

Family-oriented treatment for people with alcohol  
problems in Ireland:

A comparison of the effectiveness of  
residential and community-based programmes



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# Why Family Based Treatment?

- Engagement in treatment
- Become abstinent
- Develop more controlled approach to alcohol use
- Avoid relapse

((Edwards and Steinglass, 1995; Finney and Moos, 1998; Carr, 2000a, b).



## Community or Residential Treatment?

- Clients benefit from both settings
- Meta-analysis yield zero effect sizes (Mattick and Jarvis, 1994)
- Clients with less family and social support or more severe drinking problems derive more benefit from residential treatment setting (Orford et al, 1976; Rychtarik et al, 2000)
- Demographics unrelated to outcome (Doyle and Carr, 2000)
- Regardless of setting, problem severity major predictor of treatment response ( Mc Lelland et al, 1993)



# Problems in resolving the question of setting

- Matching clients to setting little advantage over randomisation (Mattson et al, 1994; Rychtarik et al, 2000)
- Impact of eroding choice in randomisation trials
- Role of self determination



## **This study**

- Irish Context
- Naturalistic
- Clients self-select
- Consecutive referrals
- Family based treatment



# Treatment Approach

- The Minnesota Model (Cook, 1988; Nowsinki et al., 1992; Spicer, 1993).
- Alcohol as a disease
- Can be managed but not cured
- Goal of Abstinence
- Role of Alcoholics Anonymous



# Minnesota Model

- 12 step model- steps 1-3 usually within programme, other steps aftercare
- Role of self-help groups
- Multimodal
- Emphasis on family



# Therapeutic Mechanisms of Minnesota Model

- AA Principles
- Group Therapy
- Family Involvement
- Reframing addict as responsible not for addiction but for recovery





# Family Based Treatment

- Family involvement in engagement
- Family psycho-education and reframing
- Family confrontation of drinker with the consequences of drinking
- Disrupting patterns of family interaction that maintaining alcohol abuse



# Treatment Programmes

- Residential-private, self referral, nationwide catchment, 6 week group based; 1 day per week multiple family-therapy sessions, pre and post treatment family intervention, after care
- Community based- public, self referral, urban catchment area, 10 week group based, 2 evenings per week, parallel client and concerned person groups, pre and post treatment family intervention, aftercare



# Study Design

- Stepped Consent
- Pre-treatment data collection in treatment setting
- Post treatment- very high attrition
- Follow-up six month- more participants
- Face to face interviews
- At least 4 attempts to contact post treatment
- 9 month data collection period



# Study Questions

- Improvement rates in terms of alcohol abuse
- Rates of clinically significant change in negative consequences of alcohol abuse and psychological adjustment
- Mean changes on indices of alcohol abuse and psychosocial adjustment.



# Participants

- Pre-treatment assessment
  - 67/86 consented
  - 42/45 residential and 25/37 community
- Post-treatment
  - 29/67 consented
  - 15 residential and 14 community
- Follow-up
  - 39 completed
  - 27 residential and 12 community
- Complete data sets on 21/67
  - 13 residential and 8 community



# MEASURES

- Time Line Follow Back Method
- Alcohol Dependency Scale
- Drinking Inventory of Consequences
- URICA - Readiness to change scores
- GHQ-12
- Family Assessment Device
- Multidimensional Scale of Perceived Social Support



# Demographic Characteristics

Variables		Residential (n= 42 )	Community (n=25)
Age	M	42	40
	SD	10	8
		%	%
Gender	Male	62	68
	Female	38	32
Marital Status	Single	38	38
	Married	48	64
	Widowed	5	0
	Separated/Divorced	10	16
Employment Status	Self-employed	12	12
	Employee	52	64
	Unemployed	17	12
	Homemaker	12	8
	Retired	7	4
Socioeconomic Status	1	14	8
	2	26	16
	3	14	12
	4	2	8
	5	10	28
	6	0	4
	Social class unknown	33	24
Education	Primary	10	12
	Secondary	46	60
	Vocational	17	16
	University	27	12
Previous Criminal Conviction		19	8
Previous Alcohol Treatment		45	32
Type of treatment	Inpatient	44	27
	Outpatient	13	13
Referral Source	Both	3	13
	Self	50	24
	GP	19	20
	Psychiatrist	7	20
Interviewed post treatment	Other	24	36
Interviewed at follow-up		36	56
		60	56

# Pre-treatment characteristics

		Resident. (n= 42 )	Commun. (n=25)	t
Alcohol Dependence- Total Score on ADS	M	25.87	28.76	2.71**
Recent impact of drinking-Total Score on DrInC	SD	6.87	8.41	
	M	69.40	47.03	3.66***
Lifetime impact of drinking- Total Score on DrInC	SD	25.03	23.80	
	M	33.43	29.83	1.87
Percentage days drinking on TLFB	SD	7.52	7.73	
	M	38.46	46.61	1.16
Percentage days heavy drinking (>10 units) on TLFB	SD	23.11	34.59	
	M	26.88	32.84	0.93
Mean drinks per drinking day on TLFB	SD	21.94	30.69	
	M	18.40	17.81	0.25
Psychological Adjustment–Total Score on GHQ-12	SD	9.17	10.09	
	M	20.32	16.64	1.59
Family Adjustment- Total Score on FAD	SD	8.53	10.21	
	M	2.50	2.34	1.87
Social Support-Total Score on MSPSS	SD	0.34	0.37	
	M	4.55	5.00	1.70
Readiness to change score on URICA	SD	1.11	0.09	
	M	85.88	77.72	1.77
	SD	17.46	17.95	

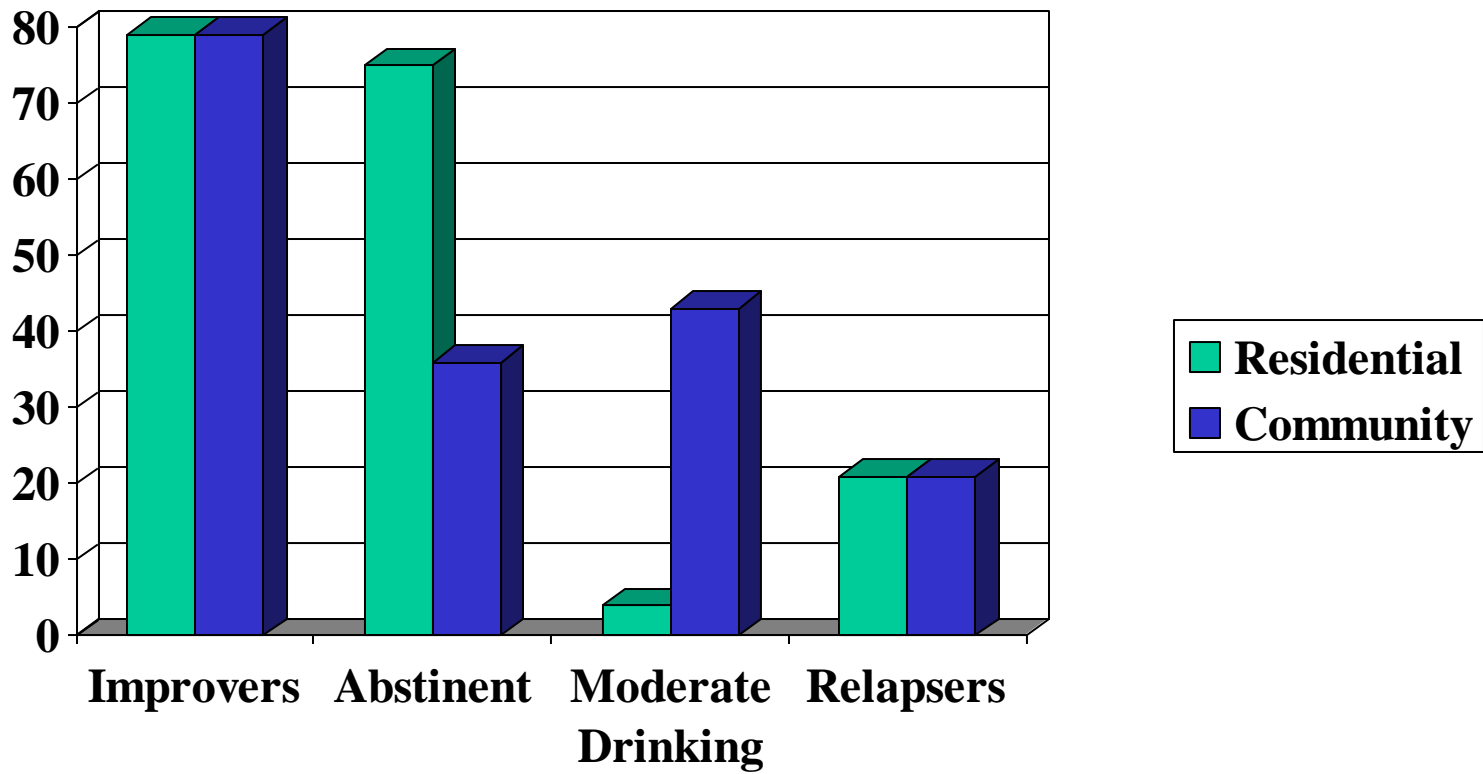


# Outcome Categories

- Improved
- Abstinent
- Moderate drinking
- Relapsed



# Global Outcomes



# Rates of clinically significant improvement

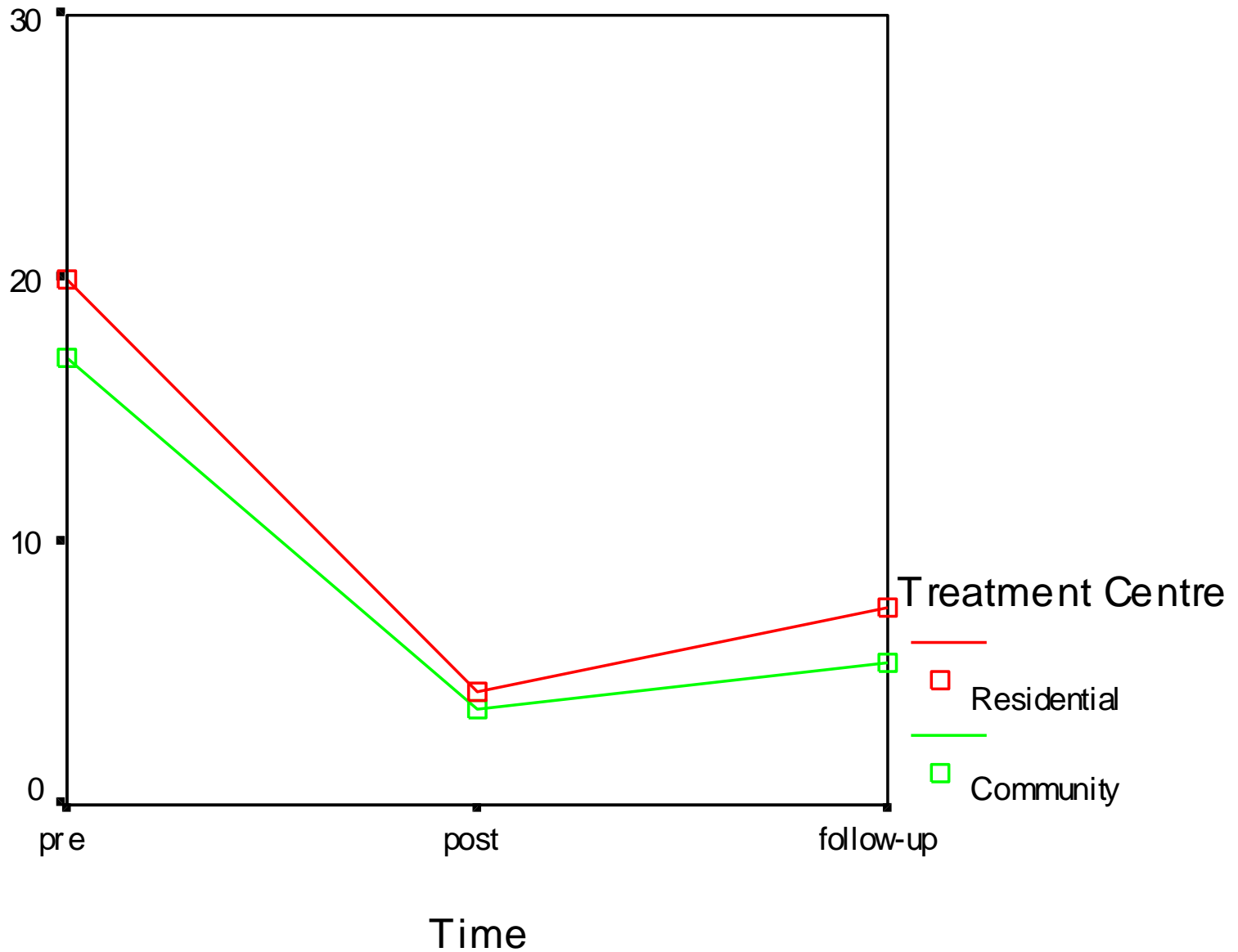
Variable	Time Period		Residential Group	Community Group	FEP	Comparison
<b>GHQ</b>	Pre-Post	%	33%	29%	0.30	RG = CG
		N	5/15	4/14		
	Pre-Follow-up	%	36%	7%	0.04	RG > CG
		N	9/25	1/14		
<b>FAD</b>	Pre-Post	%	0%	21%	0.09	RG < CG
		N	0	3/14		
	Pre-Follow-up	%	8%	0%	0.40	RG = CG
		N	2/25	0/14		
<b>DRINC</b>	Pre-Post	%	80%	57%	0.81	RG = CG
		N	12/15	8/14		
	Pre-Follow-up	%	88%	43%	0.00	RG > CG
		N	22/25	6/14		
<b>ADS</b>	Pre-Post	%	60%	36%	0.13	RG = CG
		N	9/15	5/14		

# Results of Repeated Measures ANOVA comparing pre-treatment and follow-up outcomes (n=39)

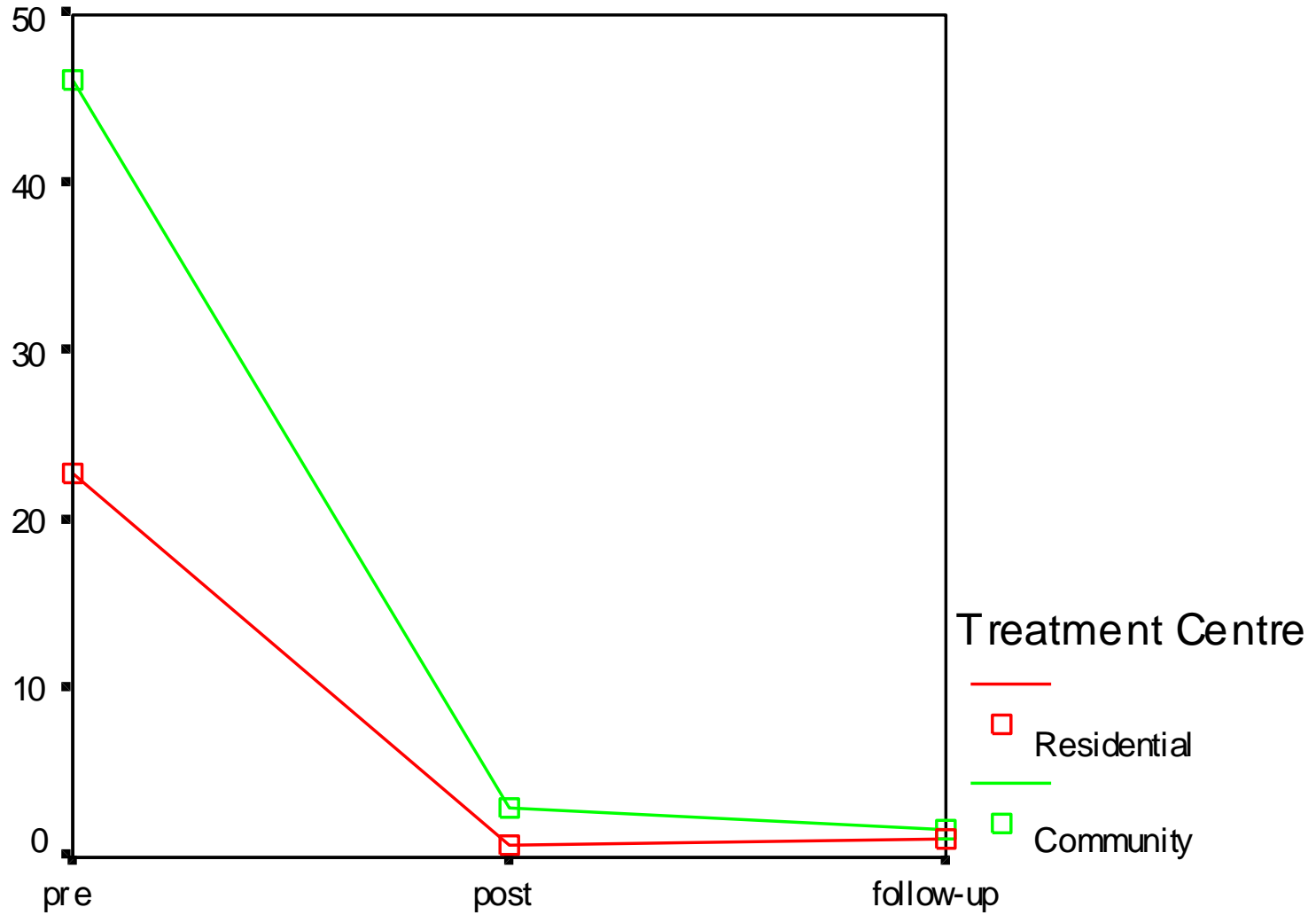
Variable	Groups				ANOVA Effects			Differences between means		
	Residential Group (n=27)		Community Group (n=12)		Group By Time Interaction	Time Effect	Group Effect	Between Groups	Within Groups	
	Pre	Follow-up	Pre	Follow-up	F	F	F			
<b>DrInC</b>	<b>M</b>	69.41	8.07	47.03	9.83	16.67***	108.18***	19.82***	RG>CG	RGPR>RGFU
	<b>SD</b>	25.03	12.09	23.81	11.37					CGPR>CGFU
<b>PDD</b>	<b>M</b>	38.47	3.56	46.83	18.29	0.84	28.50***	0.00	RG=CG	RGPR>RGFU
	<b>SD</b>	23.12	10.42	35.32	26.39					CGPR>CGFU
<b>PDHD</b>	<b>M</b>	26.88	1.64	32.84	7.38	0.06	35.09***	2.15	RG=CG	RGPR>RGFU
	<b>SD</b>	21.94	4.04	30.69	10.98					CGPR>CGFU
<b>DDD</b>	<b>M</b>	18.40	5.99	17.78	7.93	0.92	43.74***	2.39	RG=CG	RGPR>RGFU
	<b>SD</b>	9.18	10.58	10.30	6.41					CGPR>CGFU
<b>GHQ</b>	<b>M</b>	20.32	9.20	16.64	9.25	3.18	16.77***	2.73	RG=CG	RGPR>RGFU
	<b>SD</b>	8.54	9.29	10.21	10.91					CGPR>CGFU
<b>FAD</b>	<b>M</b>	2.50	2.51	2.34	2.31	0.30	0.35	3.67	RG=CG	RGPR=RGFU
	<b>SD</b>	0.34	0.48	0.37	0.41					CGPR=CGFU
<b>MSPSS</b>	<b>M</b>	4.56	5.05	5.00	5.61	0.03	4.40*	3.15	RG=CG	RGPR>RGFU
	<b>SD</b>	1.12	0.95	0.85	1.80					CGPR>CGFU



# Group means for DDD



# Group means for PDHD



PDHD

# Summary of Mean Changes

Time Effects for both groups

1. Negative effects of drinking
2. Drinking Behaviour
3. Psychological Adjustment
4. Perceived social support

No effect for Family Functioning

Group effects in favour of residential group

1. Reducing negative effects of drinking



# Summary of Findings

	Between Groups	Within Groups	Clinical Significance
<b>DrInC</b>	RG>CG	RGPR>RGFU CGPR>CGFU	RG = CG pre-post RG > CG pre-follow-up
<b>PDD</b>	RG=CG	RGPR>RGFU CGPR>CGFU	
<b>PDHD</b>	RG=CG	RGPR>RGFU CGPR>CGFU	
<b>DDD</b>	RG=CG	RGPR>RGFU CGPR>CGFU	
<b>GHQ</b>	RG=CG	RGPR>RGFU CGPR>CGFU	RG =CG pre-post RG > CG pre-follow-up
<b>FAD</b>	RG=CG	RGPR=RGFU CGPR=CGFU	RG < CG pre-post RG = CG pre-follow-up
<b>MSPSS</b>	RG=CG	RGPR>RGFU CGPR>CGFU	



## Summary of Findings

- At 6 months follow-up, 79% of both groups showed improvement
- Residential group greater % abstinent
- Community group greater % moderate drinkers



## Conclusions

- Community based treatment facilitates moderate drinking
- Residential treatment facilitates abstinence
- Is treatment response moderated in different settings by different variables?
- Was client's self selection based on outcome goal?



## Limitations

- Impact of setting confounded by other variables
- Small sample size – did intergroup differences go undetected
- High drop out rate
- Pre-treatment differences had negligible effect



# Implications for Treatment

- Choice of treatment setting based on treatment goal
- How to harness enhanced perceived social support to ameliorate family functioning?
- Developing social supports for sobriety
- Involvement with self-help groups



# Implications for Research

- Impact of treatment intensity and integrity?
- Are we asking the wrong question?
- What is the differential impact of treatment on perceived social support versus family functioning?
- Concurrent assessment of client and family members over course of treatment?



## Reference

Doyle M; Carr A; Rowen S ; Galvin P; Lyons S and Cooney G.; (2003) Family-oriented treatment for people with alcohol problems in Ireland: A comparison of the effectiveness of residential and community-based programmes. **Journal of Family Therapy**; Feb; 25(1); p. 15- 40



# Additional Findings



# Rates of clinically significant change for ADS

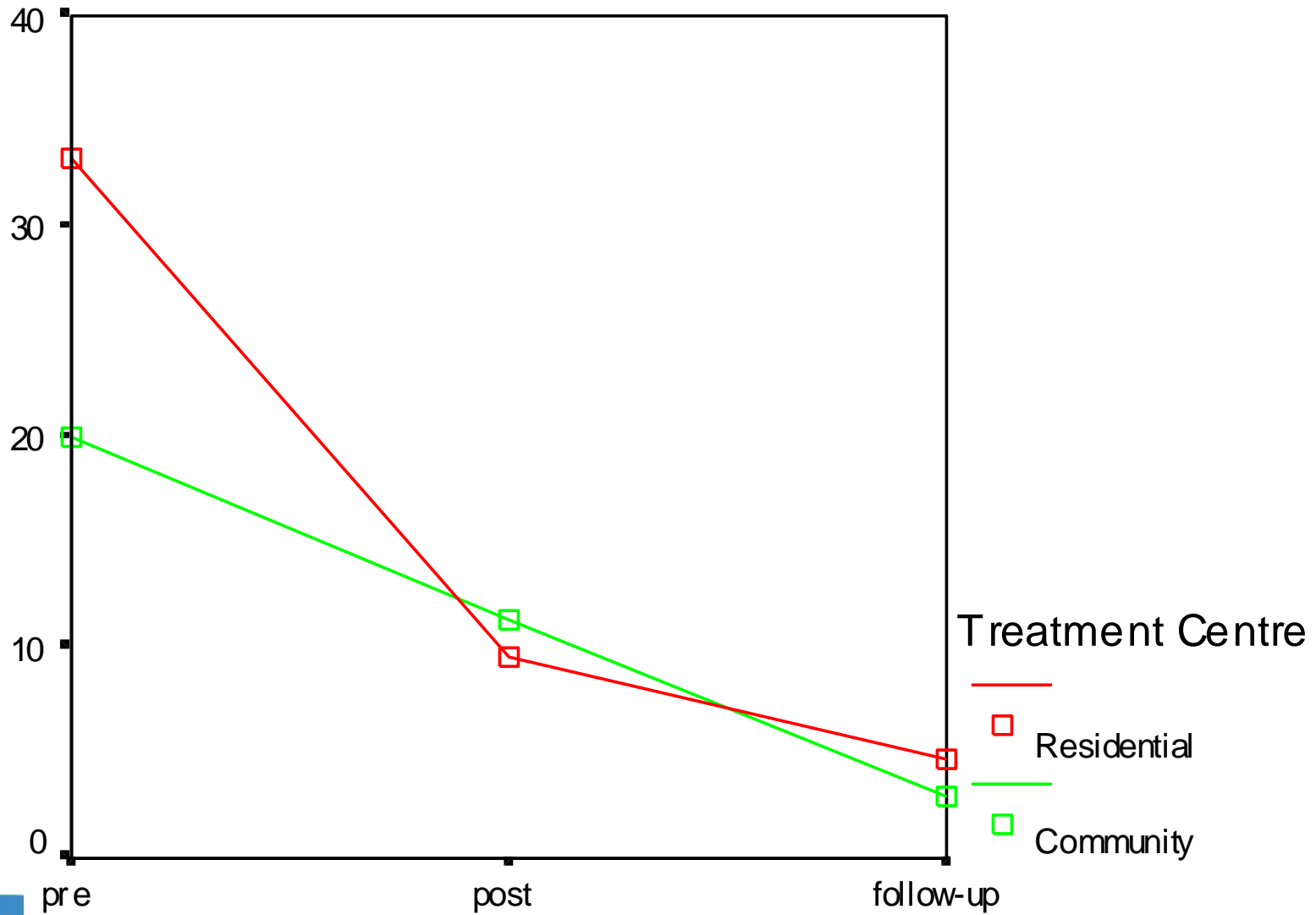
Time Period	Group	Symptomatic status			$\chi^2$	Comparison
		Deteriorated	No change	Improved		
Pre-post (n=29)	Residential	0 0%	6 40%	9 60.0%	2.397	Res=Comm
	Community	1 7.1%	8 57.1%	5 35.7%		

Note:  $\chi^2$ = chi-square. Degrees of freedom were 2 for chi-square. \*= $p < .05$ . \*\*= $p < .01$ . \*\*\*= $p < .001$ .





# Group means for DRINC shortform



Time

# Rates of clinically significant change for DrInC

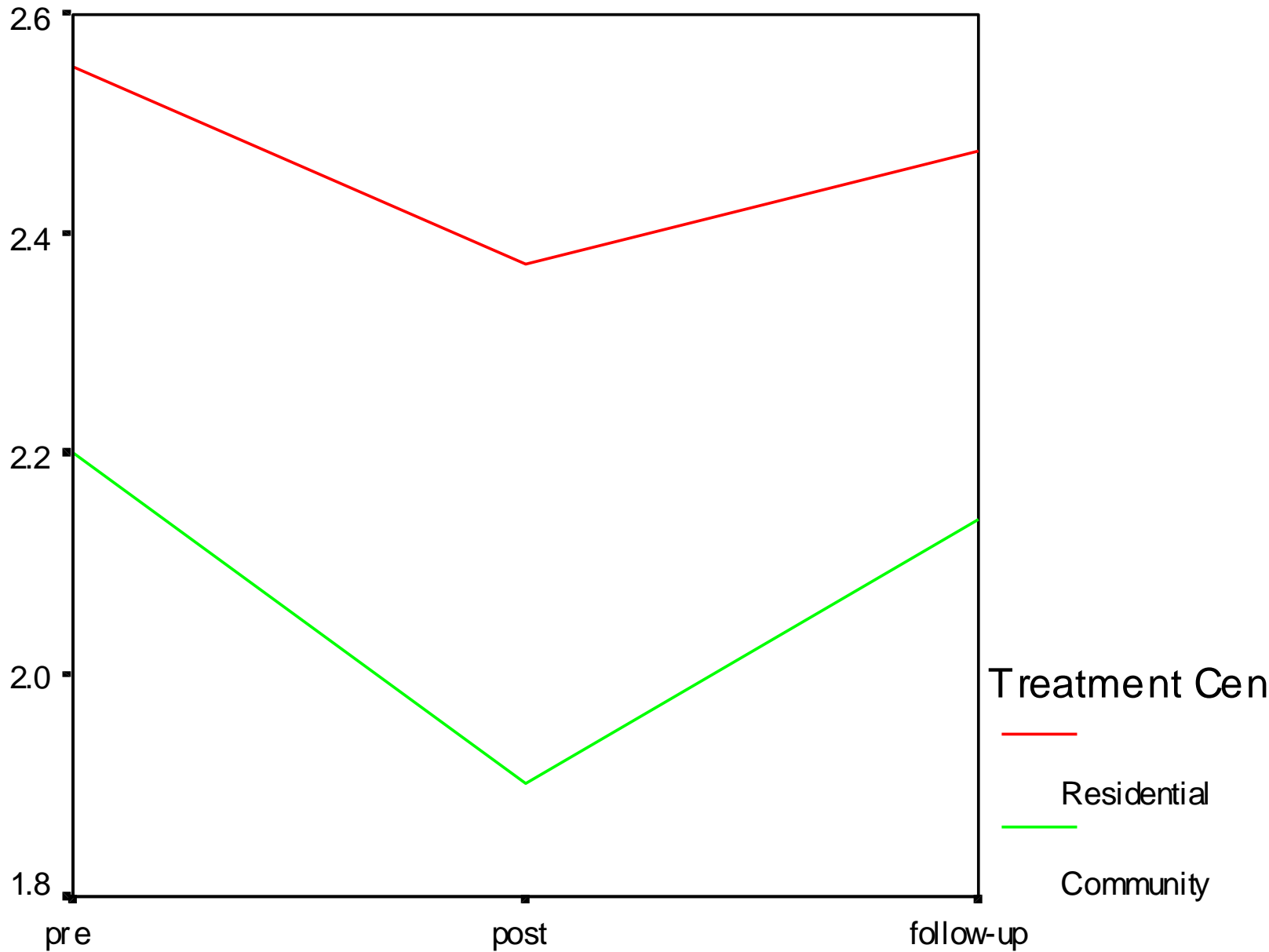
Time period	Group	Symptomatic status			$\chi^2$	Comparison
		Deteriorated	No change	Improved		
<b>Pre-Post (n=29)</b>	<b>Residential</b>	0 0%	3 20%	12 80%	2.912	Res=Comm.
	<b>Community</b>	2 14.3%	4 28.6%	8 57.1%		
<b>Post-Follow-up (n=21)</b>	<b>Residential</b>	1 7.7%	9 69.2%	3 23.1%	.646	Res=Comm.
	<b>Community</b>	0 0%	6 75.0%	2 25.0%		
<b>Pre-Follow-up (n=39)</b>	<b>Residential</b>	0 0%	3 12	22 88	9.822**	Res>Comm
	<b>Community</b>	2 14.3%	6 42.9	6 42.9		

Note: DRINC=Drinkers Inventory of Consequences.  $\chi^2$ = chi-square. Degrees of freedom were 2 for chi-square.

\*=p<.05. \*\*=p<.01. \*\*\*=p<.001.



# Group means for FAD



# Rates of clinically significant change for FAD

Time period	Group	Symptomatic status			$\chi^2$	Comparison
		Deteriorated	No change	Improved		
Pre-Post (n=29)	Residential	0 .0%	15 100.0%	0 .0%	3.58tr	Community>Residential.
	Community	0 .0%	11 78.6%	3 21.4%		
Post-Follow-up (n=21)	Residential	0 .0%	2 92.3%	1 7.7%	4.038tr	Residential> Community
	Community	2 25 .0%	6 75%	0 .0%		
Pre-Follow-up (n=39)	Residential	0 .0%	23 92.0%	2 8.0%	6.663*	Residential> Community
	Community	3 21.4%	11 78.6%	0 .0%		

Note: FAD=Family Assessment Device.  $\chi^2$ = chi-square. Degrees of freedom were 2 for chi-square.

\*=p<.05. \*\*=p<.01. \*\*\*=p<.001.



# Groups means for MSPSS

