
 - Band 7 therapist
 - Admin time
 - Furniture
 - Computer & printer
- Indirect costs
 - Consultant & registrar's time
 - Building

Treatment Goals

Remission

Prevent
Relapse

Restore
Functioning



Depression: management of depression in primary and secondary care

Who is responsible for care?	What is the focus?	What do they do?
Step 5: Inpatient care, crisis teams	Risk to life, severe self-neglect	Medication, combined treatments, ECT
Step 4: Mental health specialists, including crisis teams	Treatment-resistant, recurrent, atypical and psychotic depression, and those at significant risk	Medication, complex psychological interventions, combined treatments
Step 3: Primary care team, primary care mental health worker	Moderate or severe depression	Medication, psychological interventions, social support
Step 2: Primary care team, primary care mental health worker	Mild depression	Watchful waiting, guided self-help, computerised CBT, exercise, brief psychological interventions
Step 1: GP, practice nurse	Recognition	Assessment

Psychological therapies

e.g., CBT

Antidepressants

Take into consideration:

Weight gain

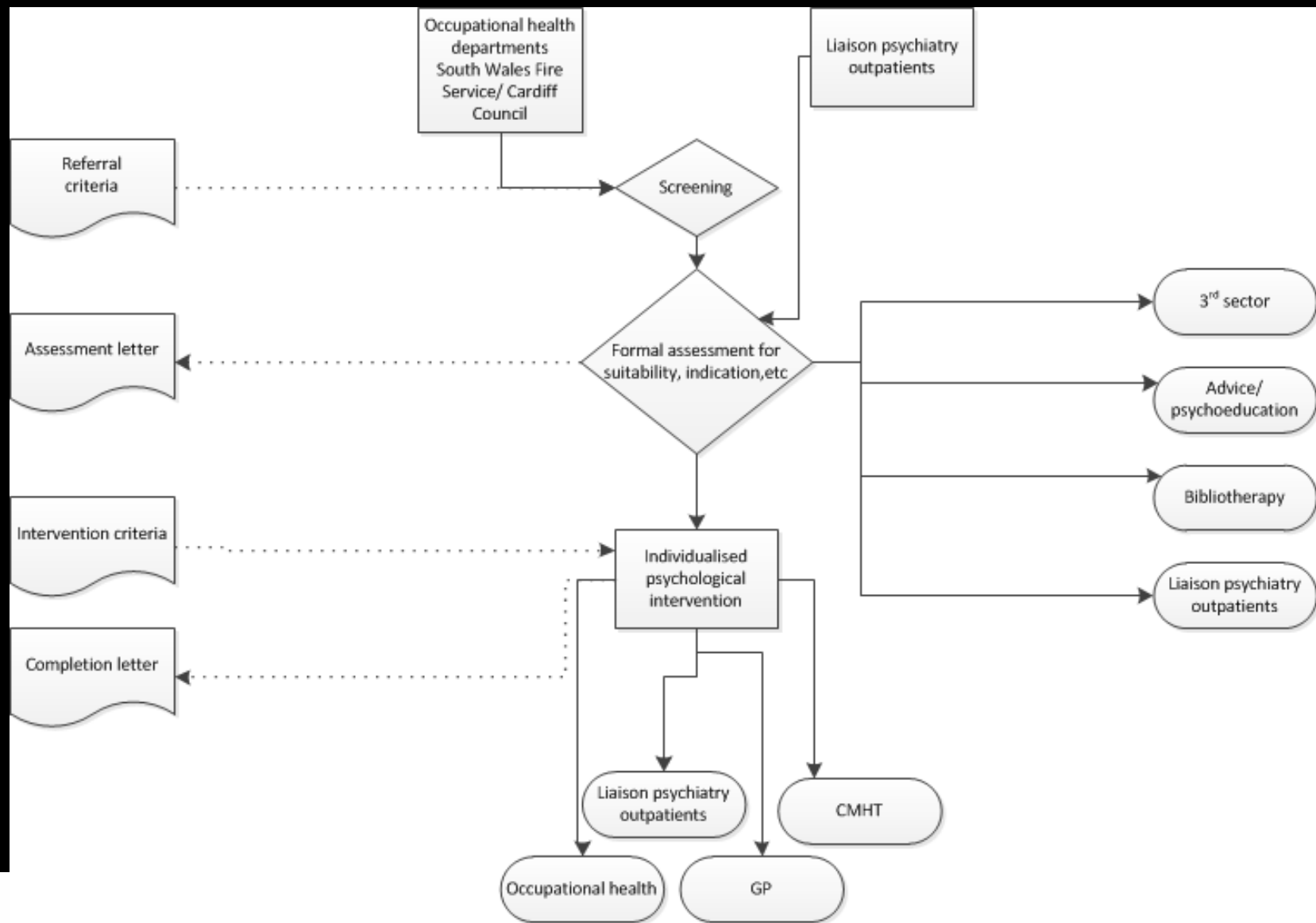
Painful conditions

Co-morbidities

Drug–drug interactions

Collaborative care

NCCMH. Depression in adults with a chronic physical health problem.
National Clinical Practice Guideline No. 91. London: BPS/RCPsych, 2010.



Economic assessment of a workplace cognitive behaviour therapy service

David Hitt and colleagues assess the value of providing cognitive behaviour therapy for employees experiencing stress, anxiety and depression

David Hitt , Tayyeb Tahir , Lyndon Davies , Srinivas Lanka , Chih Hoong Sin , Karen Naya and Ann McMahon

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Cardiff and Vale University Health Board

Cardiff University

Cardiff and Vale University Health Board

South Wales Fire and Rescue Service

Double blind peer review

This article presents a pragmatic economic assessment of an innovative service providing cognitive behaviour therapy (CBT) in the workplace to employees who are experiencing stress, anxiety and depression. The economic assessment tool used was designed to enable front line practitioners to demonstrate the value of their service innovations. Presenting the value of providing a CBT service in the workplace in this way is arguably compelling. This case study serves to illustrate the potential that can be realised by augmenting the skillset of front line practitioners who already have the clinical and service know-how with the skills to demonstrate economic value. These practitioners are equipped to lead service transformation that is not only clinically effective, but economically sound.

Investment = £1109,911

MONETISED BENEFITS: £273, 517

A CBT service for local authority employees **First 3 years**

Inputs

Investment (£110, 911)

DIRECT Set up costs:

Computer and printer **£689**

Furniture **£225**

TOTAL £914

INDIRECT set up costs:

NHS premises and infrastructure (eg: telephony)

DIRECT Running costs 2009-2012 (incurred by Local authority):

1 x 0.5 WTE Band 7 Nurse Therapist for 18 months; 1x WTE Band 7 Nurse Therapist for 18 months **£94,320**

1 x 0.2 WTE Band 4 Administrator for 16 months **£6600**

INDIRECT Running costs 2009-2012 (incurred by health service):

2% Consultant Psychiatrists time, 1% Registrar time **£ 9077**

Total running costs 2009-2012: £109, 997

The Service

Service use

- › Clients all Local Authority (LA) employees
- › Assessed and referred by LA Occupational Health (OH) staff
- › 141 cases referred, 129 assessed, 77 eligible for CBT intervention
- › 51 completed a course of CBT (2009-2012); 49 achieved health gain; 36 significant health gain

Services

- › Clients screened by Consultant Psychiatrist
- › All clients assessed and treated if indicated by CBT therapist
- › Intervention, on average, 12 hourly sessions
- › Signposting to primary secondary or voluntary mental health services where indicated
- › Liaison with GP
- › Referral to Dept Liaison Psychiatry (Consultant Psychiatrists) when indicated

Summary of benefits

For LA employees / service users (£99,000)

- › Option to receive evidence-based psychotherapy through work scheme (assumed to be unavailable elsewhere)
- › Reduction in mental health symptoms (assumed to be result of CBT)
- › Improved quality of life (assumed to be the result of CBT)
QALY gains £118,800
- › Accelerated return to work, enhanced productivity in and outside of work
- › Client satisfaction
- › Prevention of future mental health problems

For Local Authority (£149, 677)

- › Improvement in high quality partnership arrangement with NHS
- › Improvement in mental health knowledge and skills of LA OH staff
- › Improved return to work **£39,936**
- › Improved retention **£81,361**
- › Improved presenteeism **£7,840**
- › Reduced LA OH input required with referred staff **£2,180**
- › Avoidance of referrals to LA Well-being service **£18,360**
- › Potential reduction in sickness absence post CBT intervention

For the wider health system (£24, 840)

- › Clients receiving CBT through this service not referred to other services within the health system
 - › Prevention of GP appointments **£12,696**
 - › Avoidance of physical care costs **£4,600**
 - › Reduction in costs to secondary mental health services **£6392**
 - › Reduced use of medications through avoidance or timely reduction in usage **£1,152**

MONETISED BENEFITS: £273, 517 (health gained and costs avoided)

For every £1 spent, £2.47 gained

NB preventions costs based on 2011 accounting year and unadjusted.

Assumed benefits due to CBT intervention and not 'natural recovery'

Allowing for 'natural recovery' for every £1 spent, £1.92 gained

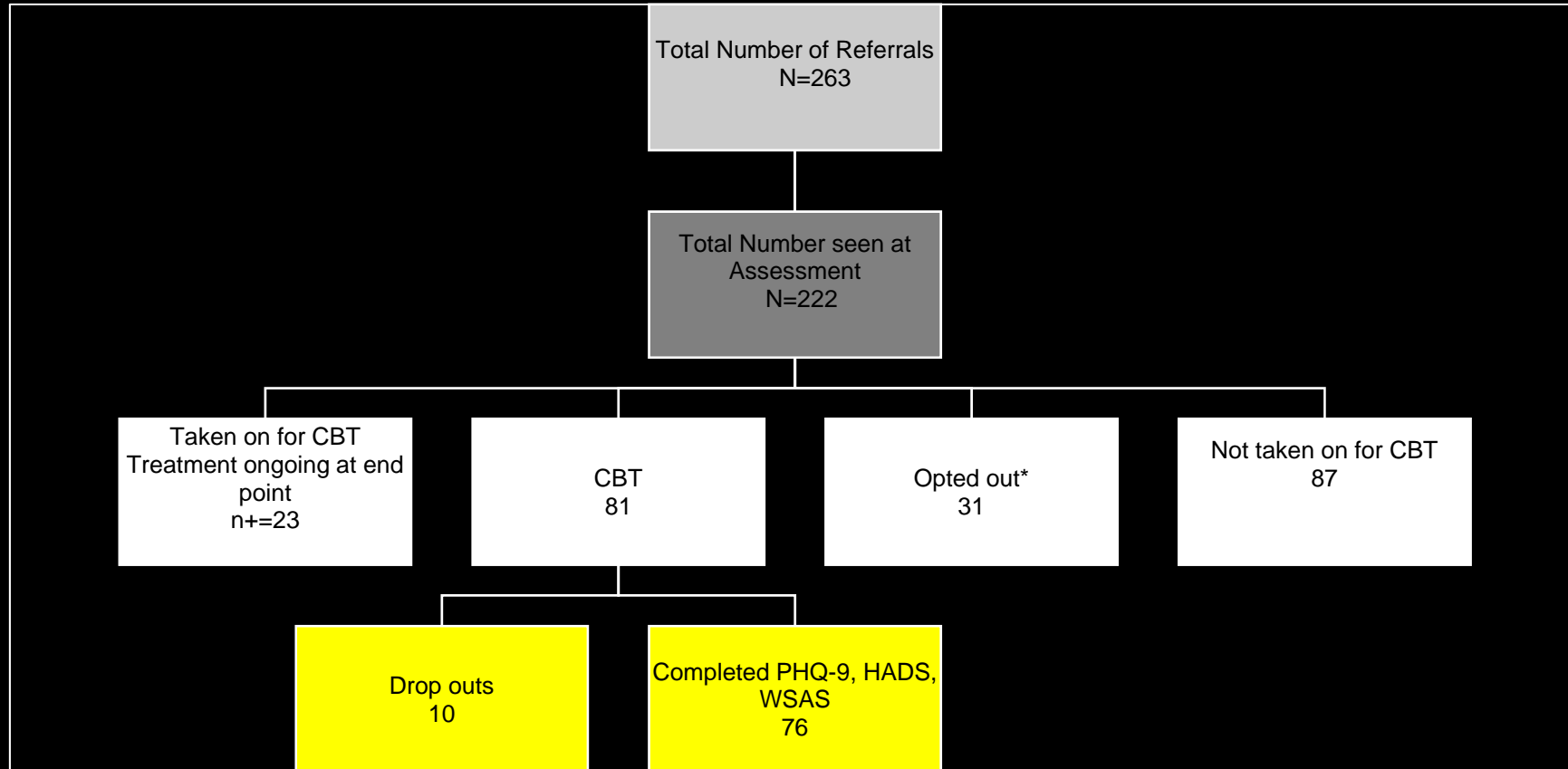
Assessments

- Pre-treatment
- Post-treatment process.
- Follow up

ASSESSMENT

- Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983)
- Patient Health Questionnaire 9 (PHQ 9) (Kroenke & Spitzer, 2001)
- Work and Social Adjustment Scale (WSAS) (Mundt, Marks, Shear & Greist, 2002)
- Suitability for Short-term Cognitive Therapy Rating Scale

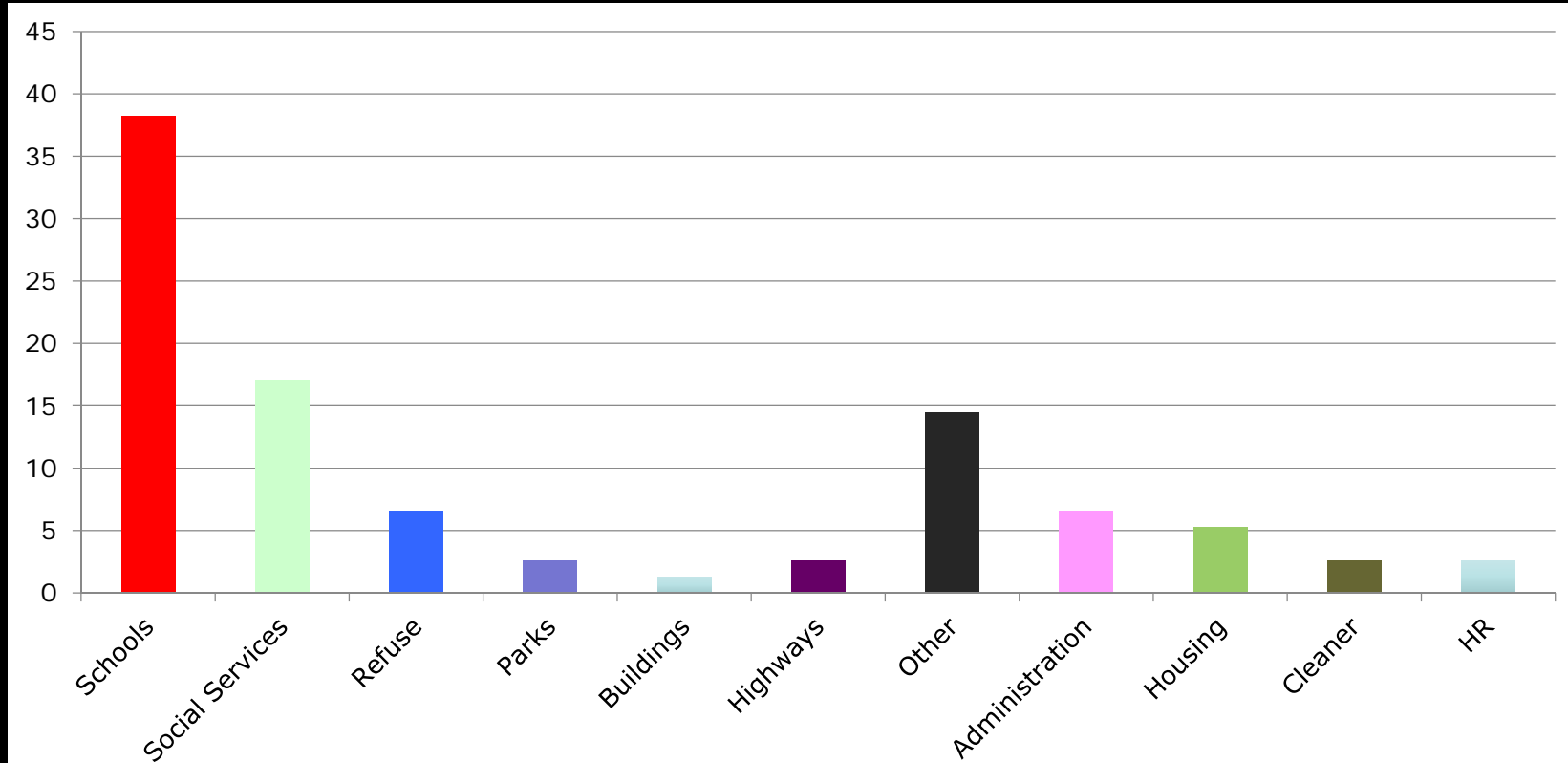
Five Year Analysis



CBT Sample

- Gender 61% Females
- Mean age 43 years

Professional Group

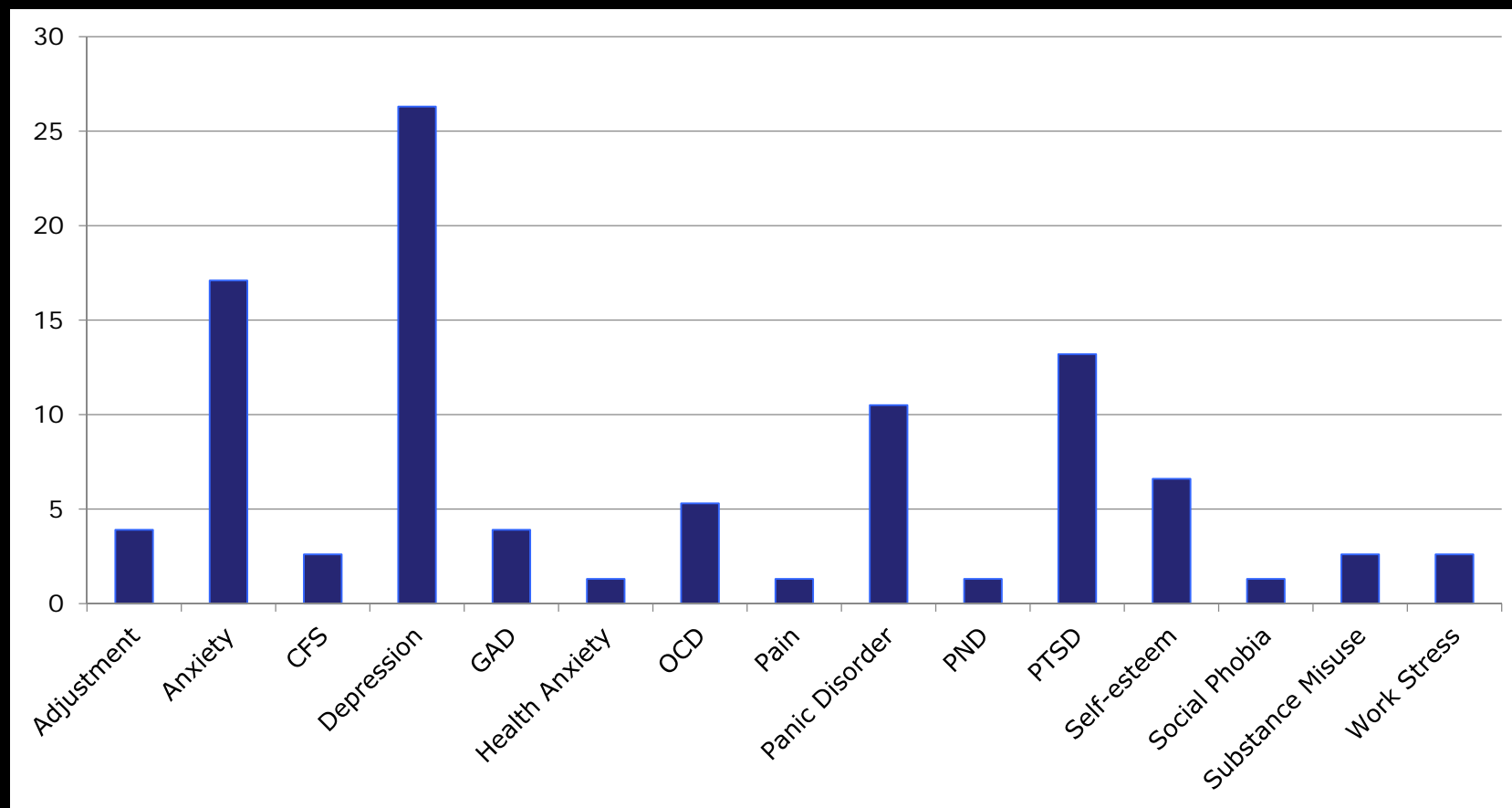


Diagnosis

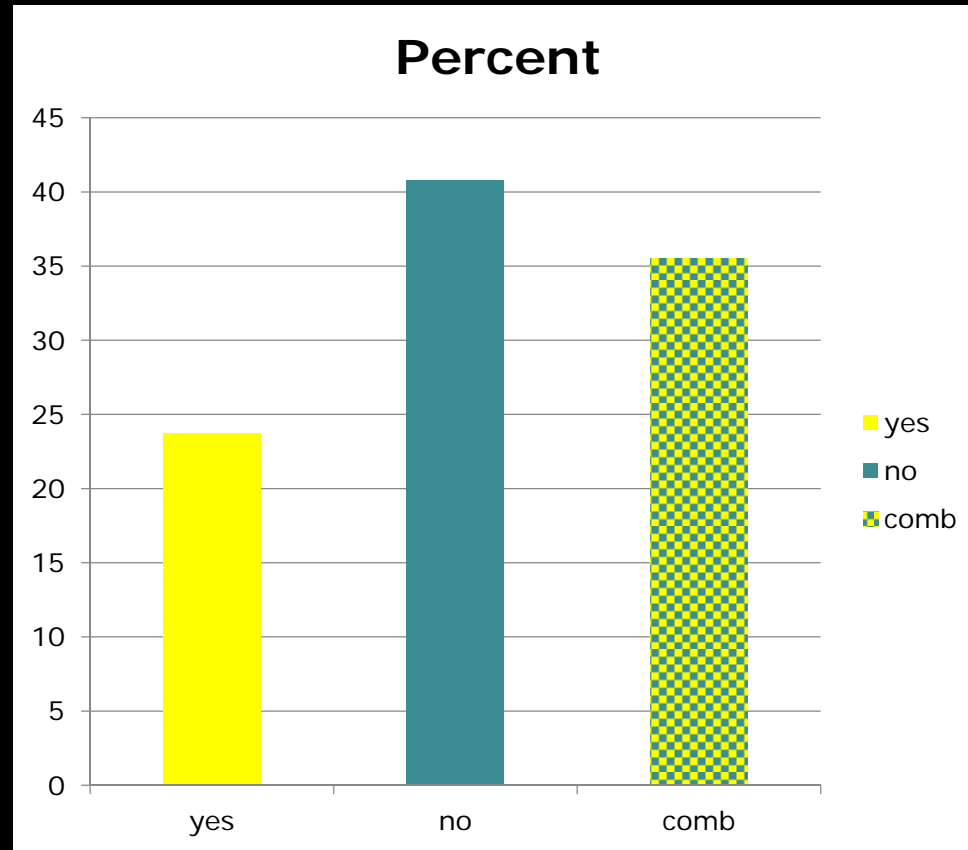
- Women more depressed
- Men more anxious

- Depression (25%)
- Anxiety (50%)
- PTSD (n=10; 13.2%)
- Panic disorder (10.5%)

Diagnosis: Percent of CBT Sample

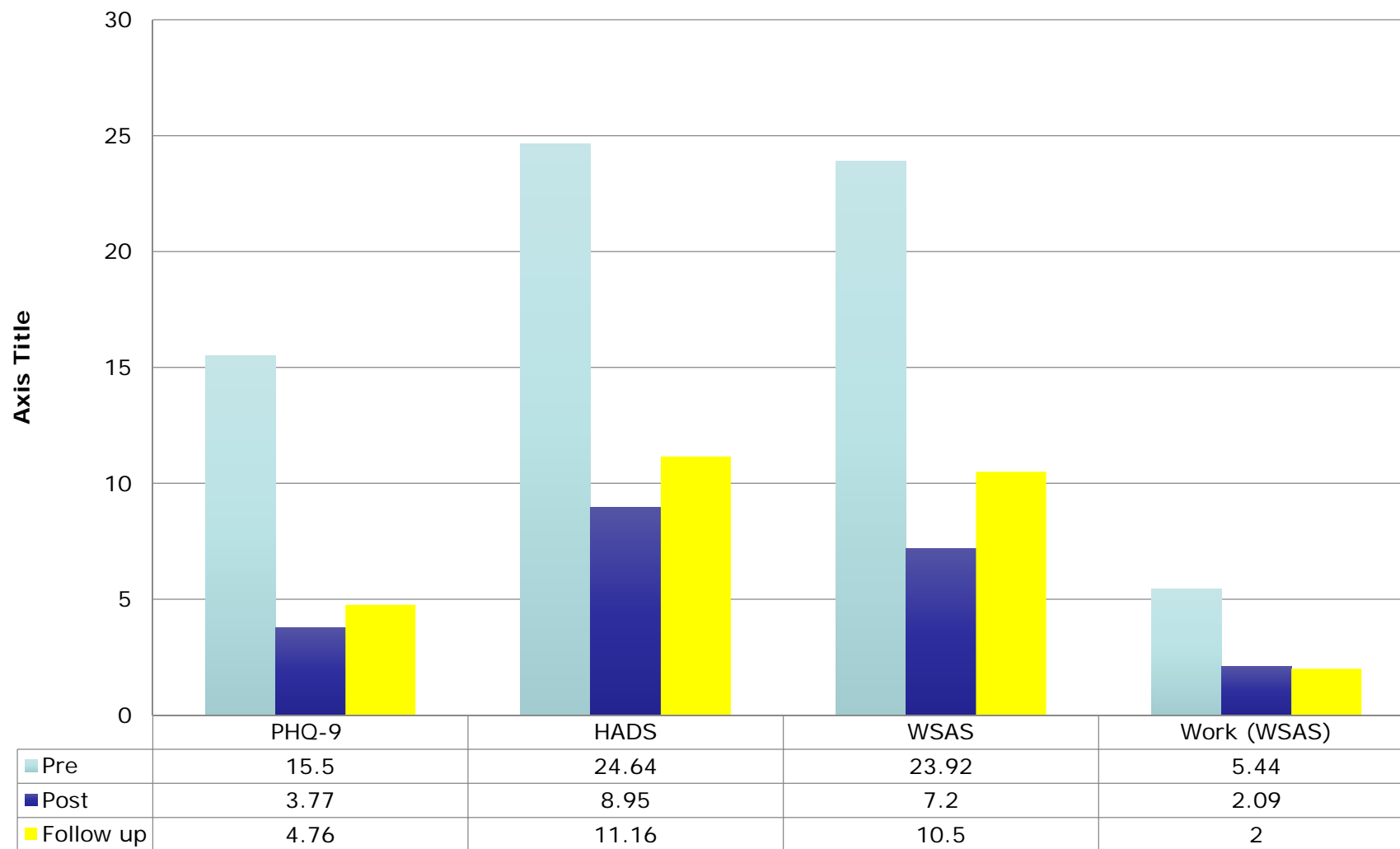


Sickness absence related to work

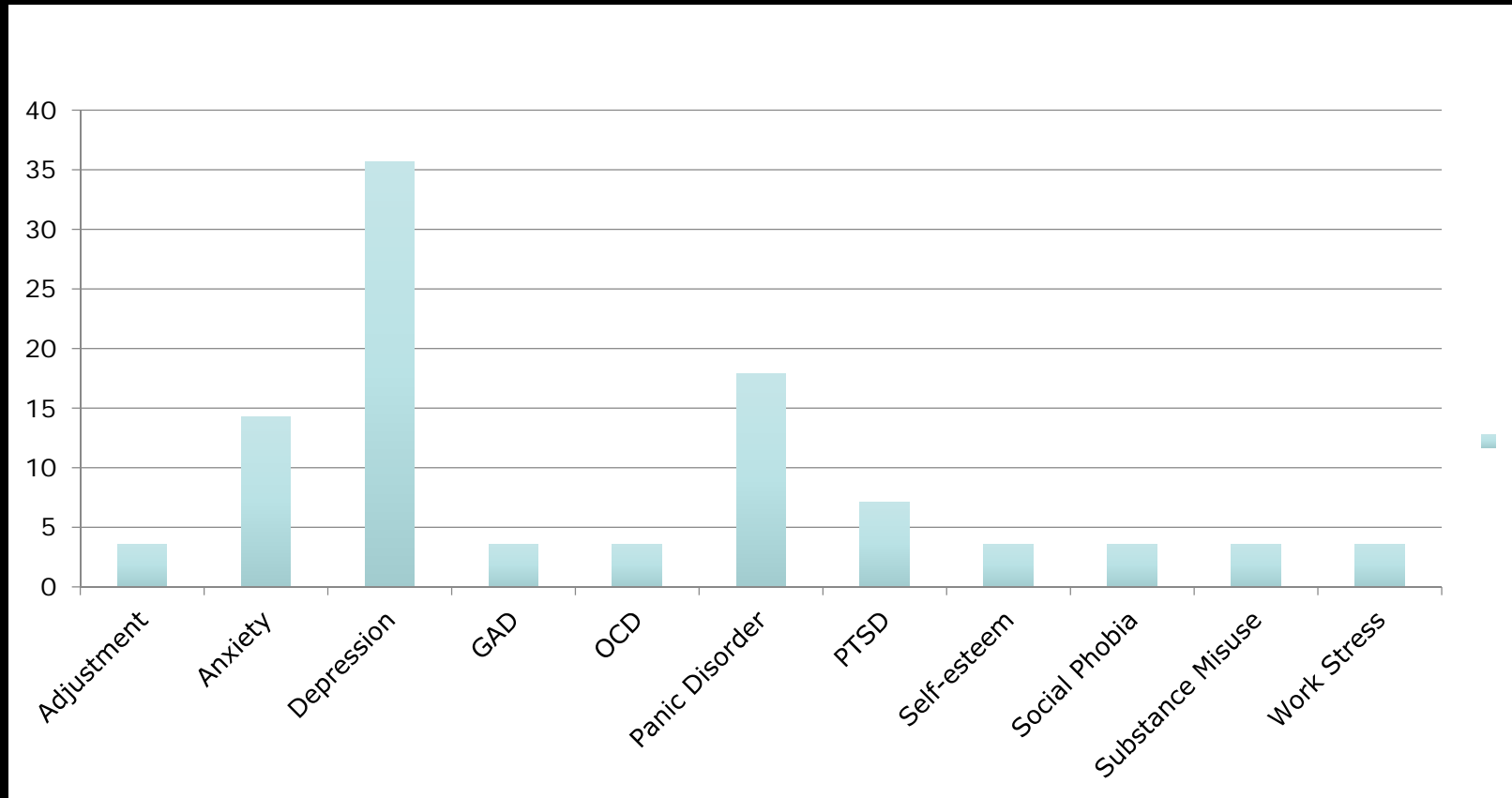


	%
Yes	23.7
No	40.8
Combination	35.5

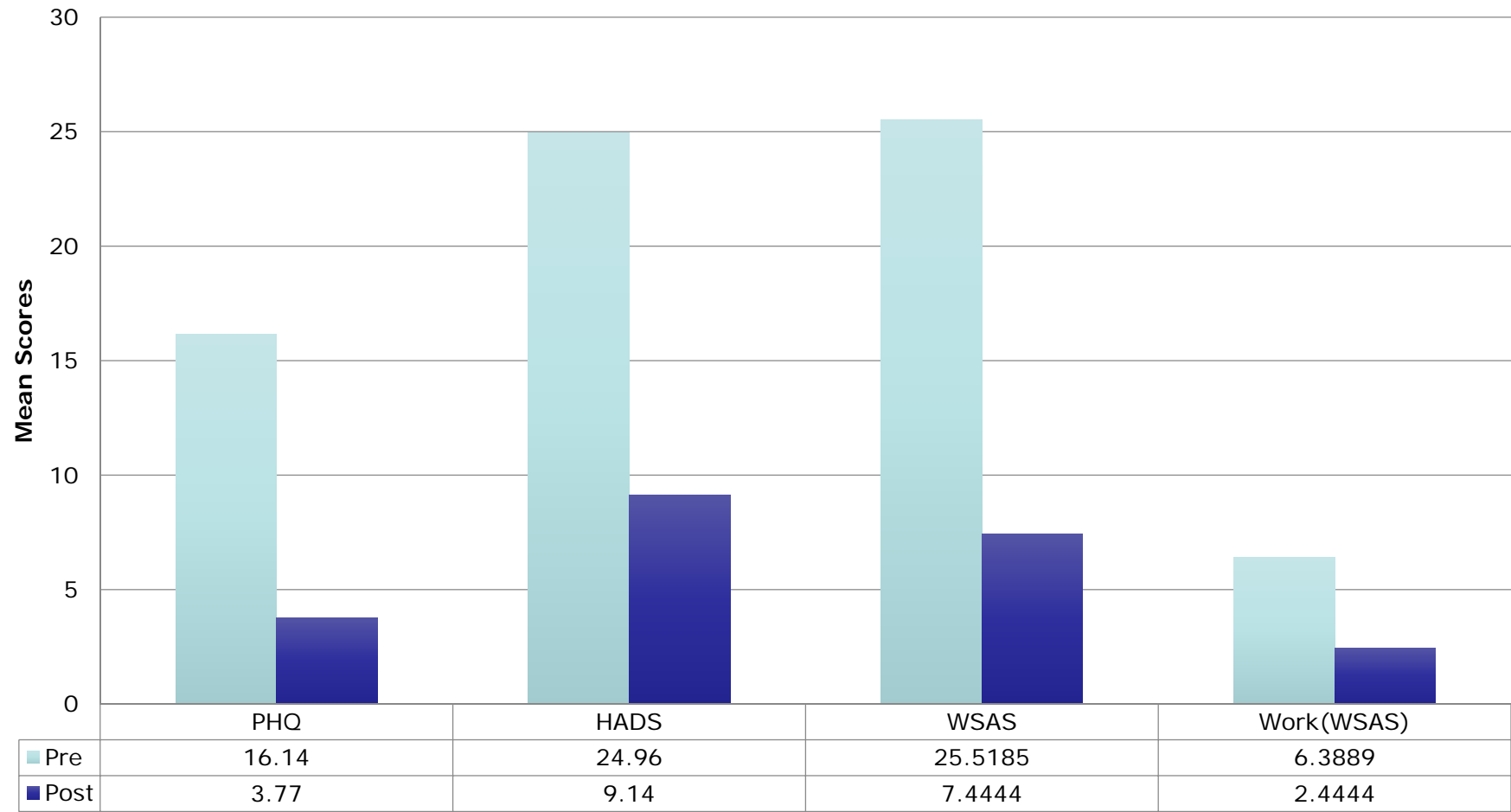
Mean Scores PHQ-9, HADS, WSAS, Work(WSAS)



Diagnosis: School referrals



Mean scores for referrals from school



Antidepressants

- Anti-depressant prescription was not a significant co-variate related to outcome against any of the measures

Teacher

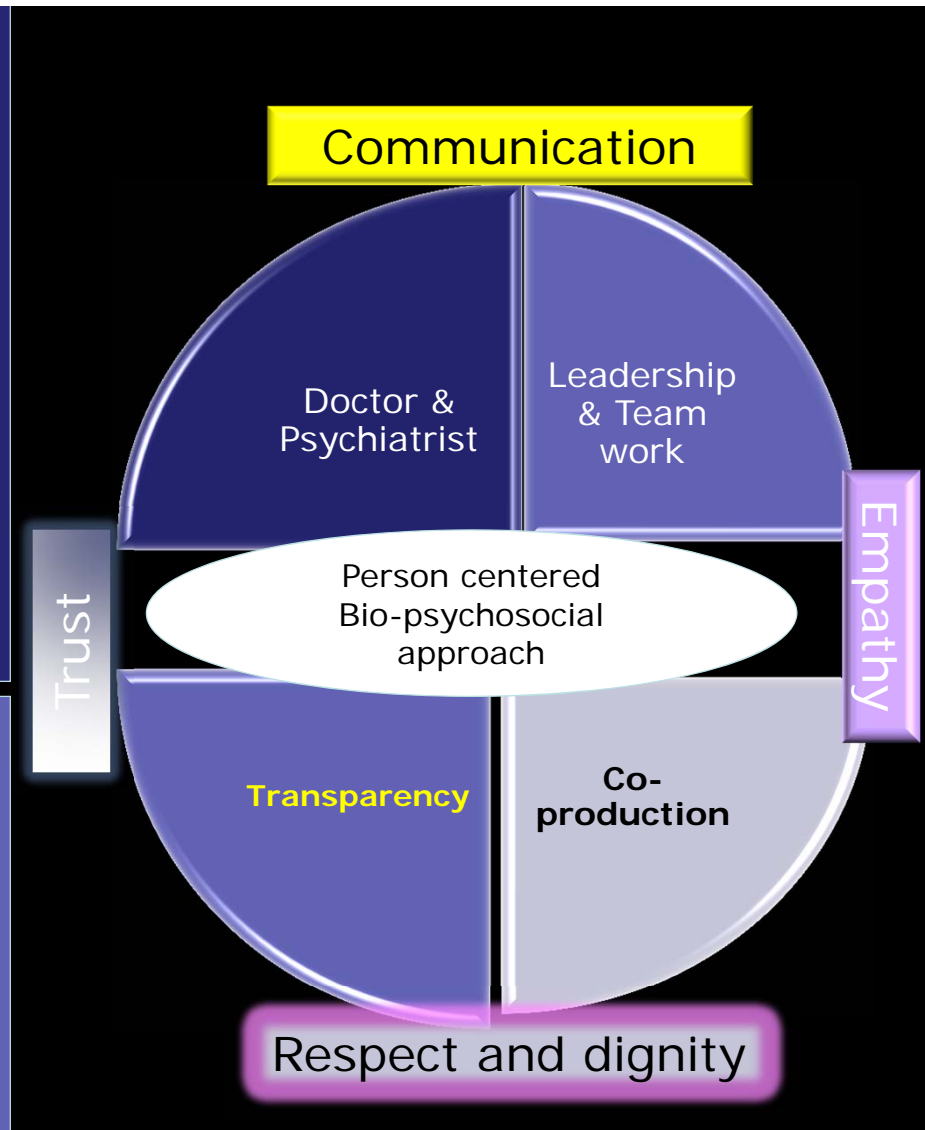
- Long history of anxiety and depression dating back to childhood.
- Poor perception of himself.
- Numerous problems identified in workplace in terms of functioning.
- CBT helped him understand the roots of his problems, and start to address the perceptions of himself as a consequence.
- Confidence began to improve and eventually his performance in work also improved.
- He put himself forward for deputy head positions, something he would have not considered a year ago.

A building inspector

- Issues with anger for many years.
- Causing problems within the workplace and at home.
- Improved very quickly using CBT
- Helped to slow down his thinking and reactions in situations
- Preserved his assertiveness
- No longer becoming angry in situations
- Felt by end of sessions that without treatment his wife may well have left him

- Duties of a doctor
- Efficiency and effectiveness
- Evidence & Values based
- Highest ethical & professional standards
- Long term engagement
- Prudent Healthcare
- Resilience
- Unique Professional Blend

- Accountability
- Boundaries
- Challenge stigma
- Confidentiality
- Equal access
- Equality & diversity
- Governance
- Safe practice
- National context



- Advocacy
- Care pathway continuity
- Choice & consent
- Empowerment and hope
- Explanation
- Maximise recovery potential
- Partnership
- Resilience
- Responsibility

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Summary

- CBT for Occupational mental health issues is beneficial
 - Clinical improvement
 - Financial benefits
 - Personal improved outcome for employees
 - Better outcome for employers

Thank You

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