Is the concept of dangerous and severe personality disorder a useful one?

Peter Tyrer (on behalf of the IMPALOX group)

IMPALOX Group

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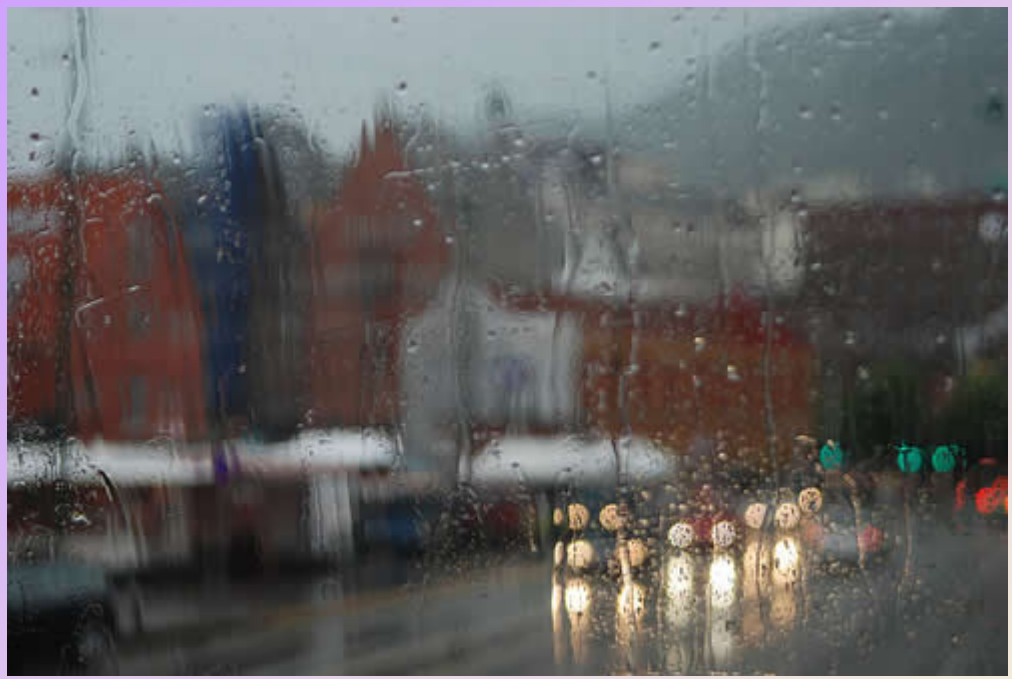
Tror det verste ligger foran oss

Today’s headline for today’s lecture



Det eneste jeg vet om Bergen er at det er et sted der det alltid regner

Men jeg er en Regn Gud fra det sentrale Afrika, og det er bare når jeg går til tørre steder at det regner, når jeg går til våte steder det forblir tørt


Hold ut - Dovregubbens hall

What I hope to achieve

- Detailed study of the key elements to make the diagnosis of DSPD (even though this was abandoned as a diagnosis and replaced with ‘DSPD programme’)
- Discussion of the assessment, treatment and outcome of the programme
- Pluses and minuses of this experiment (all in a dispassionate and magisterial way)

DSPD: Definition (after Thornton mainly)

1. >50% risk of serious offence

2. Severe personality disorder

3. Link between PD & risk

How were they measured and were they achieved in practice?

Key measures

- Risk – Psychopathy Check-List Revised (PCL-R) & Historical Clinical and Risk Assessment scheme (HCR-20)
- Personality disorder - International Personality Disorder Examination (IPDE)

Level of personality disturbance required

To meet the definitional criteria the programme required:

- PCL-R (SV) of 30 or more

  OR

- PCL-R (SV) of between 25 and 29 ***and at least*** one personality disorder diagnosis using DSM IV or ICD 10 other than anti-social personality disorder

  OR

- Two personality disorder diagnoses, one of which is anti-social personality disorder(or equivalent, using DSM IV or ICD 10).

Risk

- ' *In discussing the definition of harm it was emphasised that " since harm is a consequence of an offence rather than a feature of the offence itself excepting some special cases like murder, there is no perfect correlation between offender behaviour and harm.Despite this the group felt that " offending behaviour is “dangerous” to the extent that it has the potential for leading to serious psychological and physical harm'* (Thornton, 2000). In discussing the level of risk which would be necessary to qualify for this dangerous group it was concluded that' *the person if assessed as" more likely than not" to commit an offence that might be expected to lead to serious psychological or physical harm,*' would be in the high risk category.

Value and accuracy of PCL-R

- At the time the DSPD programme was set up the PCL-R reigned supreme as both a measure of risk and of personality disorder

- We investigated its reliability in the IMPALOX group

Early Rampton Hospital study
(Tyrer et al, CBMH, 2005)

- PCL-R, IPDE and HCR-20 assessed by trained researcher (SC) without any knowledge of previous assessments carried out on the unit
- Level of agreement tested by intraclass correlation coefficient (R_I)

Levels of agreement - PCL-R

Measure	Level of agreement (R_I)
PCL-R – Factor 1	0.49
PCL-R – Factor II	0.44
PCL-R – Total score	0.588

Caveat and implications

- The mean interval between the assessments of the hospital psychologists and the IMPALOX team was 19 months but the PCL-R is meant to be a robust and temporally reliable measure
- If these figures were repeated across the programme up to one in four could be misallocated

Was the IPDE any better?

- At the time the International Personality Disorder Examination (IPDE)(Loranger et al, 2001) was considered to be the gold standard measure of personality disorder

Levels of agreement - IPDE (cluster A personality disorders)

Measure	Level of agreement (R_I)
IPDE – paranoid PD	0.59
IPDE – schizoid	0.62

Levels of agreement - IPDE (cluster B personality disorders)

Antisocial	0.73
Borderline	0.45
Histrionic	0.62
Narcissistic	0.38

Levels of agreement- IPDE (cluster C personality disorders) & HCL-R

Avoidant	0.46
Dependent	0.70
Obsessive-compulsive	0.68
HCR-20 (total score)	0.57

Problems with Rampton data

- Psychologists not all fully trained and Rampton was abandoned as a pilot site during the course of the evaluation
- Data therefore could not be regarded as equivalent to the proper approved pilot sites
- Data therefore obtained in the main study from new pilot sites at HMP Whitemoor and HMP Frankland (high security prisons)

Levels of agreement - IPDE (cluster A personality disorders)

Measure	Level of agreement (R_I)
IPDE – paranoid pd	0.55
IPDE – schizoid	0.45
IPDE - schizotypal	0.43

Levels of agreement - IPDE (cluster B personality disorders)

Antisocial	0.67
Borderline	0.29
Histrionic	0.52
Narcissistic	0.56

Levels of agreement - IPDE (cluster C personality disorders)

Avoidant	0.44
Dependent	0.45
Obsessive-compulsive	none recorded to date
Overall level of severity	0.54

Levels of agreement – PCL-R

- Initial findings show no improvement on reliability from the Rampton data:
- $R_I = 0.48$ (fair level of agreement only)

Why such poor reliability?

- When the DSPD programme were told about these results they investigated the assessments at each site and found the PCL-R was being administered in a non-standard way or sometimes made from a distant past assessment alone
- The IPDE (as with all assessments of the current personality disorder classification) persistently has this low level of inter-rater reliability but this was also not being scored accurately either

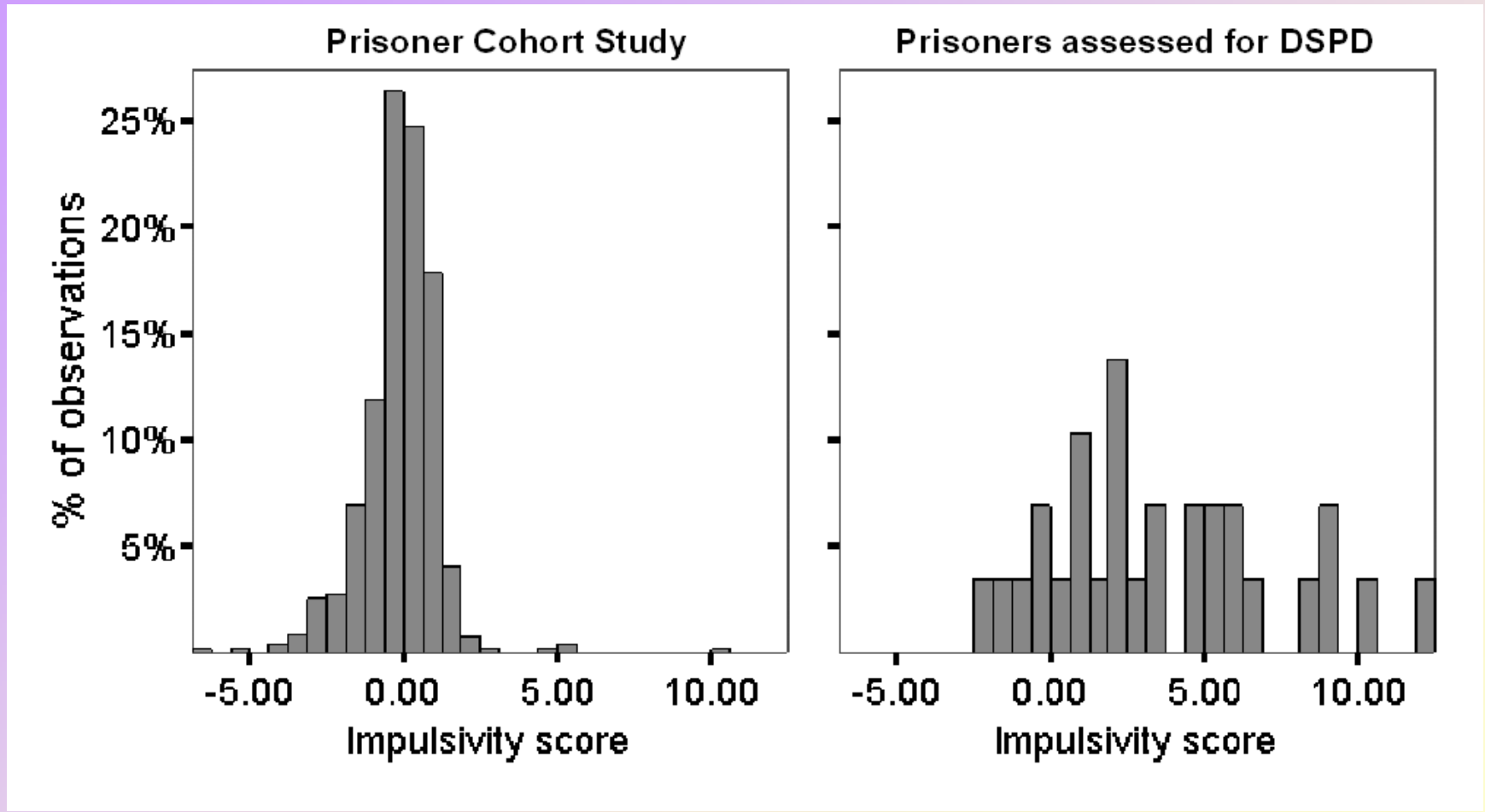
Summary of reliability

- Significantly below the 0.75 level regarded as the gold standard level of agreement for such an important executive decision

Did neurocognitve assessments help to understand risk?

- Neurocognitive approaches (Robert Rogers)

Can neuropsychology tell us anything about the seriousness of the cognitive and emotional problems of prisoners assessed for DSPD?



Prisoners assessed for DSPD (Red Spur, HMP Whitemoor) show increased levels of impulsiveness compared to high-risk prisoners from the Prisoner Cohort Study (2 or more years for violent or sexual offence; <1 yr to left serve; high risk by Offenders Group Reconviction Score (OGRS)) Impulsiveness is found most frequently as a significant personality variable in those with borderline pathology

Link between personality disorder and risk

- Methodology: to examine a random list of final reports from the assessment programme to determine how assessors decided on what constituted the ‘functional link’ between personality disorder and risk

- Results: In 7 of the 10 reports in which risk and pd were positive the same wording was used: ‘An analysis of X’s offences shows that his personality traits characteristic of his personality disorder had a causal connection to his offences’. Separate examination of the summary data for the first 58 patients assessed at the pilot sites showed that in none of them had the link been recorded as absent if both risk and personality disorder were recorded as present.

What was the idea behind the link?

- Assessors were asked to examine '*at least two documented instances of behaviour that either had, or might have, led to serious harm. They would then seek to determine whether in either of these instances something that could reasonably be seen as an expression of the personality disorder had contributed to the behaviour*' (Thornton, 2000).

- In addition the assessor was also asked to bear in mind whether the '*range of treatment options realistically available within the National Health Service or the criminal justice system could be considered and arguments made as to whether features of the personality disorder might be expected to impair reduction in risk*' (Thornton, 2000).

Conclusion

The third element of the DSPD diagnosis was an interesting aspect of the diagnosis but did not get formally defined and in almost every case there was no evidence that the assessment psychologists had taken it seriously

Explosive political issue

- The Home Office and Department of Health were at pains to stress that the DSPD programme was a therapeutic one designed to help participants to prevent re-offending and was not, ***definitely not***, a cynical attempt at ‘warehousing’ (ie keeping them in custody on the programme solely to prevent them being released).
- Did the programme give evidence based treatment and was there any suggestion of ‘warehousing’?

What happened in assessment and treatment?

- Prisoners/patients were intended to be engaged in a complex multifaceted set of psychotherapeutic interventions consisting of different modules; the programme was different in each of the treatment prisons/hospitals
- Very few prisoners were able to complete all modules
- The group psychotherapeutic component planned for each evening was abandoned early, allegedly because of staff shortages

Conclusions of neurocognitive testing

- *'The present results suggest that prisoners with BPD may find it difficult to assimilate even such general ideas when delivered in a verbal format. Treatment development might assess memory for both themes and details of treatment interventions over the short and longer-term to optimise treatment delivery in different individuals'* (Rogers, 2009)

Assessment, treatment and outcome

- Assessment procedure different at each of the four sites
- Broadmoor (no period of assessment required)
- Frankland (6 weeks)
- Rampton (10 weeks)
- Whitemoor (12 weeks rising to 26 weeks)

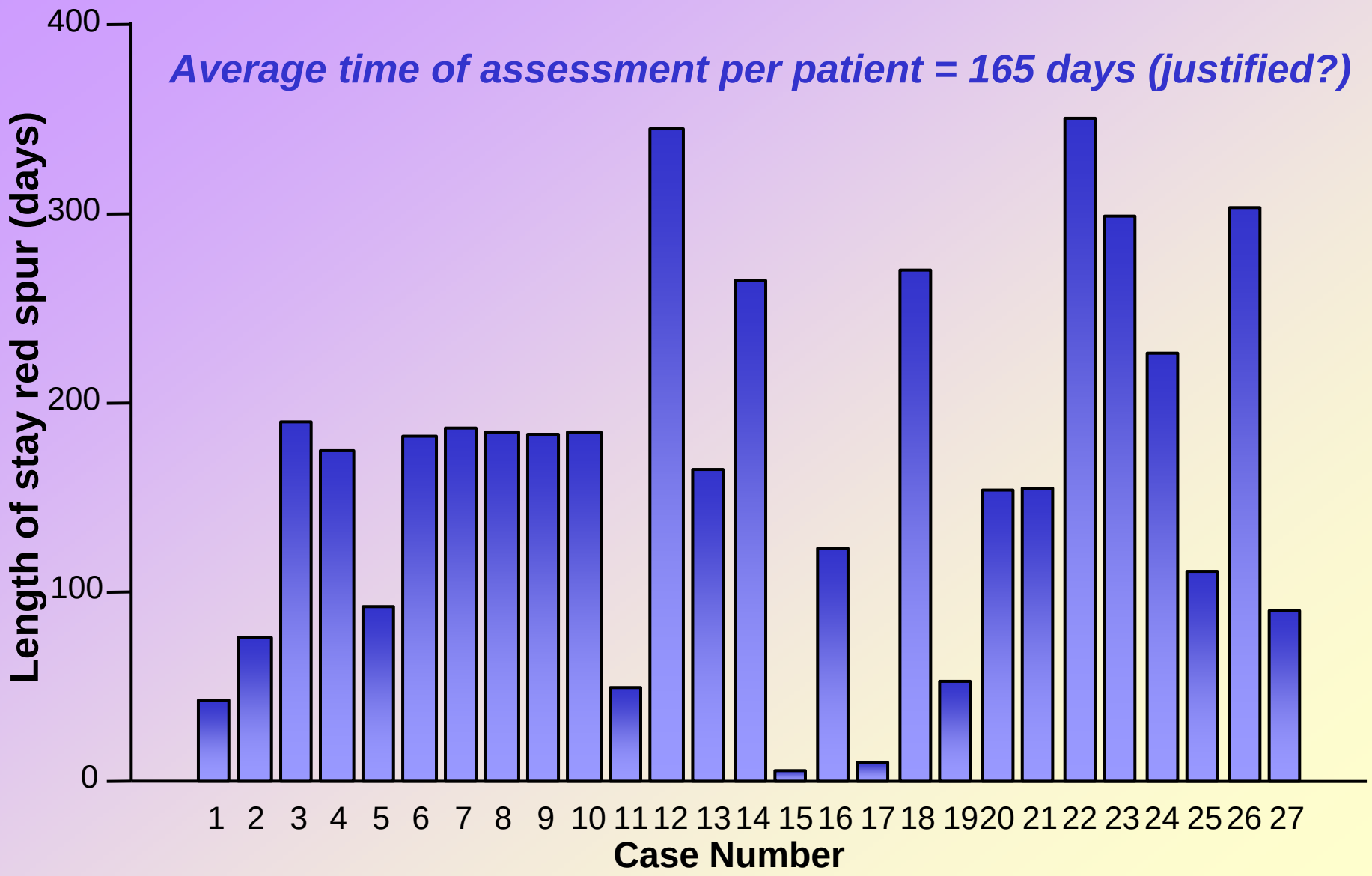
Number of days in assessment activity

In order to estimate the amount of time the prisoners spent in assessment activity, we separated DSPD Whitemoor service use into two groups: individual assessment activity and group assessment activity.

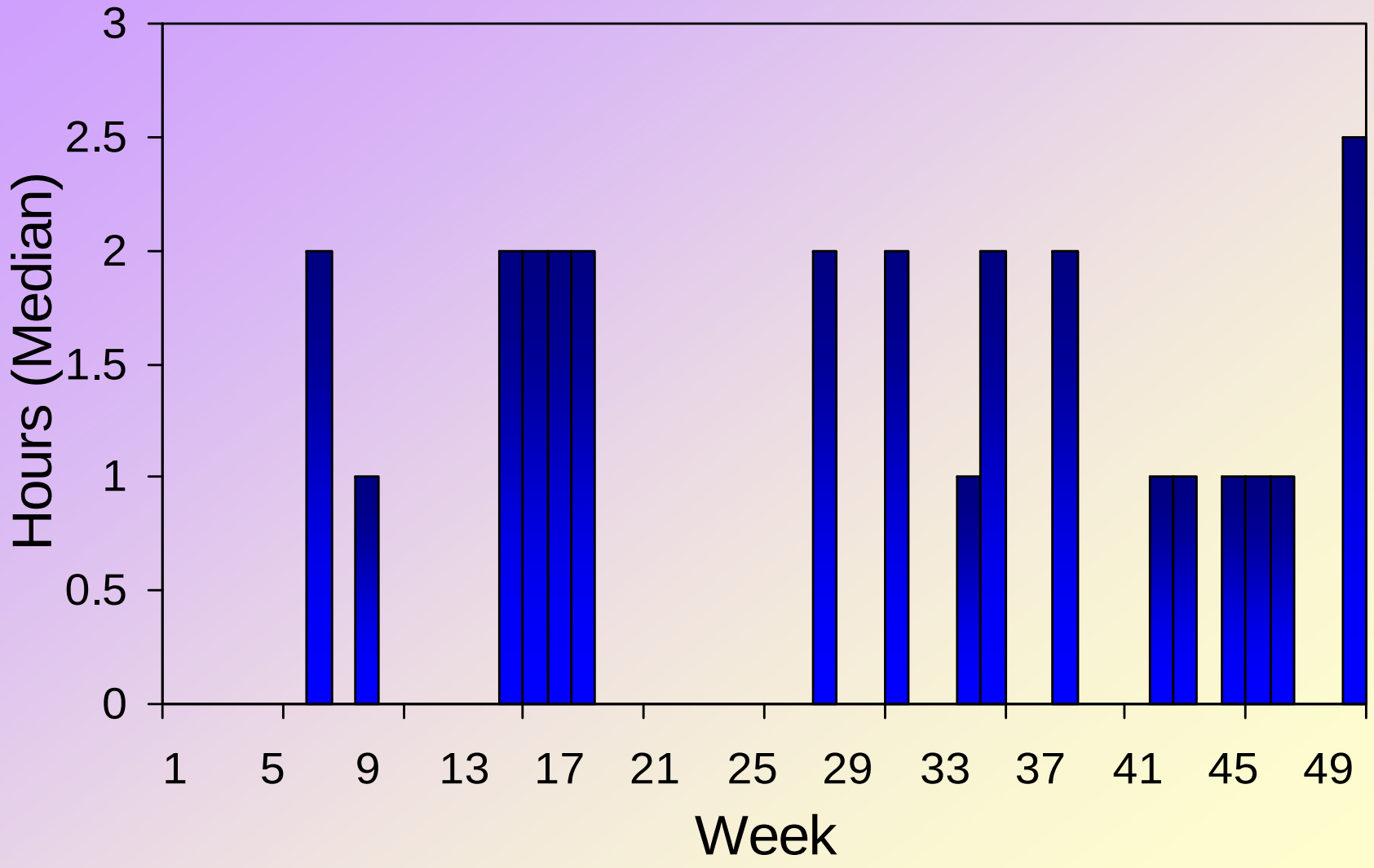
(i) Individual assessment activity was defined as any contact with the wing psychiatrists, psychologists or mental health nurses

(ii) Group assessment activity included time in a therapeutic group, creativity group or debate group.

Number of days in one prison (Whitemoor) by prisoner in order of admittance

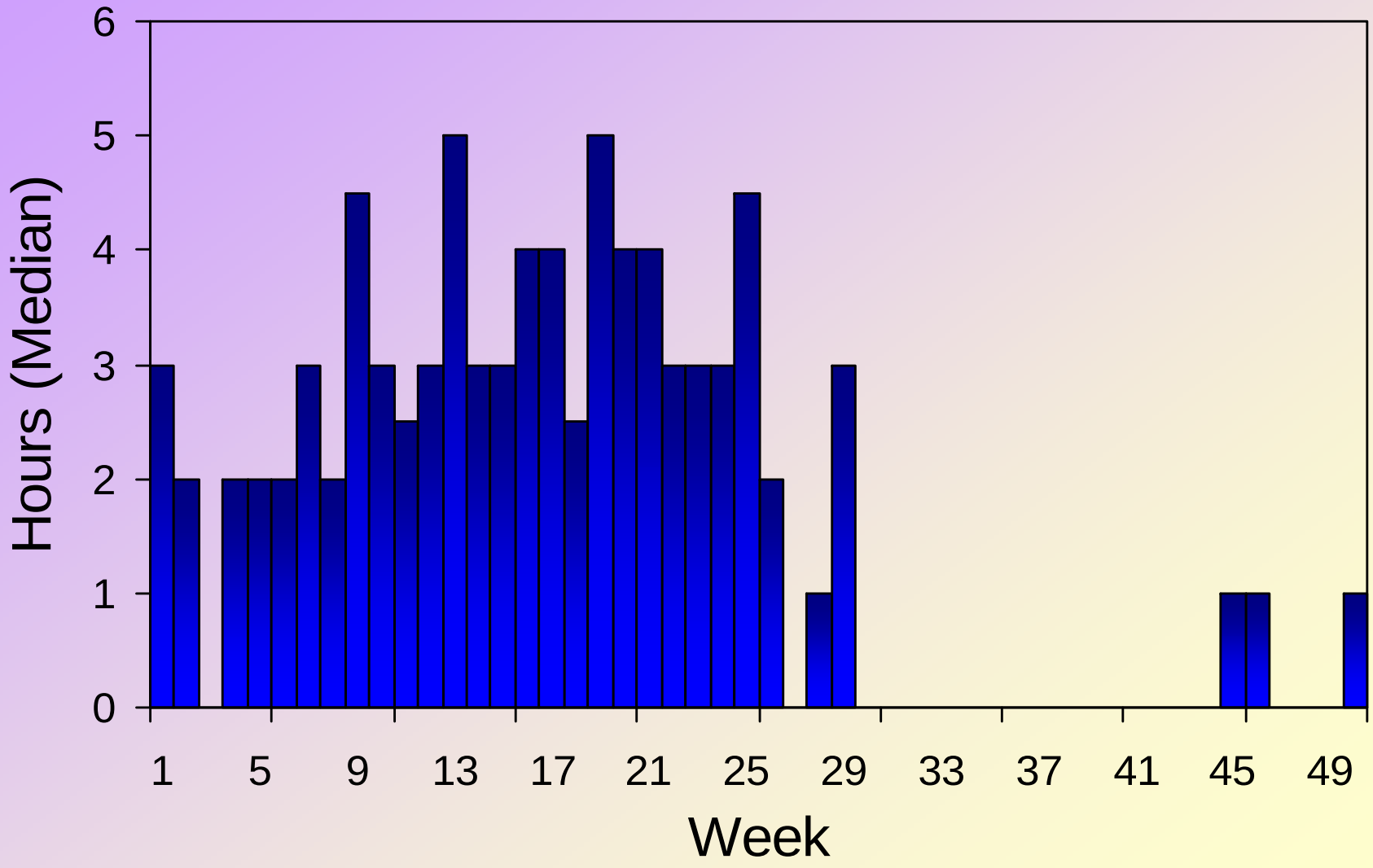


Median hours spent per week in individual DSPD assessment (*with psychiatrist, psychologist or mental health nurse*)



Median hours spent per week in <u>group</u> DSPD assessment

(*with psychiatrist, psychologist or mental health nurse*)



Results for first 27 patients in RCT

- Mean duration of individual activity per patient = 1.11 hours (range 0.2-3.4)
- Mean duration of group activity per week = 2.98 hours (range 0.19-5.39)
- These findings were almost identical in the assessment of the full treatment programme (Burns et al, 2011)

Conclusion

- Treatment was not systematised and did not follow a coherent pathway and a separate qualitative study showed it had little meaning for most participants (Rutter, 2009)
- The very long time in assessment and the low level of therapeutic activity suggests a degree of warehousing

Was there any evidence of good outcome?

- Randomised trial of early and late assessment
- The assessment process was planned to be a long one (12 weeks initially, rising to 26 weeks later) and at the outset this was judged to be a complex intervention as much as an assessment. It was therefore felt appropriate to test the impact of the assessment using a randomized controlled trial in which prisoners were randomized to early or late assessment with outcomes measured after 6 and 12 months assessment, with the expectation that those allocated to the early group would have their DSPD assessment completed by 6 months while the late assessment group would still be in their parent prison.

Outcome measured by serious harm

- We followed closely the Thornton approach that '*offending behaviour is "dangerous" to the extent that it has the potential for leading to serious psychological and physical harm*'

- Hypothesis: The early assessment & treatment group would have a better outcome in terms of serious violent behaviour (QoV scale) than the late assessment and treatment group

Outcome

Patient Number	Randomization group	Time after randomization before episode (m)	Risk of significant violence in early compared with late assessment (hazards ratio)
1	Delayed	15	0.55 (95% confidence interval; 0.10-3.01); P=0.49
2	Delayed	8	
3	Early	5	
4	Delayed	3	
5	Delayed	3	
6	Early	6	
N = 31	Early	No episodes (censored)	
N = 33	Delayed	No episodes (censored)	

Survival analysis of time to serious violent episode (score of 9 or more on the QOV scale) (Tyrer et al, 2007) in 70 patients involved in randomized trial

Cost-effectiveness and cost-function

- The DSPD programme was committed to ‘a rigid evaluation of its cost effectiveness’

- We tried our best, but most of the costs were entirely outside our control

Cost-effectiveness and cost-function (Whitemoor only)

	Early (n=19)		Late (n=21)		Mean difference	(95% confidence interval	P
	Mean	**SD**	**Mean**	**SD**			
Prison based cost	1,967	2,778	774	994			
Prison overhead	**24,270**	5,595	**20,936**	5,775			
External costs	535	388	424	481			
Health	109	258	129	350			
Criminal justice	427	392	295	289			
Total cost	**26,773**	5,992	**22,133**	6,225	4,639	(719 to 8,559)	p=0.022

Univariate associations with cost over 12 months

Variables	N	Mean cost (£)	p-value
Age at baseline			
<38	22	46,825	0.256
≥38	22	47,100	
Life			
Yes	35	45,653	0.121
No	9	50,055	
Personality Assessment Schedule			
<45	21	**43,723**	0.116
≥45	23	**49,921**	
Social Functioning Questionnaire			
<10	22	**44,312**	0.003
≥10	22	**49,613**	
Psychopathy Check-list – Short version			
<16	19	**49,264**	0.031
≥16	25	**45,214**	
Risk (HCR)			
<27	20	46,256	0.250
≥27	24	27,551	

So is DSPD a useful concept?

- It probably is in principle, but has been introduced ahead of time
- There is no point in having a treatment programme until you have an evidence-based treatment
- A better selection process is needed

Den beste ligger foran oss