Reviewer's report

Title: The rise of assertive community interventions in South Africa: Assessing the impact of a modified assertive intervention on readmission rates; a three year follow-up

Version: 3 Date: 25 November 2013

Reviewer: Gary Cuddeback

Reviewer's report:

Narrative

This manuscript addresses an important issue in mental health services research. Access to evidence-based practices like assertive community treatment is important. Given the difficulty with which most communities, especially communities with limited resources, have in funding and sustaining full fidelity ACT teams, more information about the effectiveness of modified assertive community treatment teams is needed. This manuscript has the potential to make an important contribution to the literature in that it grows the evidence base for modified assertive community treatment.

Overall the article is well written. The authors can consider a few suggestions, which could strengthen the manuscript. These are presented below.

Introduction

1. The rationale for the study is clearly articulated and the recent literature regarding assertive community treatment and its effectiveness and application is reviewed critically and concisely. [No Revisions Needed]

2. The Introduction is concluded with a well-articulated research question. [No Revisions Needed]

Methods

3. Please add more details about how the assertive community treatment teams were modified. The authors suggest that caseloads were increased to 1:35 and that the frequency of visits were increased. However, it is not clear as to how the frequency of patient contacts were modified. More details here would strengthen the manuscript. [Major Compulsory Revision]

4. Please indicate the study period. Over what time period were data collected? [Minor Essential Revision]

5. Please clarify what a PSR-based day program is. [Discretionary Revision]

6. Can the authors describe the services that the patients in the control condition received? Is this a study of modified assertive community treatment compared to
no services at all? [Major Compulsory Revision]

Sample

7. Please provide clarification as to how the study was conducted parallel to services that included patients with other diagnoses? Also, clarify why only patients with schizophrenia or schizoaffective disorders were enrolled in the study, given that assertive community treatment serves a slightly broader spectrum of disorders. Were standard ACT eligibility criteria used? What was the high frequency criteria that was used? [Major Compulsory Revision]

8. Also, the rate of refusal is not clear. How many patients were eligible but refused the study? Thus, the representativeness of the sample is unclear. This should be addressed in a limitations sections. Also, the authors should be clear in the limitations that the results of the study pertain only to those with schizoaffective and schizophrenia spectrum disorders. Thus, this is a study of modified ACT for patients with a limited set of diagnoses and the results may not generalize to other diagnostic groups. [Major Compulsory Revisions]

9. Please define HFU. Also, please provide some clarification with regard to the rationale for excluding patients with unstable co-morbid medical illness that could affect hospital admission. Given the high rates of chronic physical health problems among persons with severe mental illness, how many patients were excluded from the study using this criterion? [Major Compulsory Revisions]

10. The numbers in the flowchart do not seem to add up for the intervention arm of the study. That is, initially 34 patients were randomized to receive modified assertive community treatment, then, one patient died (n=33) and four were lost to long-term care (n=29); however, two patients were included from the standard care group, which should bring the total to 31 not 32. Please clarify. [Major Compulsory Revision]

Measures

11. The authors describe the use of primary and secondary data collection methods. The authors report that subject files were used but subjects were surveyed directly when those files did not contain sufficient information. How was sufficient defined here? Can the authors provide more information about the extent to which medical records were reviewed, and was this similar in both groups? [Major Compulsory Revision]

12. Were service contacts measured for either group? To what extent did the control group receive services? Please provide more information here. The authors state that data were collected on the number of patients who attended the intermediate rehabilitation facility but these data do not seem to appear in the table or the text. [Major Compulsory Revisions]

Data Analysis and Results

13. Please clarify that tests of significance were used to assess differences in
patient demographics in Table 1. It seems that the groups were not balanced in all cases, which is not surprising given the small sample size. If there are between group differences, this would need to be addressed in the multivariate analyses. [Major Compulsory Revision]

14. Please provide more information about the outcomes in Table 2. In particular, please include Means and Standard Deviations for continuously-measured variables and percentages and sample sizes for categorically-measured variables. What percentage of each sample had any admission? Among those who had an admission, how many days were spent in the hospital? Tables 2 and 3 could be more informative. For example, prior to demonstrating pre vs. post differences, it would be helpful to see raw numbers and percentages during pre and post observation periods. [Major Compulsory Revision]

15. How were the patients who changed groups handled analytically? Minor Essential Revision

16. More details about the survival analyses would be helpful. That is, once a participant was hospitalized, did the clock start over with respect to the follow-up period? Were hospital admissions treated as separate events? How were multiple admissions for the same patient handled analytically? Were incarcerations considered? [Major Compulsory Revisions]

17. The first sentence of the Results section is confusing. Data were available for 32 of 34 (94%) patients assigned to the intervention group and 24 out of 26 (92%) of the control group, correct? Please clarify. [Major Compulsory Revision]

18. Please report test statistics, degrees of freedom, p values and confidence intervals clearly in the tables and in the text when not reported in either table. [Major Compulsory Revision]

Discussion

19. The authors state that the intervention group had a large number of readmissions; however, this number does not appear to be clearly reported in the text or either table. Please do both. [Major Compulsory Revision]

20. The discussion of study limitations is underdeveloped. Please address issues of selection bias and generalizability, in particular. [Major Compulsory Revision]

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: I declare I have not competing interests.