Pathological Gambling: An evidence based approach.

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'Unreal Scene' Liu Jianhua (Shanghai)





National Problem Gambling Clinic

- First dedicated multidisciplinary NHS clinic for problem gamblers in the United Kingdom
- Vision is to be the Centre of excellence and research for PG
- Offering individual and group treatment for gamblers
- Large research hub for PG on site set up recently by myself and Prof Anne L-H.
- Focus on Biological aspects of PG, cognitive neuroscience and some clinical. First DATABASE!!. MRC and university funded. Imperial, Cambridge, Oxford, UCL.



National Problem Gambling Clinic

Come and visit.

Open day 7th Dec.

Annual conference 6th Dec,RSM Focuses on Research of PG.





BRITISH PREVALENCE SURVEY-2007

- 68% of the population had gambled in the past year (48% without national lottery)
- 0.6% of general population are problem gamblers.
 Similar to the 2000 Survey.
- = 284,000 adult problem gamblers in UK (>30,000 in London)
- New prevalence survey out in early 2011.



How it all started...2007.

- Government was considering an increase in casinos
- Public concerns: would this increase number of PGs
- Media attention
- My role as national lead on Problem Gambling at the Royal College of Psychiatrists
- The lack of designated services within the NHS to treat problem gamblers
- British Medical Association wanted NHS involved...



2008

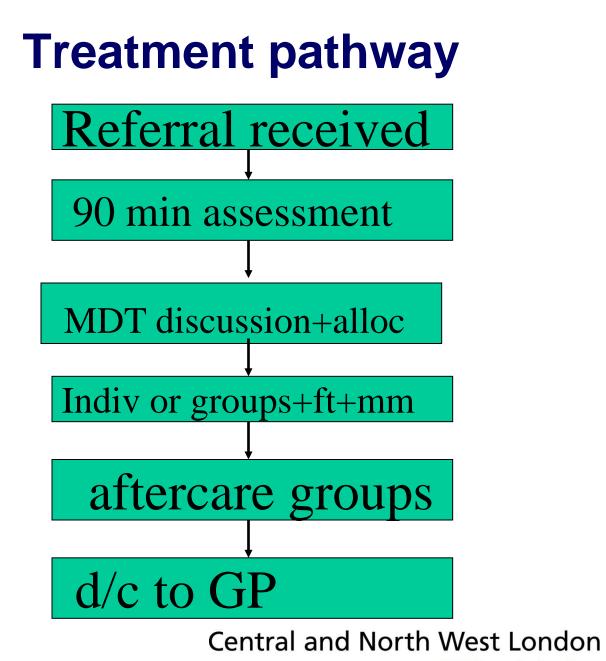
- Location of service- Soho very central, high number of casinos and betting shops.
- Treatment protocol and evaluation measures: with the help of Marc Potenza's moral support and Nancy Petry's manualized CBT programme.
- Two US conferences- lots of advice from colleagues and offers of help.
- First patient Oct 08. Over 700 referrals of severe PG to date plus many relatives and carers also receiving help..



Staff

- Consultant Psychiatrist
- Consultant Psychologist
- Psychologists (four different grades)
- Family therapist and carers' group leader
- Financial Awareness worker
- Service Manager
- Administrator
- 15 members of staff now and 12 researchers.







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Gambling Data

- Referral form, assessment, evaluation measures
- Using 'G-TOP'
 - incorporating time-line follow-back method
- Massachusetts Gambling Screen (MAGS)
 - and Canadian Problem Gambling Severity Index
- Depression and anxiety measures
 - PHQ-9 (Patient Health questionnaire)
 - GAD-7



Treatment options

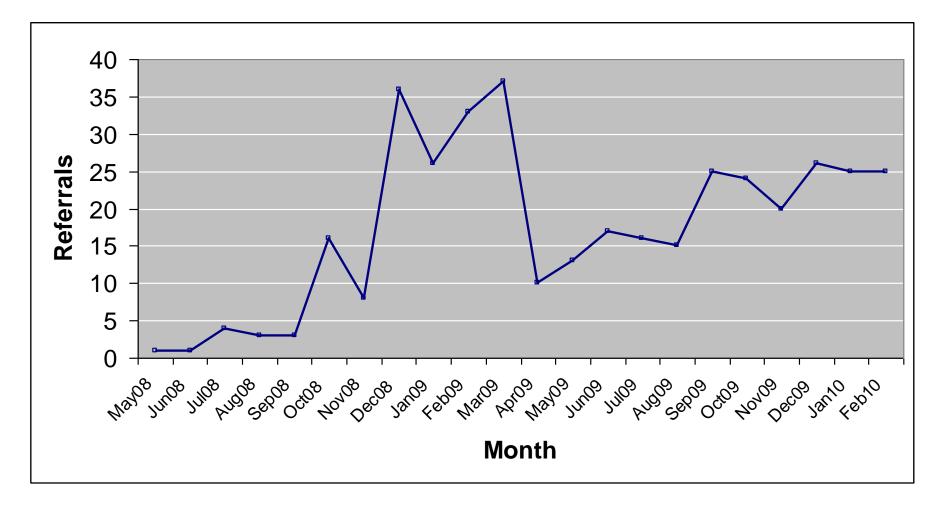
- Psychology package
 - 10-12 Week individual CBT now only for severe DD
 - 8 week CBT group for majority
 - 4 Session brief intervention (MI/CBT)
- Family therapy package
 - Joint sessions
 - Relative Connections group for carers and significant others
 - Separate treatment stream for carers of gamblers not in NPGC
- Aftercare
 - 3 month weekly Recovery group
 - Independent weekly users group on site.

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Referral Rate



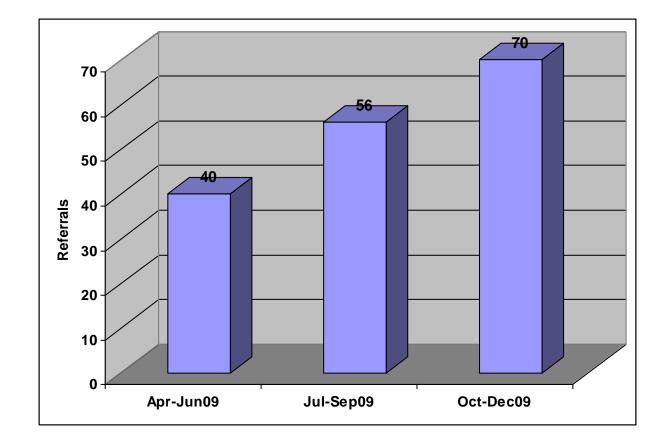
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Increasing Demand

 Last 6 months '08
 4 a week

 First 6 months '09 4.5 a week

 Last 6 months '09
 6 a week



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Referrals

- There has been a 36% increase in the number of referrals to the clinic between 2008 and 2009.
- We anticipate a continued rise in referrals as GPs, mental health teams and addiction teams learn about our existence.
- Last week 11 referrals!



Referral Sources

Referral source	2008-2009	2009-2010		
Self	154	166		
GP	10	13		
Mental Health service	13	33		
Addiction services	2	5		
Housing/Homeless services	4	6		
Criminal Justice	11	19		
Private healthcare	6	4		
Gambling Treatment Providers	4	3		
Friends/relatives	1	2		
Other	2	1		
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Referral Sources

- Media appearances and newspaper articles led to the high rates of self-referrals.
- More motivated cohort than rest of PGs?
- Note the increase in referrals from mental health services as we become known amongst colleagues.
- Note the rise in criminal justice referrals.



Demographic data

Region	2008-2009	2009-2010
London	136	179
South East	36	33
South west	3	2
East	11	15
Midlands	9	8
North West	7	4
North East	1	2
Scotland	1	1
Wales	3	5
Missing	8	8

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Age	2008-2009	2009-2010
16-24	30	41
25-34	62	83
35-44	62	72
45-54	37	36
55+	13	16
Missing	3	9



Gender

Gender	2008-2009	2009-2010
Male	199	243
Female	8	14



Ethnicity

Ethnicity	2008-2009	2009-2010
White	131	176
Mixed	8	6
Black or Black British	9	25
Asian or Asian British	22	13
Chinese	6	4
Arabic	2	9
Other	1	4
Not Stated/Unknown	28	20
Missing	0	0

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Employment Figures

Employment last 4 weeks	2008-2009	2009-2010
Full-time (20= days)	76	58
Part time (1-19 days)	31	41
Unemployed	49	55
Missing/uncollected3	3	5



Depression

- **2008-2009**
- Diagnosed cases using PHQ-9(Patient Health Questionnaire)
- 85% had depressive sxs at time of assessment
- Of these 32% were 'severe'
- 2009-2010
- 79% had depressive sxs at time of assessment
- Of these 31% 'severe'



Anxiety

- Diagnosed cases according to the GAD-7 (Generalized Anxiety disorder Assessment)
- 74% diagnosed with anxiety.
- Of these, 26% were 'severe'
- For period 2009-2010
- 71% diagnosed with anxiety
- 21% 'severe'



Type of Gambling(N=360)

Type of Gambling	n	%
FOBTs	260	61.7%
Sports betting	147	42%
Fruit Machines	115	32%
Internet	72	20.6%
Casino Games	37	10.6%
Lottery	31	8.9%
Other	15	4.3%



Types of Gambling

- 9/360 were abstinent at assessment but had gambed in a pathological way prior to the 4 week period assessed. Outcome issues when evaluating success.
- Of the 10% who played casino games, 1/3 reported this was their only betting activity.
- Overall, just over 1/3 of patients reported just doing one form of gambling.
- The majority who reported a single form of gambling were playing FOBTs.
- However, the majority of FOBT users also report betting on other games. Central and North West London



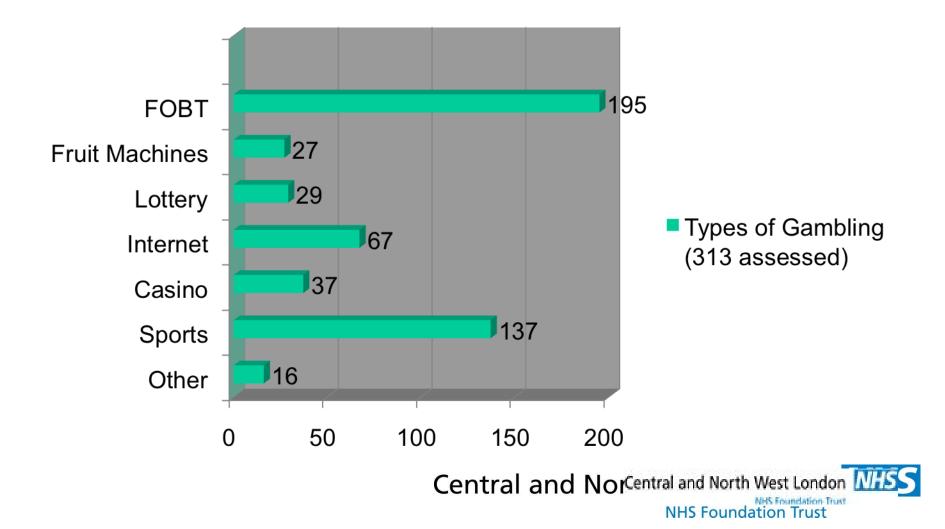
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Types of Gambling

- These figures represent the types of gambling the PGs reported doing at the time of assessment, we can not say from this whether the type of playing was problematic.
- When database is fully up and running the amount spent and frequency of play will be available. Full time research assistant working on this.



Type of Gambling

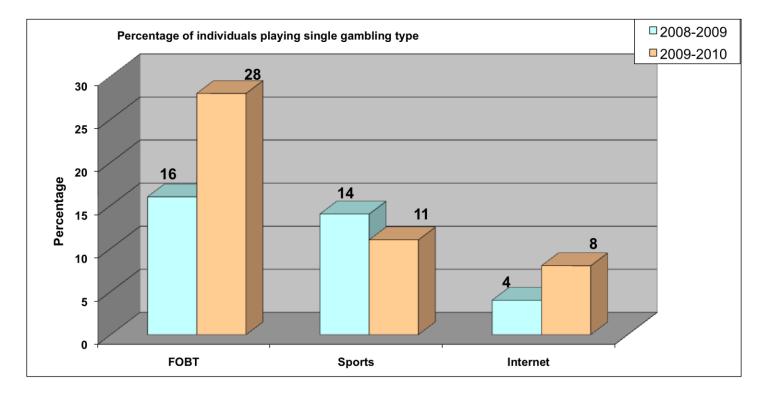


Multiple forms of gambling

- LESS DIVERSITY IN THE TYPE OF GAMBLING.
- 2008-2009: 92 patients reported playing 2 or more types of gambling
- 2009-2010: 67 patients reported playing 2 or more types of gambling.
- For this reason, an analysis was conducted of SINGLE-TYPE playing in the next slide.

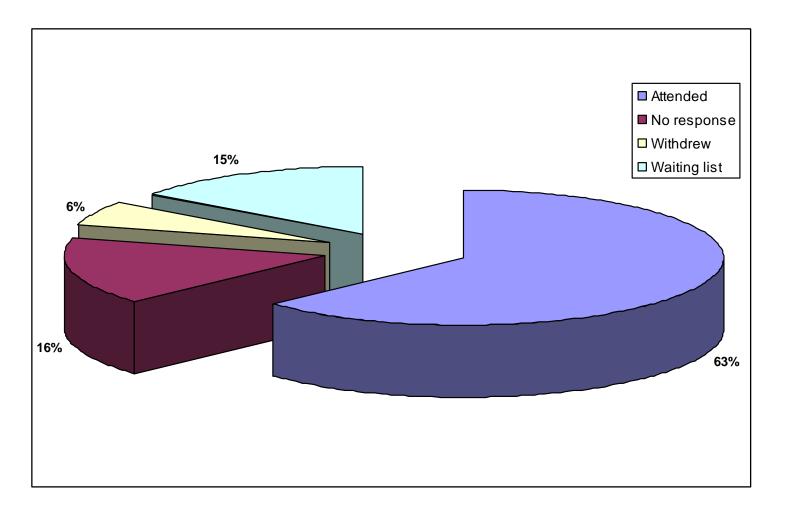


Percentage of individuals playing single gambling type





296 patients: Post-referral





Attendance post referral

- 58% of people who started CBT completed the 9 week programme.
- This is in keeping with Nancy Petry's 2006 study showing a figure of 60% for six CBT sessions.
- Great to have consistency across countries, the CBT sessions were manualised.

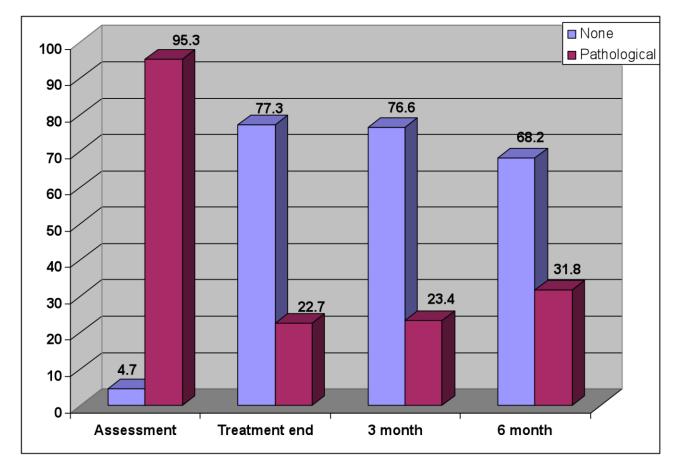


Who drops out? Analysis by gambling type.

	Completed Tx (or open case)			ed out of Itment	Statistical analysis (Chi square))TAL =249)
	Ν	(%)	Ν	(%)		Ν	(%)
FOBT +/- other, not casino	109	(74.1)	38	(25.9)		147	(100)
Casino (+/- others)	16	(61.5)	10	(38.5)		26	(100)
Sports + others (not casino or FOBT)	23	(74.2)	8	(25.8)	X ² =6.8, df=4, p=0.148 (ns)	31	(100)
Other (combinations)	31	(83.8)	6	(16.2)		37	(100)
Abstinent	8	(100.0)	0			8	(100)
TOTAL	187	(75.1)	62	(24.9)		249	(100)

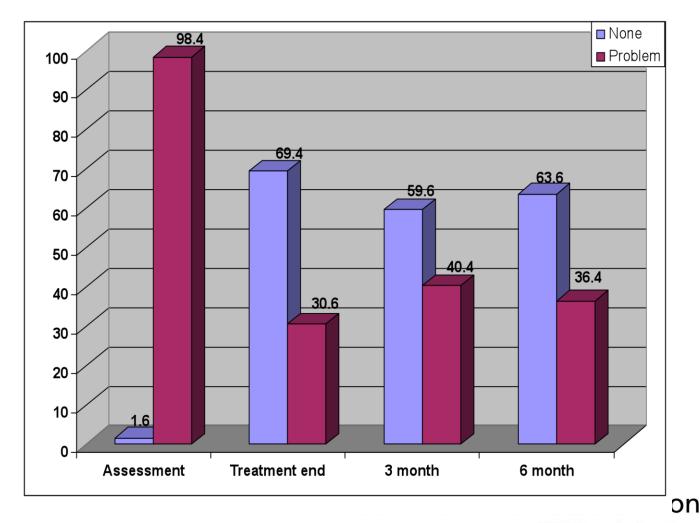


Massachusetts Assessment of Gambling Severity0-4=none5-10pg



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Canadian Problem Gambling Severity Index0-8none9-27pg



NHS

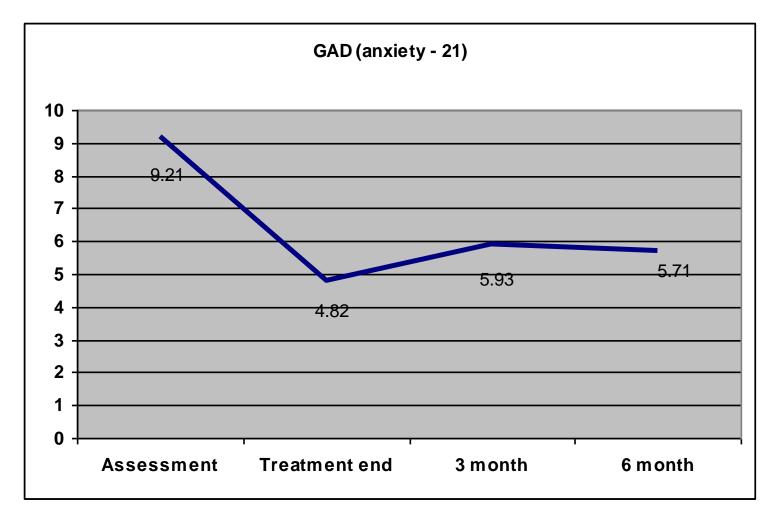
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Anxiety

 Scores for anxiety were reduced from 9.21 on assessment on the GAD down to 4.82 on treatment completion.



Anxiety





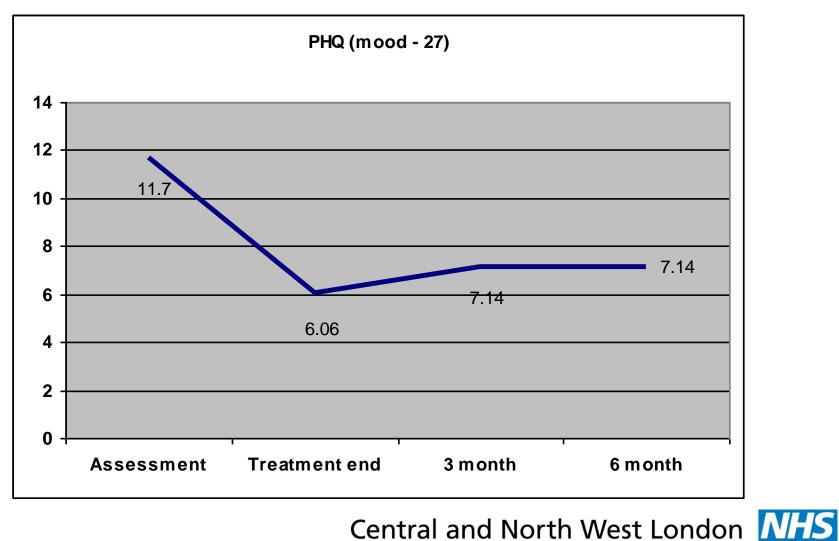
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Depression

- On the PHQ (Patient Health Questionnaire) the scores were reduced from 11.7 on assessment to 6.06 on treatment completion.
- This may be due to the clinical expertise of the team who are used to dealing with complex mental health issues and used to treating comorbid disorders.



Mood





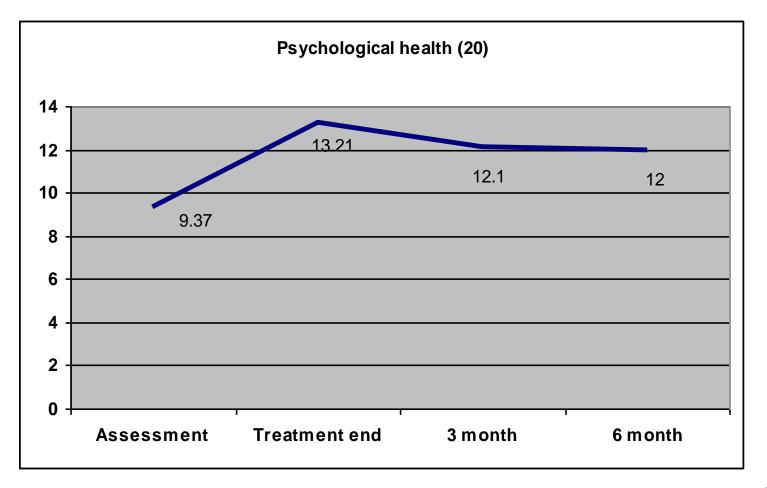
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Subjective Ratings

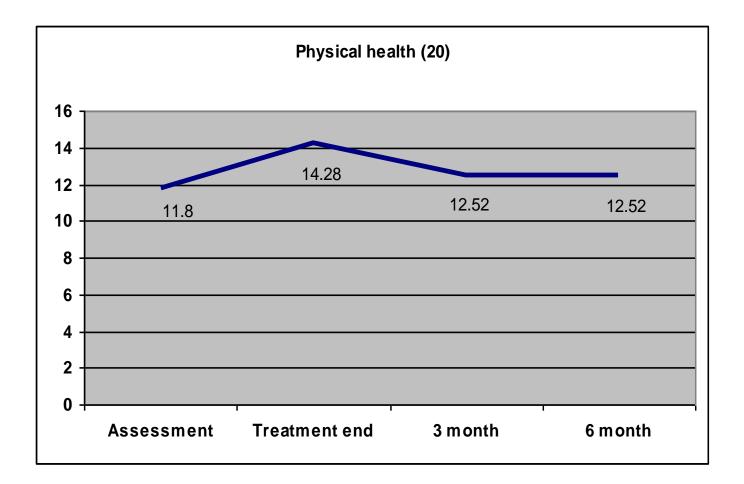
- Psychological Health 9.37ass......13.21treatm end
- Physical Health 11.8.....14.28
- Quality of Life8.99......13.94
- These items are collected on the TOP. Ask subs to rate the last 28 days on a scale that goes from 0-20, from poor to good.



Psychological Health



Physical Health



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Quality of Life



Comparison of outcome btw Assessment and Treatment Start

	ASSESSM ENT	ASSESSM ENT	TREATME NT START	TREATME NT START	Results of statistical analysis
	mean	(SD)	Mean	(SD)	
MAGS n=185	7.3	(1.7)	5.6	(2.7)	t=9.09, P<0.001
PHQ9 n=182	11.8	(6.4)	10.3	(6.3)	t=3.7, P<0.001
GAD7 n=182	9.7	(5.7)	8.4	(5.7)	t=3.2, p=0.002
CPGSI n=139	18.6	(5.2)	14.8	(6.8)	t=6.3, P<0.001

Comparison of outcome btw Treatment Start and Completion

	Treatment start	Treatment start	treatment completio n	treatment completio n	Results of statistical analysis
	mean	(SD)	Mean	(SD)	
MAGS n=85	5.5	(2.7)	2.4	(2.6)	t=9.5, P<0.001
PHQ9 n=81	9.9	(6.5)	6.4	(5.1)	T=5.5, P<0.001
GAD7 n=82	7.9	(5.8)	5.3	(4.3)	T=4.5, p=0.001
CPGSI n=77	13.9	(7.0)	6.8	(6.2)	T=8.7, P<0.001

OUTCOMES Discussion

- There seem to be different rates of treatment completion according to different patterns of gamblng.
- Patients who used Casino gaming were least likely to complete treatment. However, the observed differences were not statistically significant so may not be replicated.
- Current major limitation is the absence of follow-up assessment data for pts who drop out of treatment.
- Not known whether these pts have done well and left or have dropped out and returned to gambling.



Discussion

- Current outcome data is only available for treatment completers.
- There were no statistically significant differences in the primary outcome assessments (MAGS,PHQ-9,GAD-7,PGSI) of 'completers' and 'drop-outs' at either assessment or treatment start.
- There were also no stat sign differences between patients in relation to which type of gambling they pursued. i.e no greater depr or pg in one type of gambling.



Outcome data discussion

- Despite the large, highly statistically significant and present for all measures, changes, we must not forget that ultimately these data represent outcomes for only a third of all patients because of drop outs during treatment or at follow-up.
- There is very likely a bias towards the most positive outcome.
- It will be imperative to collect data more systematically at fixed points, 0,3, 6 months etc rather than treatment start and treatment end. This will require more manpower.



Discussion

 We collect data on all comorbid mental health conditions and classify them using ICD10 codes. The prevalence of different disorders will be available in the future.



Research

<u>12 researchers are part of Research Hub based at the</u> <u>clinic.</u>

The research is funded through national and university grants.

Dr Henrietta Bowden-Jones Imperial and Luke Clark Cambridge - MRC grant for 2-year study on impulsivity and decision-making

Brain scanning research in collaboration with Imperial College - PG and Parkinson's disease using fMRI

Impulsivity research through UCL studying eye movements

- Institute of Neurology

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1st PG ANNUAL CONFERENCE

- 6th December
- Royal Society of Medicine, London
- Programme and application forms on our website.
- 150 places.
- Full day of talks covering epidemiology, clinical issues, case studies, family work and much more.



How to contact the clinic

- By phone: 0207 534 6699
- By email: gambling.cnwl@nhs.net
- Can download our referral form from our website
- www.cnwl.nhs.uk/gambling.html



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SUGGESTIONS WELCOME!

