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Is Assertive Community Treatment an effective intervention for patients with frequent re-admissions to psychiatric hospital?

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Introduction

Hong Kong has followed the international trend to shift the care of psychiatric patients from in-patient services to community care. Among various models of community care, the Intensive Case Management (ICM) and the Assertive Community Treatment (ACT) models were regarded as an effective means to ensure patient contact with psychiatric services (1, 2). In 2008, two pilot community psychiatric mobile support treatment teams named Intervention for Frequent Re-admitters (IFR) were established in two clusters (Kowloon West and New Territories East). Each team was staffed with 6 case managers recruited from community psychiatric nurses and occupational therapists, to use ACT model of care to provide round-the-clock, super-territorial, trans-disciplinary support to about 120 frequently re-admitted patients (FRP).

Objectives

The aim of this study was to compare rehabilitation outcomes (including clinical and administrative related) of the IFR project with that of the conventional psychiatric intervention (CPI) program for severely mentally ill patients with repeated psychiatric hospitalization living in Hong Kong.

Methodology

The treatment group (Group T) included patients having 3 or more admissions within a 12 month period in Kwai Chung Hospital. All the frequently re-admitted patients that we identified had to be recruited to the ACT intervention in order to satisfy the service demand. Therefore, it was impossible for a randomization study design. Exclusion criteria were: 1) patients below 18 or above 65 years old, 2) patients suffering from mental handicap or dementia 3) patients who have substance use disorder as the sole diagnosis.

The two control groups included patients with same inclusion and exclusion criteria as treatment group, but in a 12 month period before (Group C^1) and after the recruitment period of treatment group (Group C^2). By comparing outcome data of the treatment group with the two control groups, the effect of the existence of a secular trend during the period and the effect of the ACT intervention could be evaluated.

Outcomes Measures:
Administrative outcomes included number of psychiatric admissions, length of stay, and Accident & Emergency Department (AED) attendance. The data would be collected via the Clinical Data Analysis and Reporting System (CDARS).

Clinical outcomes included mental state measured by Brief Psychiatric Rating Scale (BPRS) (3), quality of life measured by Hong Kong Chinese Version World Health Organization Quality of Life Measure abbreviated version (WHOQOL-BREF-HK) (4), and community functioning assessed by Specific Level of Functioning (5).

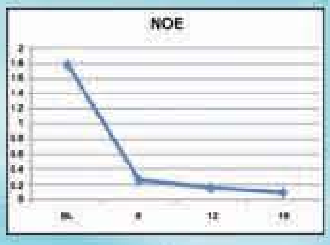
Interim results

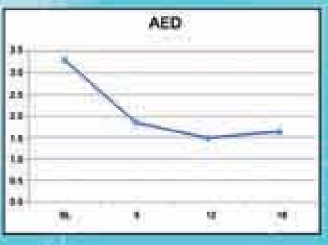
The research group had recruited 70, 60 and 69 patients to Group T, Group C^1 and Group C^2 respectively. Outcome data had been collected at baseline and at 6-, 12-, and 18-month follow-up points for the treatment group. Preliminary analysis on collected outcome data in the treatment group indicated that psychiatric admissions, length of stay and AED attendance, and the clinical variables of BPRS, SLOF were all significantly improved, compared with baseline data. But the ACT intervention had not significantly influence the quality of life of patients.The baseline and some of the follow up outcome data for the two control groups were being collected with pending analysis.

Results for Treatment Group

	Baseline*	6 month	12 month	18 month	F-value	p-value	Post hoc
No. of Readmissions (NOE per 6month)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Length of Stay in days in any psychiatric hospital (LOS per 6 month)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
No. of Attendance of Accident & Emergency Department (AED per 6 month)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BPRS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SLOF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
QOL							
Physical	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Psychological	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Social Relationships	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Environment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* The baselines of NOE, LOS, AED are calculated from halved the value of previous 12 months data to match the comparison with 6 monthly interval outcome data.
• Values are expressed as mean (standard deviation), unless otherwise stated





Potential implication after study finished

The present study will inform the clinicians and mental health service planners on the nature and magnitude of impact of the ACT model of care to a group of frequent re-admitters in one service cluster. The data may generalize to other service clusters and will provide further insight for intervention on other groups of patients.

Key references

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