Aims of Treatment and Recovery Criteria for Eating Disorders

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Abstract

Introduction: The aim of treatment is recovery, but when have eating disorder patients recovered? Is that when they no longer show the eating disorder symptoms, or is that when also the underlying psychological factors are reduced? As long as there is no consensus about criteria for recovery no answer can be given about the question which treatments are effective to recover patients from their eating disorder.

Aim of study: To develop a list of criteria for recovery from eating disorders which are important according to therapists and patients.

Methods: Participants: 57 therapists and 41 recovered patients received a questionnaire with a list of criteria for recovery from eating disorders. They were asked to select the criteria they viewed as important for recovery. Former patients were also asked which criteria they had realized at the end of their last treatment and one year later.

Instrument: A questionnaire was developed with a list of criteria for recovery from eating disorders about the following domains: eating behavior, body experience, physical and psychological well-being, emotion regulation and social functioning.

Results: Therapists and patients agreed upon the most important criteria for recovery. Only few differences were found between the therapists and the patients. At the end of their last treatment more than half of the patients had improved in most domains of their eating disorder. One year after their treatment the percentage of patients who had realized the most criteria for recovery was substantially higher.

Conclusion: Therapists and patients evaluate the following domains as relevant for recovery from eating disorders: normalizing eating behavior and weight, recovery of the physical consequences, and improvement of psychological, emotional and social functioning.

The aim of treatment of eating disorders not only is the reduction of symptoms, but also to improve the body attitude, self evaluation, emotion regulating and social coping strategies.

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INTRODUCTION

Does treatment mainly be focused on reduction of the eating disorder symptoms, such as regaining weight and normalizing eating behavior, or also has to reduce the underlying psychological factors, such as the reduction of the fear to become fat and the reduction of preoccupation with food and weight, the negative body attitude and self evaluation, as well as the lack of emotional and social coping strategies? Without consensus about criteria for recovery no clear answer can be given at the question what has to be the main aims of treatment in order to recover eating disorder patients (Berkman et al., 2007; Jarman & Walsh 1999; Strober, Freeman & Morell, 1997, Steinhausen, 1999, 2002; Noordenbos, 2010; Björk & Ahlström, 2010). Absence of an agreed upon definition of recovery from eating disorders results in a variety of definitions of recovery and a variety of aims of treatment. The absence of consensus bout criteria for recovery makes straightforward comparison between outcome studies impossible. Recovery rates vary greatly between studies which use different criteria for recovery and use different instruments to measure the effects of treatment (Jarman & Walsh, 1999; Couturier & Lock, 2006a & 2006b; Petterson & Rosenvinge, 2002).

Most outcome studies focused on just three criteria for recovery: body weight, food intake and menstruation (Morgan & Russell, 1975). According to these criteria a good outcome for anorexia nervosa is recovery to within 15% of the normal weight and regular menstruation, a moderate outcome is recovery to within 15% of the normal weight and irregular menses and a bad outcome is a weight lower than 85% of the normal weight and no menstruation, or the development of bulimia nervosa. Using these criteria Steinhausen (2002) analyzed 119 effect and outcome studies and found that 45% of anorexia nervosa patients showed a good outcome, 35% showed a moderate outcome and 20% were chronic. In bulimia nervosa patients the outcome is good when they no longer binge and purge, moderate when reduced their binging and purging behavior in a substantial way and bad when they often binge and purge. According to these criteria 48% of the bulimic patients had a good outcome, 26% were improved and 26% were chronic (Steinhausen, 2002).

However, these percentages may be overly optimistic, because the restricted Morgan-Russell criteria for recovery do not take into account the psychological, emotional and social factors. For that reason it is highly debatable whether the restricted Morgan-Russell criteria are sufficient as indicator for recovery.

Saccomani, Savoini & Cirrincione et al. (1998) found that when only somatic criteria were considered 79% of anorectic patients had recovered, but when also psychological criteria were taken into account the recovery rate fell to 49%. Research shows that after normalizing eating behavior and weight many eating disorder patients have a negative body attitude and a negative self evaluation or even have become severely depressed or suicidal (Bruch, 1974) while some anorexia patients even start to binge and purge (Windauer et al., 1993).

According to Strober et al. (1997) the Morgan-Russell criteria are too restrictive, because a good outcome according to these criteria may represent just partial recovery. Strober et al. introduced their concept of “full recovery”, which implies that the characteristics of
anorexia and bulimia nervosa are absent for 8 successive weeks, weight is normal, and the patient demonstrates no compensation behavior (vomiting, laxatives, diuretics, excessive exercising), no negative attitudes towards weight and no weight phobia. According to Steinhausen (2002) also the reduction of co-morbidity has to be taken into account in the evaluation of recovery because many eating disorder patients suffer from depression, fear disorders, personality disorders, schizophrenia or addition to alcohol and drugs.

Criteria for recovery not only have consequences for the aims and outcome of treatment, but also for the duration of the treatment. Physical aspects of recovery are often realized much earlier than psychological and social aspects of recovery (Strober et al., 1997). In a study at 95 anorexia nervosa patients Strober et al. (1997) found that patients’ weight, eating behavior and menses were recovered after 4.7 years, but it took 6.6 years to realize the psychosocial criteria for recovery. In cases where severely disturbed family relations played a role, the process of recovery took even longer. Strober et al. (1997) conclude that full recovery is a long process, but when realized the risk of relapse is much lower. This was also found in the study of Fennig et al. (2002) who found that when physically recovered patients took part in therapy directed at psychosocial recovery the relapse reduced from 40% to 15%.

In order to develop more consensus about criteria for recovery from eating disorders a study was done in which therapists who were specialized in the treatment of eating disorders were asked to evaluate which criteria are important for recovery. Also former patients who evaluated themselves as quite well recovered were asked to evaluate which criteria they evaluate as important for recovery. Research questions were:

1) Which criteria for recovery from an eating disorder are important according therapists specialized in the treatment of eating disorders?
2) Which criteria are evaluated as important by former patients?
3) Do therapists and former patients evaluate different criteria as important for recovery?
4) Which criteria did patients realize at the end of their last treatment and one year later?

METHODS

Participants: To contact therapists specialized in the treatment of eating disorder all clinics for eating disorders and therapist with a private practice specialized in treating EDs received a letter in which therapists were invited to participate in this study by filling out a questionnaire about criteria for recovery from eating disorders. In total 57 therapists (39 women and 18 men) participated in this study.

Former eating disorder patients were found by using the website of the Dutch Foundation of Anorexia and Bulimia Nervosa in which we asked for patients who felt substantially improved or recovered from their eating disorder. Moreover we asked for those patients who had finished their last treatment at least one year ago. In total
41 ex-patients participated in this study, 40 women and 1 man. In total 14 have had anorexia nervosa, 19 bulimia nervosa and 8 first anorexia and later bulimia nervosa.

Procedure: Therapists and patients who wanted to participate in this study received a questionnaire about criteria for recovery and were asked which criteria they evaluate as important for recovery. Former patients also were asked to indicate which criteria they had realized at the end of their last treatment and which criteria they meet at the moment of research which took place one year or longer after their last treatment.

Instrument: We developed a questionnaire with a list of criteria for recovery. To find criteria for recovery of eating disorders we first looked at the diagnostic criteria for EDs as mentioned in the DSM-IV. We also listed the most relevant aims of treatment for eating disorders which were published in the last century. Finally we interviewed 10 therapists who had treated many eating disorder patients about the most important criteria for recovery for eating disorders. These procedure resulted in a list of 50 criteria for recovery: 9 about eating behavior, 5 about body attitude, 14 about physical recovery, 8 about psychological well being, 9 about emotion regulation and 5 about social adjustment. These criteria for recovery can be found in table 1.

Analysis: First the percentages were calculated of criteria of recovery which were evaluated as important for recovery by therapists and former patients. We then analyzed the similarities and differences in their opinions. Secondy the percentages were calculated of the criteria which were realized by the former patients at the end of their last treatment and also one year later at the moment of research. Finally we analyzed whether they were improved or deteriorated one year later.

RESULTS

In total 57 therapists participated in this research, 39 women and 18 men. 38 therapist worked in a clinic for EDs and 19 therapists had a private practice.

In total 41 former patients participated in the study: 14 (34%) had anorexia, 19 (46%) bulimia nervosa and 8 (20%) first had anorexia and then developed bulimia nervosa. The mean duration of the eating disorder was 4 years (range 1 to 7). The mean number of therapy’s and treatments was 3 (range 1 to 5) and the mean duration of treatments was 2.5 years (range 4 months to 5 years). The duration between their last treatment and the research was between 1 and 4 years.

Criteria evaluated as important for recovery
In table 1 the percentages are presented of the therapist and patients who evaluated the criteria as important for recovery.
### Table 1: Percentages of Criteria for Recovery from Eating Disorders according to Therapists and former Patients*1

<table>
<thead>
<tr>
<th>Criteria for recovery</th>
<th>Therap Patients</th>
<th>Diff</th>
<th>After Treatment</th>
<th>Follow Up</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>very important &gt; 80%</strong></td>
<td><strong>n=57</strong></td>
<td><strong>n=41</strong></td>
<td>- &gt; T</td>
<td>+ &gt; P</td>
<td>- &lt; lower</td>
</tr>
<tr>
<td><strong>important &gt; 50 &lt; 80 %</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* less important &lt; 50%</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### A. Eating behaviour
- A1 Eats three meals a day***: 96% (TP 95%), -1 T, 71% TP, 80% TP, + 9
- A2 Amount of calories is normal**: 72% (TP 83%), +11 T, 63% TP, 76% TP, +13
- A3 No binges**: 76% (TP 95%), +19 T, 76% TP, 97% TP, +21
- A4 Does not vomit after a meal***: 100% (TP 95%), -5 T, 80% TP, 93% TP, +13
- A5 Does not take laxatives***: 98% (TP 100%), +2 T, 80% TP, 97% TP, +17
- A6 Does not take diuretics***: 90% (TP 95%), +5 T, 97% TP, 93% TP, - 4
- A7 Does not use slimming pills***: 82% (TP 90%), +8 T, 80% TP, 73% TP, - 7
- A8 Does not exercise excessively***: 92% (TP 90%), -2 T, 76% TP, 90% TP, +14
- A9 Does not use too much alcohol**: 70% (TP 76%), +6 T, 73% TP, 85% TP, +12

#### B. Body experience
- B1. Does not feel too fat**: 64% (TP 97%), +33 T, 41% TP, 49% TP, + 8
- B2. Has a positive body experience**: 68% (TP 85%), +17 T, 44% TP, 63% TP, + 19
- B3. Accepts her appearance ***: 80% (TP 90%), +10 T, 49% TP, 76% TP, + 27
- B4. Feels no need to slim excessively ***: 92% (TP 93%), +1 T, 66% TP, 78% TP, +12
- B5. Is not obsessed by food and weight**: 64% (TP 95%), +31 T, 56% TP, 71% TP, +15

#### C. Somatic criteria
- C1. Weight is normal for age and height**: 96% (TP 68%), -28 T, 59% TP, 68% TP, + 9
- C2. Weight is stable for 4 weeks**: 54% (TP 61%), +7 T, 56% TP, 80% TP, +14
- C3. Has her monthly periods**: 82% (TP 66%), -16 T, 56% TP, 71% TP, +15
- C4. Monthly periods come regularly*: 42% (TP 37%), -5 T, 46% TP, 68% TP, +22
- C5. Endocrinological values are normal**: 52% (TP 56%), +4 T, 59% TP, 63% TP, + 4
- C6. Body temperature is normal**: 58% (TP 78%), +20 T, 76% TP, 78% TP, + 2
- C7. Heartbeat is normal**: 58% (TP 83%), +25 T, 78% TP, 85% TP, + 7
- C8. Has no constipation**: 52% (TP 44%), -8 T, 49% TP, 61% TP, +12
- C9. Has no intestinal disturbances**: 50% (TP 59%), +9 T, 51% TP, 61% TP, +10
- C10. Has no stomach complaints**: 52% (TP 59%), +7 T, 53% TP, 71% TP, +18
- C11. Skin is not dry**: 58% (TP 51%), -7 T, 66% TP, 85% TP, +19
- C12. Has healthy teeth**: 38% (TP 34%), -4 T, 63% TP, 83% TP, +20
- C13. Sleeps normally**: 38% (TP 83%), +45 T, 51% TP, 63% TP, +12
- C14. Is not very tired**: 84% (TP 78%), -6 T, 61% TP, 68% TP, + 7

#### D. Psychological criteria
- D1. Has positive self evaluation**: 80% (TP 85%), +5 T, 66% TP, 73% TP, + 7
- D2. Self esteem not dependent on weight**: 92% (TP 97%), +5 T, 63% TP, 76% TP, +13
- D3. Is sufficient assertive**: 74% (TP 76%), +2 T, 49% TP, 76% TP, +27
- D4. Does not punish herself after a meal**: 86% (TP 97%), +11 T, 73% TP, 85% TP, +12
- D5. Can concentrate well**: 62% (TP 61%), -1 T, 66% TP, 76% TP, +10
- D6. Is not extremely perfectionist**: 68% (TP 80%), +12 T, 41% TP, 83% TP, +42
- D7. Has no strong fear of failure**: 64% (TP 78%), +12 T, 56% TP, 86% TP, +30
- D8. Has a realistic image of herself**: 88% (TP 97%), +9 T, 61% TP, 71% TP, +10

#### E. Emotional criteria
- E1. Is not depressed**: 76% (TP 83%), +7 T, 61% TP, 76% TP, +12
- E2. Can express emotions verbally**: 94% (TP 98%), +4 T, 73% TP, 85% TP, +12
- E3. Can express emotions nonverbally**: 76% (TP 95%), +19 T, 68% TP, 85% TP, +17
- E4. Can regulate negative emotions**: 90% (TP 95%), +5 T, 53% TP, 80% TP, +27
- E5. Can regulate positive emotions**: 82% (TP 84%), +2 T, 66% TP, 83% TP, +17
- E6. Is not dependent on opinion of others**: 72% (TP 78%), +6 T, 61% TP, 80% TP, +19
- E7. Dares to express a different opinion**: 70% (TP 80%), +10 T, 66% TP, 85% TP, +19
- E8. Is able to handle conflicts**: 78% (TP 83%), +5 T, 61% TP, 76% TP, +15
- E9. Is in touch with her own feelings**: 90% (TP 90%), 0 T, 53% TP, 73% TP, +20

#### F. Social criteria
- F1. Participates in social activities**: 86% (TP 78%), -8 T, 68% TP, 66% TP, - 2
- F2. Is able to make contacts**: 82% (TP 83%), +1 T, 73% TP, 66% TP, - 6
- F3. Is not isolated**: 92% (TP 95%), +3 T, 61% TP, 80% TP, +19
- F4. Has some friends**: 74% (TP 83%), +9 T, 76% TP, 97% TP, +21
- F5. Has an intimate relationship**: 34% (TP 44%), +10 T, 39% TP, 51% TP, +12

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1. A revised version of this table was published by Noordenbos & Seubring (2006).
Table 1 shows a high degree of consensus between therapists and ex-patients on the criteria they considered as important for recovery. For 34 criteria the differences between the therapists and former patients were less than 10%. For 18 criteria their opinions differed more than 10%, whereby the therapist evaluated only 3 criteria as substantially more important than the former patients, all about somatic recovery (C1, C3, C9) while the former patients evaluated 15 criteria as more important than the therapists, including criteria for eating behavior, body experience, somatic criteria, psychological, emotional and social criteria: (A2, A3, B1, B2, B3, B5, C6, C7, C15, D4, D6, D7, E3, E7, F5).

Most relevant criteria for recovery

To make a list of the most relevant criteria for recovery the criteria were categorized as very important *** when more than 80% of both therapists and patients evaluated this criterion as relevant, as important ** when 50% to 79% of the therapists and the patients evaluated this criteria as relevant and less important * when less then 50% of the therapists an the patients mentioned this criterion as relevant. The results are indicated in table 1. The most important criteria were about all 6 domains of recovery: 6 about eating behavior, 2 about body attitude, 0 about physical recovery, 4 about psychological well being, 9 about emotional functioning and 3 about social functioning. Only three criteria were evaluated as less important by therapists and: (C4 monthly periods are regular, C8 has no constipation, C12 healthy teeth, C13 sleeps normally and F5 has an intimate relationship).

Did the patients realize the criteria for recovery after treatment and at follow-up?

Former patients were asked which criteria they had realized at the end of their last treatment and at the time of the research (see table 1, columns 4 and 5). At the end of their last treatment only 4 criteria had been realized by more than 80% to 97% of the patients, all about eating behavior (A4: does not vomit, A5: does not take laxatives, A6: does not use diuretics and A7: does not use slimming pills). In total 40 criteria had been realized by 50% to 79% of the patients and the following 8 criteria were realized by less than 50% of the patients (B1: does not feel too fat, B2: has a positive body attitude, B3: accepts her appearance, C4: menses are regular, C10, no constipation, D3, is sufficiently assertive, D6 no extreme perfectionism, F5 has an intimate relationship). One year later much more criteria were realized. In total 80% to 97% of the patients had realized 22 criteria, while 50% to 79% had realized 29 criteria. Only 1 criterion was realized by less than 50% of the ex-patients: does not feel too fat (B1). In table 2 the differences are presented between the number of criteria realized at the end of treatment and one year later.
Table 2: Percentage of patients meeting criteria for recovery at the end of their treatment and one year later

<table>
<thead>
<tr>
<th>Realized criteria of recovery</th>
<th>After last treatment</th>
<th>One year later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 80%</td>
<td>4 criteria</td>
<td>22 criteria</td>
</tr>
<tr>
<td>50% to 79%</td>
<td>40 criteria</td>
<td>29 criteria</td>
</tr>
<tr>
<td>Less than 50%</td>
<td>8 criteria</td>
<td>1 criterion</td>
</tr>
</tbody>
</table>

Compared with the condition at the end of their last treatment the former patients had improved on 47 criteria: for 38 criteria they improved in a substantially way, 1 criterion stayed equal (C8) and in 4 criteria a slight deterioration was seen (A6: does not take laxatives, A7: does not use slimming pills, F1: participates in social activities and F2: is able to make contacts).

DISCUSSION

Research shows that for eating disorders the aims of treatment and criteria for recovery vary greatly, resulting in incomparable percentages of recovery. This study shows that therapists specialized in eating disorders and former patients who are quite well recovered agree on most criteria for recovery. They do not only evaluate normalizing eating behavior and weight as relevant for recovery, but also improvement of psychological, emotional and social functioning. This finding is supported by the research of Bachner-Melman, Zohar & Ebstein, 2006; Björk & Ahlström, 2010; Cogley & Keel, 2003; Noordenbos, 2011a & 2011b; Petterson & Rosenvinge, 2002; Vanderlinden et al., 2007)

At the end of their last treatment more than half of the patients in this study research were improved, but one year later the percentage of patients who had realized the criteria for recovery had substantially increased. The realization of psychosocial criteria for recovery takes more time than improving their eating behavior and weight. This was also found by Strober et al. (1997) and Fennig et al. (2002).

Our study shows that more consensus about criteria for recovery between patients and therapists is possible. These criteria are not only about normalizing the eating behavior and weight, but also has about improving their body attitude, self esteem, emotion regulation and social functioning (Björk & Ahlström, 2010; Noordenbos, 2011a, 2011b; Petterson & Rosenvinge, 2002; Vanderlinden et al., 2007).

Although a short therapy only directed at normalizing food intake and weight is cheaper, the risk of relapse is much higher and repeated treatments are necessary which makes the total treatment duration very costly (Root, 1999). A treatment which is focused on all relevant domains of recovery takes more time, but is more cost effective.
This study however had some limitations. A problem in this study is that the evaluation of recovery was made by the patients whose self-evaluation might be too optimistic. To get more objective information about the level of recovery it is desirable that both therapists and patients fill in the same list of criteria for recovery and to compare their answers.

Another limitation in this research is that the list of criteria used in this research was evaluated as incomplete according to some therapists and patients, who suggested more detailed criteria for the amount of food intake and the calories the patient eats. Others suggested criteria regarding improvement of family interaction. Also criteria concerning the reduction of co-morbidity are desirable, as well as criteria concerning educational and vocational adjustment. More research is desired in order to elaborate and validate the list of criteria for recovery from eating disorders and to gather more objective data about recovery.

REFERENCES


