Eating Behaviors 14 (2013) 119–123

Contents lists available at SciVerse ScienceDirect

Eating Behaviors

Predicting premature termination of hospitalised treatment for anorexia nervosa: The roles of therapeutic alliance, motivation, and behaviour change

Richard Sly [a,b,*], John F. Morgan [a,c], Victoria A. Mountford [a,d], J. Hubert Lacey [a]

[a] Population Health Sciences and Education, St. George's University of London, London, UK
[b] School of Nursing Sciences, University of East Anglia, Norwich, UK
[c] Yorkshire Centre for Eating Disorders, Leeds, UK
[d] Institute of Psychiatry, London, UK

ARTICLE INFO

Article history:
Received 10 September 2012
Received in revised form 18 December 2012
Accepted 30 January 2013
Available online 8 February 2013

Keywords:
Anorexia
Dropout
Treatment outcome
Motivation
Therapeutic alliance
Behaviour change

ABSTRACT

Objectives: This study aims to investigate treatment drop-out, and the associated roles of motivation, alliance, and behaviour change exhibited over the first four weeks of hospitalised treatment for anorexia.
Methods: 90 participants meeting DSM-IV criteria for anorexia nervosa completed questionnaires at admission, and four weeks into treatment. Weight data was collected over this same time period. At the end of treatment, participants were categorised into completer or premature termination groups.
Results: The overall rate of premature termination was 57.8%. Those who prematurely terminated treatment demonstrated lower discharge BMI ($p<.0005$), and weight gain ($p<.0005$) than those who completed. Therapeutic alliance proved significantly different between outcome groups at admission ($p=.004$).
Discussion: End-of-treatment outcomes for those who do not complete treatment are invariably poor. Therapeutic alliance appears to be a particularly important factor in this area.

1. Introduction

Anorexia nervosa (AN) is a complex illness which is expensive to treat (Simon, Schmidt, & Pilling, 2005), and in which chronic sufferers experience low levels of perceived quality of life (Bamford & Sly, 2010) and have high rates of suicide (Sullivan, 1995). Rates of treatment drop-out are high, and have remained so over the course of time, regardless of country or treatment modality (Mahon, 2000). Drop-out rates as high as 50% have been cited for both out-patient and in-patient samples (Button, Marshall, Shinkwin, Black, & Palmer, 1997; Mewes, Tagay, & Senf, 2008; Vandereycken & Pierloot, 1983).

Those who drop out of treatment are more likely to be readmitted to treatment compared to those who completed treatment as planned (Baran, Weltzin, & Kaye, 1995). The reported data on timings of drop-out suggest that it happens typically within the initial weeks of treatment, and commonly after gaining less weight than those who completed treatment (Kahn & Pike, 2001; Masson, Perlman, Ross, & Gates, 2007; Woodside, Carter, & Blackmore, 2004). Lower discharge weights are in turn associated with the need for rapid rehospitalisation for treatment (Sly & Bamford, 2011).

1.1. Patient characteristics and premature termination of treatment

The vast majority of drop-out studies have examined patient characteristics – physical and psychological – and their relation to the likelihood of drop-out. A minority of studies suggest that factors such as eating disorder severity and self-esteem may have a role in predicting those at risk of drop-out (e.g. Halmi et al., 2005; Treat et al., 2005). However, many more have found no significant predictors of drop-out from looking at measures of illness severity (Franzen, Backmund, & Gerlinghoff, 2004; Howard, Evans, Quintero-Howard, Bowers, & Andersen, 1999; Kahn & Pike, 2001; Masson et al., 2007; Pereira, Lock, & Oggins, 2006; Surgenor, Maguire, & Beumont, 2004). Treat et al. (2005) conclude that our current ability to identify those at risk of drop-out through such means is poor.

To reflect a shift in approach to studying drop-out, this study will use the less pejorative term of 'premature termination of treatment' (PTT) to categorise patients who do not complete treatment, and

Abbreviations: PTT, premature termination of treatment; TCAP, treatment completed as planned.

* Corresponding author at: School of Nursing Sciences, University of East Anglia, Norwich, UK. Tel.: +44 1603 597024; fax: +44 1603 597019.
E-mail address: r.sly@uea.ac.uk (R. Sly).

1471-0153/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.eatbeh.2013.01.007

those who do complete will be categorised as 'treatment completed as planned' (TCAP) (Sly, 2009).

1.2. Motivation, behaviour change, alliance, and perceived coercion

Patient characteristics are neither predictive of outcome, nor something that front-line clinicians can change. Instead, there is a growing trend to examine areas of treatment experience that clinicians can have some control over in attempts to improve treatment response and outcome. Such areas include addressing motivation, fostering alliance, encouraging behavioural change, and reducing levels of perceived coercion to treatment.

Readiness to change has been reported as a significant factor in the prediction of PTT (Bewell & Carter, 2008), as well as in the prediction of treatment uptake (Geller, Drab-Hudson, Whisenhunt, & Srikameswaran, 2004). However, there has been little replication or confirmation of these results. Studies examining motivation and outcome are on the whole difficult to generalise from, given the trans-diagnostic make-up of the samples and lack of specific details regarding diagnostic differences (e.g. Geller, Cassin, Brown, & Srikameswaran, 2008; Geller, Zaitsoff, & Srikameswaran, 2005; Rodriguez-Cano, Beato-Fernandez, & Segura Escobar, 2006).

Early response to treatment was not investigated with an anorexic population until relatively recently (Hartmann, Wirth, & Zeeck, 2007). This study stated that an individual's weight curve over the first four weeks of treatment was a significant predicting factor of subsequent PTT. A caveat must be placed regarding these results, for PTT that occurred within the first six weeks of treatment were not included in the analysis, potentially excluding a significant sub-group of participants. A further study into treatment response, focusing on weight curves (Mewes et al., 2008), concludes that appropriate weight gain early on in treatment is a powerful predictor of treatment outcome. Again, methodological limitations of the study – which was retrospectively designed, and with no form of psychological measures to describe the sample with – demand further investigation into this area before robust conclusions can be made.

Therapeutic alliance is under-researched in the field of eating disorders, an area in which building therapeutic alliance is – clinically, at least – considered a key aspect of treatment (Ramjan, 2004; Surgenor, 2003; Tierney, 2008). One of the only studies to look into this aspect of eating disorders treatment found that therapeutic alliance was related to early weight gain in treatment, and hence treatment outcome (Pereira et al., 2006). This study was carried out with adolescents with AN who were taking part in a family therapy treatment, and findings have yet to be replicated for a hospitalised adult population.

Many service users who are informally admitted to treatment for their AN feel pressured or coerced in doing so (Guarda et al., 2007). Although Guarda et al. (2007) state that perceived coercion lessens in the first two weeks of treatment, no study of this population has looked at how perceived coercion affects the course of treatment and how this mediates treatment outcome. It is nonetheless an important area to consider within the context of treatment for AN, in which the ego-syntonic nature of the illness may heighten experiences of perceived coercion.

1.3. Objectives

This study had three underlying objectives. The first was to examine the different end-of-treatment outcomes exhibited by those in the PTT group compared to those in the TCAP group. Secondly, the study sought to examine the predictive nature of attitudes to treatment at point of admission, and to compare their predictive ability against that of patient characteristics. The final objective was to examine if changes in motivation, alliance, and weight within the early stage of treatment would predict later outcome.

2. Methods

2.1. Participants

The sample for this study consisted of successive new admissions at each of the four research sites, all of which were specialist treatment centres for eating disorders in the United Kingdom. To meet inclusion criteria, participants needed to have a confirmed diagnosis of AN, an admission BMI of <17.5, and be physically and cognitively able to complete the study's measures. Exclusion criteria included being admitted to treatment without a confirmed diagnosis of AN, having an admission BMI of >17.5, or being compulsorily admitted under the Mental Health Act. All participants were required to be over the age of 18 to take part in this study.

Recruitment for this study lasted a total of 17 months, between 2009 and 2010. The study was granted ethical approval by the relevant research committees (equivalent to Institutional Review Boards).

2.2. Procedure

This was a naturalistic, prospective cohort study. All patients who were admitted to any of the four treatment centres and fulfilled the inclusion criteria were approached to participate. The naturalistic nature of the study was designed to fairly reflect the reality of treating AN in residential settings.

Participants were asked to complete the battery of admission (T0) questionnaires within the first 7 days of treatment. These were re-administered after participants have been in treatment for four weeks (T1). Data from weight charts were collected by the study researchers from participants' on-going clinical records. Participants were later categorised into groups (PTT or TCAP) depending on their outcome at the end of treatment (T2). Data taken at T2 was limited to treatment duration, discharge weight, and treatment outcome category.

2.3. Definition of treatment outcome

For the purposes of this study, an a priori decision was made to assign participants to the PTT group if their treatment ended via a unilateral decision made by *either* service users or staff. Participants who completed treatment as planned – typically after reaching and maintaining a designated target weight – were allocated to the TCAP group.

2.4. Measures

Data on gender, ethnicity, and past treatment episodes were acquired by routine service demographic questionnaires and clinical notes.

2.4.1. Anorexia Nervosa Stages of Change Questionnaire (ANSOCQ)

The ANSOCQ (Rieger et al., 2000) is a 20-item multiple choice questionnaire utilising a five-point Likert scale, that assesses a patient's readiness to recover from AN. It has been demonstrated to have good concurrent validity and high levels of test–retest reliability (Rieger et al., 2000).

2.4.2. Working Alliance Inventory Short Form (WAI-S)

The WAI-S (Tracey & Kokotovic, 1989) is a 12-item measure with a seven-point coding scale that was developed from the longer 36-item Working Alliance Inventory (Horvath & Greenberg, 1989). Three subscales are derived (Task, Bond, and Goal). The sum of these subscales can be taken as a global measure of alliance. The WAI-S has demonstrated strong psychometric properties and is regarded as a valid, robust, widely used and well validated measure (Elvins & Green, 2008; Macneil, Hasty, Evans, Redlich, & Berk, 2009). The Participant fills in