An Evaluation of the Impact of a Crisis Resolution Home Treatment Team on Admissions, Symptoms and Functioning

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Introduction

- Crisis resolution home treatment teams (CRHTTs) offer time limited, intensive multidisciplinary assessment and support to people experiencing a serious mental health crisis in the community (Johnson, 2013).
- Additional functions of the CRHTT includes its ability to prevent admissions and support early discharge from the inpatient setting (Johnson, 2013).
- There is a gap in the literature surrounding the impact of CRHTT's in Irish urban and suburban settings in terms of effect of admission rates, symptom reduction and quality of life improvement.
- The South Lee CRHTT was setup as a standalone team in 2015.

Aims

- Primary objectives: To evaluate the impact of treatment given by the Crisis Resolution Home Treatment Team (CRHTT) in terms of:
  - Preventing hospital admission,
  - Impact on health outcomes
  - Change in intensity of symptoms
- Secondary Objectives were to evaluate patient characteristics of those referred to, assessed by and/or admitted to the CRHTT.

Methods

- All patients referred to the service from 2016-2020 were included in the study.
- Standardized quantitative measures are routinely taken by the CRHTT before and after treatment.
- The Brief Psychiatric Rating Scale (BPRS) was used to measure symptom reduction and the Health of the Nation Outcome Scale (HONOS) was used to measure health outcomes/overall functioning.
- Inpatient admissions per sector per year, before and after the introduction of the CRHTT, were compared, in both sectors where CRHT was available and sectors where it was not (control).
- Sociodemographic information and key characteristics of those referred, assessed and treated were also analyzed.

Results

1. 1645 patients were referred to the service, of these 1041 were accepted for CRHT. The median length of treatment with the service was 28 days. Referral and treatment outcomes are summarized in Figure 1.
2. BPRS scores were reduced significantly (p<.001), from a mean score of 32.01 to 24.64 before and after treatment (Cohen's d=0.94). (Figure 2)
3. Mean HoNOS showed similarly positive results, mean scores were 13.6 and 9.1 after treatment (p<.001) (Cohen's d=0.89). CRHT had a strong effect size on both outcomes. (Figure 2)
4. Admission rates to inpatient (approved centre) care fell by 38.5% in area's served by the CRHTT. Inpatient Admission rates also fell in areas not served by the CRHTT, but this was not statistically significant (Figure 3).
5. Table 1 shows key characteristics of those accepted for CRHT. Table 1 also shows results of chi square with post hoc subgroup analysis, to show which subgroups of service users are more likely to be accepted after referral.

Figure 1 Flow chart of CRHT Referral and treatment Outcomes
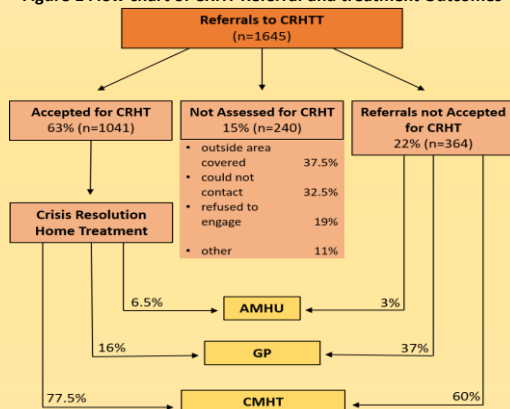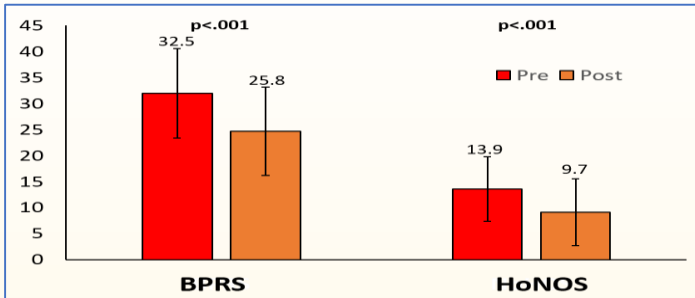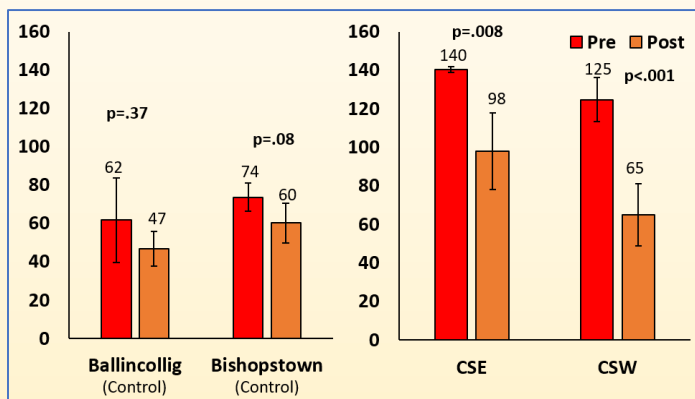

Figure 2 CRHT leads to a reduction of symptoms and improved functioning

BPRS = Brief Psychiatric Rating Scale, HoNOS = Health of the Nation Outcome Scale

Figure 3 Reduced inpatient admission in areas served by CRHTT (CSE/CSW) versus controls

CRHTT was introduced in City South East (CSE) and City South West (CSW) but not in control areas (Ballincollig & Bishopstown).

Table 1 Characteristics of service users admitted to the CRHTT. *Referrals compared to admissions, *=less likely to be admitted, **=more likely to be admitted.*

Category	n	% of service users accepted	Referral acceptance rate (%)	Pearson's Chi-Square (X^2)	P-value
All	1041	100	63	N/A	
Gender	n				
Male	425	41	61	2.35	0.13
Female	616	59	65		
Age (yrs)					
18-24	160	15	53 *		
25-34	245	24	63		
35-44	212	20	65	19.80	<0.001
45-54	167	16	68		
55-65	176	17	69		
65+	81	8	62		
Diagnosis					
Depressive Disorder	216	21	58		
Personality Disorder	216	21	61		
Schizophrenia	219	21	84**		
Bipolar Affective Disorder	185	18	82**	174.32	<0.001
Anxiety Disorder	101	10	55		
Acute psychotic episode	18	2	38*		
Psychotic Depression	16	2	84		
Other	70	7	40*		
Referral Source					
CMHT	716	69	73**	102.32	<0.001
GP	325	31	49*		
Referral Reason					
Prevent hospital admission	462	44	69**		
Acute relapse	257	25	55*	137.54	<0.001
Crisis management	121	12	43*		
Early discharge	201	19	89**		

Conclusion

- CRHTT was shown to be an effective option for the treatment of service users experiencing a severe mental health crisis, using quantitative measures.
- CRHT reduced the intensity of psychiatric symptoms and improved overall functioning of service users significantly.
- CRHTT was shown to be effective at preventing admission to inpatient care in the areas it served.
- This study further supports the ongoing use of CRHT in Ireland, particularly in urban and suburban settings.

References .Johnson, S. (2013). Crisis resolution and home treatment teams: An evolving model. Advances in Psychiatric Treatment, 19(2), 115-123. doi:10.1192/apt.bp.107.004192