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How do males recover from eating disorders? An interview study

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Abstract

Objective Previous studies have explored how women experience their recovery process from eating disorders, yet little is known about this process from a male perspective. This study aims to explore males' experiences with such a process and what kind of challenges and needs they describe.

Participants and design We included 15 Norwegian and Swedish males with an age range from 19 to 52 years. All had a long-term history of anorexia nervosa (n=19), bulimia nervosa (n= 4) or eating disorders NOS (n= 1). They participated in qualitative in-depth interviews, and we used content analysis to decode transcribed texts from these interviews.

Results The content analysis revealed four main categories, i.e., "the need for a change", "a commitment to leave eating disorder behind", "interpersonal changes", and "searching for a life without an eating disorder". These categories comprise features like motivation to change, gaining structure in eating situations, a re-learning of personal and interpersonal skills as well as accepting losses and a reorientation of identity and meaning. We noted a rather goal-oriented approach to help seeking and a variation in how the males engaged their social network in resolving the challenges associated with the recovery process. Still, the overall nature of the recovery process highly accords with what has been reported for women.

Conclusions: A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement, but that the nature of the recovery process would require a wider perspective in treatment. Clinicians may also be informed about challenges related to an instrumental approach to help seeking reported in this study.

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Strengths and limitations Strengths in this study is that the elucidation of common attributes of male ED-patients recovery process irrespective of age and treatment content. A limitation is that participants were recruited among those who had been treated in specialized ED-units. This may have limited the selection of participants and excluded those with ongoing recovery process and those treated in other treatment settings. The variation of ED-diagnosis in the sample is, however rich in variation and the categories may therefore be transferable to males with ED in other settings.

Introduction

Eating disorders (ED) are uncommon, particularly among males[1,2]. In the field of ED a strong focus on females reflects the gender disparate epidemiological figures. A low prevalence of males with ED has led to fewer studies, but overall, those who have included males have found few gender differences in terms of aetiology, symptomatology, treatment response, and outcome[3]. In the literature on females with ED, some studies have focused on the outcome *process*, and the nature of recovery in particular[4]. In the present paper, we aim to explore the nature of this process among males.

There are several possible reasons why the nature of males' recovery could differ from those of females. First, it could be that trigger factors and personal reasons for taking actions to recover may be different from those of females. A second possibility relates to feelings of shame of having a "female" illness. This shame may delay seeking treatment, with the consequences of increasing the risk of a slower recovery process, and thereby prolong the duration of illness and raising the probability of a poorer prognosis[2]. Moreover, although a recent review of ED in males[5] indicates substantial improvements in clinician's ability to detect and treat males with ED, treatment services may still be suboptimal. In general suboptimal clinical services may negatively affect the nature of the recovery process, and particularly so among males given that the shame of having a "female illness" may make a male with ED more vulnerable to experiences of being ignored or misunderstood by a therapist[6]. In addition due to possible shame of having a "female illness", males may be more concealed about their ED and thereby blocking for the contribution from their social network to their recovery process.

Study of the recovery process can benefit from a qualitative approach, since it enables a deeper understanding from the patient's perspective. This perspective is often missing in traditional outcome studies[1,2,7]. However, if the patients are given a voice, it is the voices of women. Qualitative accounts of these voices show that for women, the recovery process starts with a wish to change, often facilitated by important persons in their lives[8-10]. Moreover, it is important to develop the ability to identify and express feelings, in an empathic, non-judgmental understanding milieu[11] as well as improving self-esteem, body experience and to learn more functional problem-solving skills[12]. A review of female studies[13] shows a number of "recovery-promoting agents", notably interpersonal relations, treatment, self-help, and positive life events that trigger self-determination and motivation to explore alternatives to an ED-identity. Moreover, for females the process elements appear as highly affective and motivational in nature. Also, the recovery process appears as continuous rather than dichotomous in nature, where the individual need time to come to terms with grief over lost time and finding other ways of living the life without an ED, and learn to practice more functional self-regulative behaviours[14, 15]. Women also tend to experience the recovery as spiritual process or like a journey to self, with turning points and shifts in relationships that enabled different ways of belonging, self-acceptance and agency[16]**.** An integrative model of the nature of female's recovery process[7, 13] outlines weight normalisation and reduction of symptom frequency and severity as the *necessary* prerequisites for progress of the *sufficient* domains, i.e., the resolving of psychological issues, existential issues, as well as interpersonal and social aspects[7].

Despite the growing number of qualitative studies of women's experiences of recovery, the largely missing male perspective makes our knowledge incomplete. Hence, we lack evidence for practicing gender-neutral treatment models. Moreover, there is a need to explore factors that may

facilitate therapy with male ED-patients as well as a need to discover how male patients' experience the recovery process in order to provide optimal support and aftercare.

To our knowledge, there is only one review on males' treatment experiences[17] including only four small studies. Of these, only two specifically aimed to investigate males' treatment experiences. Analysing these experiences showed themes related to barriers for help-seeking or specific male ED-symptoms, such as delay in seeking treatment due to shame, as well as the importance of specific ED-symptoms like a drive for muscularity and erection-problems. Results also highlighted a lack of appreciation of male issues in treatment services, a lack of consensus about the relevance of gender, and too little attention to males' experiences of the treatment-process. The review also revealed some negative treatment experiences; too short treatment, experiences of care as control, and the professionals' failure to take time to listen to the males. On the other hand, several helping components in treatment were also found, like being understood and cared for, with recognition of gender issues. This review also underscores male specific treatment needs, but that this needs further investigations. Knowledge about the nature of the recovery process may increase the possibility of actually influencing this process in treatment settings, and in return, shorten the duration of the illness and raise the probability of a favourable course. Hence, the aim of our study is to investigate the nature of the recovery process from a male patient perspective.

Method

This study is a part of three studies, where the first one[18] focused on the males' experiences of life after recovery and the second focused on the attributed causes of their ED[19]. The present study focuses on the recovery process.

Patients and procedure

Eligible participants were former male patients who had completed their treatment for a DSM-IV ED in specialised ED-units in Norway or Sweden, and who had experienced recovery.

After approval from the Regional Ethical Committees of Medical and Healthcare Research in Northern Norway and Sweden, respectively, 17 males were provided proper study information by their former therapists. The authors contacted the males, and made an appointment about time and place where they felt it convenient to conduct the interview (eg. at their homes, working places or former treatment units). Of the 17 males, 15 participated and gave their written consent to be qualitatively interviewed by one of the three authors (GP,KW,TB), i.e four to six interviews per author. Before the interview started, the authors informed them about reasons for conducting the study, as well as personal involvement and interest in the topic of ED. To reduce the risk of bias, no author interviewed their own former patient. The interviews focused on the males' own experiences of recovery, and lasted for about 1-2 hours. Every interview was recorded and transcribed consecutively. The participants' age ranged from 19-52 years (median = 23 years). By clinical evaluation, 10 participants had anorexia nervosa, four had bulimia nervosa and one had an unspecified ED. All had a long history of considerable symptom load, and those low in weight had been hospitalised for medical complications. Compulsive physical exercise was common, as were high self-demands low self-esteem, depressive episodes, inner beliefs of not being good enough and likable to others. In addition, they reported body dissatisfaction and feelings of not being thin or muscular enough, a long duration of symptoms, a delay in treatment seeking as well as a massive hiding of symptoms from family members and other close relations for years. Vocational problems elicited by the ED-symptoms were also present.

Data analysis

The analysis was inspired by principles outlined by Graneheim and Lundman[20] and the interviews were analysed according to the principles of content analysis. In order to reach a general interpretative consensus related to the analysis, all three authors read the interview text several times to get an overall impression of the material. The transcripts were then compared with the audiotaped interviews to check the accuracy of the texts, and thereafter imported to the software Nvivo 9, were all statements containing the word "recovery" or other words related to the aim were marked. The next step included rereading and coding, where additional notes on the themes and ideas that emerged from each interview were made, and condensed units of meaning reflecting the texts were identified. The third step included a further reading of the texts in order to filter out irrelevant information, reduce the main meaning-carrying units and to identify pattern and nuances. The meaning units were defined, condensed and reformulated, continuously checking the text for relevancy. The next step was coding according to the meaning units, to identify the categories. The coding-process was made by the first author (GP). A validation process followed were all the three authors discussed the analysis process as a whole. Sorting the units of meaning resulted in four categories (table 1).

Table 1. Overview of categories, subcategories and common themes.

Sub-categories	Main categories	Common themes
Admitting the problem	**The need for (a) change**	Understand the situation
Treatment needs in the early phase		Giving up own control- leave it to professionals.
Stabilizing nutrition and weight		Accepting regular food intake.
	Commitment to leave the ED behind (Strict rules of living and dysfunctional cognitive schemas.)	ED as a friend and a foe.
Searching for a balance		Finding the balance between activity, rest, structure, and self-care.
Expectations of treatment		Demands towards the clinicians and the content of treatment.
Being aware of own needs	**Interpersonal changes**	Being more social, no need to hide the ED, better self-confidence, and being more flexible to food intake.
Relating to others in new ways		Related to relations – what are my needs?
		Some changes in personal relations. Some questioned the health benefit of disclosing the ED, and various thoughts about whether openness was beneficial.
Accepting the losses	**Searching for a life without the ED**	Accept the years being spent on the ED and the consequences.
Finding oneself		Who am I without the ED.

Results

Category 1 – The need for change

This category concerns issues from the period when they understood that something was wrong, that their relation to food, weight, body and exercising dominated in a negative way, and where they experienced the need for a change. This need is sub-categorised into "admitting the problem", "treatment needs in the early phase" and "stabilising nutrition and weight", respectively.

Admitting the problem

The process of understanding and admitting that they had an ED had taken a long time, and some reported many years with struggling without speaking with others about their problems. To admit having an ED included admitting that food, weight and body appearance controlled or dominated all domains of life, like for instance their relations to family members, friends or others. Thus, they experienced daily life as rather chaotic and with feelings of being worried and "fed up". Some reported even having to quit job or education either temporary or permanently because of living with the ED. Some of the males had been exercising like elite athletes do, and with a high drive to "perfect" training. In sum then, the males retrospectively recalled the periods of their life with the ED before seeking treatment as chaotic or "meaningless". As a result, some of the males reported having nearly given up and described it like being in a crisis, for some exacerbating into suicidal ideations. Whether or not they understood or admitted that they had an *ED* certainly varied, but they came to a point where they understood that they needed help in order to move further.

One of the males stated:

"I came to a point I realised the need for help. I couldn't manage to eat and my only thought was- I can't live like this anymore, it's no life".

Realising the negative consequences and admitting having a problem was thus important the first period of the recovery process.

Treatment needs in the early phase

Realising the need for help, some of the males contacted health professionals themselves. However, most of them reported having been pushed into it, or even forced by a close family member or a friend. In retrospect, many realised that by so doing their parents or close friends almost saved their life. Indeed, they were grateful, at least in retrospect that someone else took over the control and of feeding and eating. A typical citation may illustrate:

"It was a relief that others just could take the control over the food and decide what I should eat and the hospital stay could provide structure and frames to regulate my eating".

Some of the males started their recovery process with hospitalisation due to severe weight loss and food avoidance. Others contacted a general practitioner or started with outpatient treatment. No matter what kind of treatment they sought, the need was somewhat the same; they needed help because they had realised that they could not manage the situation on their own.

Stabilising nutrition and weight

The males highlighted the importance of stabilising eating, nutrition and weight in the early phase of the recovery, and many recalled the structure of hospital treatment as helpful, notably as facilitating work on more difficult issues like overeating and purging, which some had strived with for years.

As one of the males expressed:

"*I needed a break from everything- I wanted to be hospitalised and I hoped that they could close the doors so I didn't get the opportunity to overeat and throw up".*

Another male said it in this way;

"*I joined a "luncheon group" at the hospital and that changed my attitude markedly. I got another and better structure around food and managed to keep the meals to fixed time during the day."*

Others also reported the benefit of having had to relearn "how to eat". It was a process learning to eat in a new way, and it took time, as one of them said:

"It took at least one year before I learned to eat. I went to a dietician who taught me how to organise my eating into breakfast, lunch and dinner. Even if ED are not just a matter of food, it is also about food and I was totally "out of place" on this food thing".

As the citation illustrate, gaining structure was a time consuming struggle.

Category 2 Commitment to leave the ED behind

After the initial stabilising of food intake and weight, the main issue was how to leave the ED behind. This category consists of the subcategories "searching for a balance", "expectations towards treatment".

Searching for a balance

The males reported being challenged to let the ED behind and replace it with new coping strategies. Despite the fact that the males had experiences all the negative consequences related to

the ED, they also reported that the ED had been their functional coping strategy for years. Some even described their ED as having been their best friend. Hence, a challenge was to handle the ambivalence of change, i.e., looking for ways towards a less chaotic life, but also letting go of some "advantages" that the ED represented.

The males reported challenges in finding a balance between rest, sleep, and activity. Moreover, from previously being compulsive about physical exercise, the recovery process meant learning to convert exercise into a positive contribution in terms of balance and a contact with own needs. As one male expressed it:

"I exercised several times a day and it was very compulsive… On the other hand, the exercise has been very important for my recovery and I will never live a life without exercise. Now, however, I have learned to ask myself- why do I have to exercise now? In addition, I learned to sit down and think that I need both rest and activity. I also had to be more flexible about when to exercise".

The citation illustrates the need to examine the motives for exercising, and search for the joy of exercising, instead of pursuing the aim of burning calories. Almost the same process was relevant with respect to the rules related to meals. Gradually, the males managed to loosen up their detailed mealtime schedules, but also to gain more flexibility by challenging personal rules about what one "can" do and "not do". The males described how the focus on regulation of food and activity as well as self-care made them gradually stronger and improved in many areas of their life.

Promoted by therapy the males started a process with increasing self-care and more regular patterns of living. Also, they gradually learned to think better about themselves, be more kind to oneself, to discover own needs and be able to fulfil them, and thus, to "deserve" entering a

recovery process. Another issue was to understand which kind of purposes or functions ED-symptoms served in their life and, in essence, why they developed an ED in the first place. As consequence, the males came to understand that the ED-symptoms served as a twisted way to express themselves emotionally.

Later in the recovery process many of the males step-by step restarted with activities they liked before, with the result that there was less time to think of food and a positive circle emerged. Others began with new activities, of which the ED earlier had been a barrier. For some it was important to keep up leisure activities like sports, travelling or playing music, while others managed to take up again their activities after more intensified treatment. Overall, leisure activities became "a free space", where it was easier to manage the ED-symptoms.

More time to do things was frequently mentioned along with other positive circles because of symptoms being more stable. Being able to have a daily occupation, being able to have a job, go to school or having a daily occupation were of some participants highlighted as important in the recovery process. Some though, asked for a sick leave in order to concentrate more fully on their treatment and recovery process.

Expectations of treatment

In general, the males had high expectation towards treatment. It was important for them to find a therapist that they could trust and talk to about their ED-related problems. Some expressed that when they first should recover, and put so much effort in treatment, they would not like to waste their time on a service that they did not experience as helpful. Some were thus quite goal-orientated and instrumental and did not hesitate to quit treatment if they after some time did not

come along with their therapist. Some were eager to come to grip with the "whys", but the main development was just to learn how to find a way «out» of the illness. The demands were also evident in terms of the personal effort, investment and engagement they put in therapy in order to get the most out of it.

The therapist was the person they spoke most openly with and sometimes the only person they talked to about the ED. All participants reported high personal investment and engagement in their therapy. This is shown in the huge effort they were willing to take to get most out of their treatment illustrated as follows:

"I drove my car 150 kilometres each way to the therapist, so I was rather motivated on that time and I used my self-determination. When I decide to do something, I really make an effort, and when I decided to give treatment a try, the driving distance was not a problem at all."

Thus, the males gave themselves some credit for their recovery, but all of them said that they would not have made it without professional help, as one said:

"It has been a struggle, but I have had the fortune of receiving good treatment. I could not have manages it on my own, but at the same time I have my resources inside me that made me go through with recovery and start a life without the ED. I have gradually learned to use my strength and my resources in a right way."

Category 3 - Interpersonal changes

This category includes interpersonal changes, notably acquiring more flexibility in the social relations and learning to express better own needs. The sub-categories were "expressing own needs" and "relating to others in new ways".

Expressing own needs

The males reported how they gradually learned to become more aware of own needs and to express them to others. The males changed their history from being pleasers, who always said

"yes" if someone asked for something, and seldom asserted their own needs and boundaries to becoming "boundary setters". As one of the male stated;

"Before it was very important for med that my friends thought I was ok, but now it is more important for me that I think it is ok to be with my friends. If I think it is ok, I am sure they do as well. I have started to ask myself – what are my needs?"

Relating to others in new ways

The recovery process also included a change in their understanding of relations. Facilitated by treatment, they understood more about ED and the mechanisms of symptoms, and this made it easier to find the right words to explain their ED-symptoms to family members and close friends. Some reported an indirect benefit from interpersonal relations in the sense that job, colleagues and friends made a supportive impact by providing social control and an external structure in order to control the frequency of symptoms. Some also understood that in order to start to recover and to secure continuing the recovery process, they had to distance themselves from difficult relationships, like a violent father or a mentally sick mother, realising that no support could ever be provided. When being more social, they became more self-confident and therefore, they stood up for their own needs when relating to others. As one of the male said;

"I have learned a lot about myself during this process and now I know more what kind of life I want to live. It is important with social network and to see the value of friends and having someone to really care about. It is also like – you have to accept yourself before you are able to love others. It is hard to have close relationships when you have so much trouble yourself. After a while, I was able to be social with others, and I managed to keep a conversation going without thinking of other things, I could really listen to others and I became more participating and present in the moment.

Category 4 – Searching for a life without the ED

The males had spent years of their lives living with an ED, thus missing other experiences and opportunities. The recovery process included feelings of grief over such losses, but also the need

for reconciliation and a search for normality and an identity without an ED were experienced as important. This category consists of the subcategories "accepting the losses" and "finding oneself".

Accepting the losses

Nearly all the males struggled with a grief related to having been preoccupied with the ED and the related problems for so many years. They had experienced that the years with an ED had caused losses, for instance a dropout of school, a sick leave from work or having sparse or no experiences with being in close relationships. One of the male said:

"I can feel a grief because I have spent 25 years of my life on the bulimia, and now I feel that many trains have passed by".

Even if the males in general could feel a grief over the losses, at the same time they had some expressions that described how this process had made them stronger and more and more aware of their own needs.

"When I had my bulimia, I didn't have a need for or place in my life to have a close relation, but during the recovery process the need for a family and own children came up".

This citation also illustrates progress and recovery in the sense that new needs elicited grief for something (i.e., bulimia) which previously had been experienced as "functional". Moreover, to understand development of the ED was described as helpful to realise the psychological pain in order to be able to look ahead. After years of struggling with the ED many of the males also expressed that they had become more empathic, understanding and compassionate with others who were experiencing problems in their lives.

Finding oneself

Due to the years of suffering from the ED a common description was that the disorder had become a part of their identity. They reported that during the recovery process they were uncertain about what is defined as normal and what actually a recovery from an ED is all about. Hence, during the recovery process the males had asked themselves "who am I without the ED?", and "how will my life be without an ED? These rather existential questions were in essence, partitioned out into many daily life contexts. Apart from their relearning of basic regulative issues with respect to food, sleep, activity, emotions and reactions, they were furthermore occupied with a relearning of ordinary behaviours and emotional reactions and daily rules of ordinary social interaction with others. The males reported difficulties with for example to know whether a strong emotional reaction was "normal" or due to their ED-history. As one male asked:

"*How sad is it normal to be after a split-up with a partner*".

This citation illustrates that the males felt it difficult to sort out whether their reactions or feelings were coloured by their former identity as an ED-sufferer" (and hence possibly not "normal") or whether they mirrored their "true selves". Several of the males also remarked that they characterised themselves as vulnerable.

During the recovery process, the males were taking more part in social life, but there were variation on how open they were about their ED. Some had a fear of as well as an experience with being stigmatised and that others should attribute all kinds of behaviours to their ED-history. To avoid stigmatisation and additional problems in the reorientation of identity, some of them had made a choice to be selective with respect to whom they shared this ED-history. However, there were also males that had good experiences with openness in the recovery process and males who described openness as a relief that helpful for the reorientation process

Discussion

This study focused on how the males described their recovery process from ED. We found four descriptive categories, i.e., "the need for a change", "a commitment to put the ED behind", "interpersonal changes", and "searching for a life without an ED. During treatment, parallel recovery processes were going on, yet these categories may also be sorted in a timeline. Hence, the first category was more relevant to the first phases and the fourth one to the final stages of the process.

Hardly surprising, admitting to having an ED was the first theme the males mentioned as initiating their recovery. This is almost a prerequisite for even starting a recovery process. Prior to this, the males reported a chaotic period where ED- symptoms dominated all domains of life. All of the males realised that they had problems for which they needed professional help, but there were variations in realising that the problems indicated ED in particular. Although some kind of "decision" or the experience of a "turning point" is necessary, previous studies on women have shown that ambivalence is an important issue in the initial phases of recovery[21-23] as well as in the later stage of the recovery process[15]. The current study shows that the ambivalence towards change is truly gender neutral.

While the males achieved more structured eating behaviour, they gradually also learned to better recognise and understand their own personal needs. In return, this led to ability to being more self-caring and compassionate with themselves. Our findings indicate that increased self-care as well as self-regulation are important aspects of the recovery process in the sense that they set in motion positive circles with opening up the often strict cognitive schemas and rules, a better

structure and relation to food, resulting in less shame, more self-acceptance, and eventually, in a better social functioning. Moreover, our findings indicate that regulative issues should not be restricted to affective control, but may comprise the full spectrum of life domains, similar to what has been reported[14] among females in recovery from an ED.

The interviews also revealed the importance of health care professionals for a good recovery process, notably in terms of helping the males to sustain self-regulation and self-care activities. Moreover, it is noteworthy that professional helpers were for some of the males almost the only persons they talked with about the ED and the associated problems. Even so, they were not afraid of setting demands, and they would not "waste" their time with treatment, which they believed were not beneficial to them. In some ways then, these males took a rather instrumental approach in own recovery process (once they had made a decision to recover), and in this process they made use of a sometimes strong and positive willpower. Nevertheless, this goal-orientation did not seem to shorten the often long and demanding journey towards recovery. The instrumental approach to treatment stands out as a likely gender specific finding.

Our findings indicate that the recovery process consists of several elements. One element is the control of ED-symptoms and their complicating elements. Hence, the males reported that recovery is a matter of lowering the symptom load, to loosen strict rules for food intake, to let go of self-stigmatisations, to experience less somatic complications and to experience that symptoms do not dominate daily life.

Another element of the recovery process comprises psychological and social issues. The males reported how the ED prevented them from taking part in social activities. However, during the recovery process they began to strive for social support and more openness about their problems.

The social network consisted of many sources, i.e., people who stand for continuity, who had been there all the time and knew the person before the development of the ED. An important aspect of recovery was depicted in the participant's wish to make better use of the social network as a platform for hope and a wish to function well in social settings. This theme concerned developing the intrinsic need to take part in, and enjoying social activities and not just to please other people.

Our results show that the later stages of males' recovery process consisted of existential elements, like questioning their opinions about the meaning of life without the ED. This part of the recovery process indicates a cognitive and attentional shift from being preoccupied with the beliefs of controlling food intake by dieting, vomiting or excessive exercise. Obviously, this shift released an important "psychological free space", and a rethinking of one's identity and goals of life.

Taken together, our findings concur with themes and change processes, which have been identified among women in recovery from an ED[7, 13-15]. This may indicate a universal nature of change and recovery from ED. The other side of the coin, and possibly equally gender related is the fact that the males had concealed their ED for a long time and delayed to seek treatment. This is indicated by the high frequency of hospitalisation as the first line of treatment due to symptom severity.

This study's strengths is its originality as being one of few studies the recovery process among males with an ED and the first one to support overall gender neutral nature of the recovery processes. In addition, our sample is large, yet our findings may be tempered by the lack of

formal diagnostic validation procedures as well as standardised measures of recovery, both explaining why the interviews detected that some participants were still suffering from ED-symptoms. In these few cases, accounts of later phases of recovery may have reflected wishes and expectations rather than actual personal experience.

Conclusion

A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement. Moreover, and similar to findings on females' recovery process, our study points to the need to address a wider perspective, i.e., to support patients recovery through social reorientations, personal reconciliations and coming to terms with existential issues. In a real world of limited health resources, this wider perspective may seem unrealistic to accomplish. However, we firmly believe that taking such a perspective will pay off as it may prevent incomplete recovery processes and relapses, and in return, future societal and personal burdens. Clinicians may also be informed about challenges related to an instrumental approach to help seeking reported in this study.

Contributors GP, KW and TB were all responsible for the planning of the study, the data collection and the analysis. Moreover, all authors contributed to the manuscript.

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Competing interest None

Ethical approval Regional Ethical Committee of medical and healthcare research and the regional Ethics Review Board in Uppsala Sweden (D. no 2009/118) and the Regional Ethical Committee for Medical and Health Care Research in Northern Norway.

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No	Item	Guide questions/description
Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	All authors (GP,KW,TB) interviewed the patients (i.e four to six patients each), (page 6).
2.	Credentials	The researcher's credentials were PhD (GP, TB) and BSc (KW), (page 1)
3.	Occupation	Their occupations were associate professor (GP) psychotherapist (KW) and clinical researcher (TB), (page 1, 6),
4.	Gender	Females
5.	Experience and training	The researchers (GP, TB) have several years of experience in applying qualitative method as well as teaching at university level. The psychotherapist and also PhD-student (KW) has extensive experience in interviewing patients, and training in qualitative methodology
Relationship with participants		
6.	Relationship established	No relation was established before the interview, only an appointment were to meet (page 6)
7.	Participant knowledge of the interviewer	The researchers explained their reasons for conducting the study before the interview, (page 6) as well as their current occupation.
8.	Interviewer characteristics	To minimize bias, due to former patient – psychotherapist relationship, none of the authors interviewed a former patient (page 6). No other characteristics were found necessary to report.
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	The methodological approach was guided by principles in qualitative analysis in nursing reseach outlined by Graneheim and Lundman, and interviews were analysed according to content analysis (page 7).
Participant selection		
10.	Sampling	The recruitment procedure started with a written request to all specialist ED-units in Sweden and Norway. Therapists were asked to contact their male ex-patients if they fulfilled inclusion criteria, to and inform them about the study and ask if they were willing to participate in the study (page 6)
11.	Method of approach	The males who were willing to participate were contacted by phone by one of the authors (GP,KW,TB), to make an appointment of time and day to conduct the face to face interview (page 6)
12.	Sample size	17 males fulfilled the inclusion criteria and were requested. At time-point for interview 15 participated in the interview (page 6)

13.	Non-participation	Two participants failed to appear at the agreed place - one for practical reason, one for unknown reason (page 6).
Setting		
14.	Setting of data collection	The locations of the interviews were chosen by the participants, often close to their homes (eg. at their homes, working places or former treatment units) (page 6)
15.	Presence of non-participants	Only the participant and a the interviewing author was present during the interview
16.	Description of sample	Important characteristics of the sample were male gender, age distribution (19-52 yrs) and the experiences of recovery from different ED-diagnoses.
Data collection		
17.	Interview guide	An interview guide was created for the study. No pilot was carried out (page 6)
18.	Repeat interviews	No repeated interviews (page 6)
19.	Audio/visual recording	All interviews were audio recorded (page 6)
20.	Field notes	No field notes was made during and/or after the interview
21.	Duration	The duration of the interviews varied between one and two hours (page 6)
22.	Data saturation	Data saturation was discussed, with a conclusion that 15 rich interviews were sufficient.
23.	Transcripts returned	No transcripts were returned to participants. They were invited to take contact with the interviewer, if they had some questions or wanted to make changes.
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	One author (GP) coded the data, but a validation process followed were all three authors discussed the analysis process as a whole. (page 7)
25.	Description of the coding tree	No description of a coding tree.
26.	Derivation of themes	Themes derived from the data (page 7).
27.	Software	The software Nvivo was used in an early phase of the analyzing process (page 7)
28.	Participant checking	Participants did not provide feedback on the findings
Reporting		
29.	Quotations presented	Quotations were presented to illustrate the themes, but without identifying participant numbers (page 9-17).
30.	Data and findings consistent	There was consistency between the data presented and the findings.
31.	Clarity of major themes	The major themes were clearly presented in the findings (page 8)
32.	Clarity of minor	Clarity and discussion of minor themes and diverse

themes cases are also included (page 8, 18-20)

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How do males recover from eating disorders? An interview study

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How do males recover from eating disorders? An interview study

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Abstract

Objectives: Previous studies have explored how women experience their recovery process from eating disorders, yet little is known about this process from a male perspective. This study aims to investigate what males experienced as helpful in their recovery process from eating disorders ED.

Participants and design: We included 15 Norwegian and Swedish males with an age range 19 to 52 years. All had 10-25 years experiences with anorexia nervosa (n=10), bulimia nervosa (n= 4) or eating disorders NOS (n=1). They participated in qualitative in-depth interviews, and we used content analysis to decode transcribed texts from these interviews.

Results: The content analysis revealed four main categories, i.e., "the need for a change", "a commitment to leave the ED behind", "interpersonal changes", and "searching for a life without an ED". These categories comprise features like motivation to change, gaining structure in eating situations, a re-learning of personal and interpersonal skills as well as accepting losses and a reorientation of identity and meaning.

Conclusions: Our findings indicate that recovery is a demanding process. Clinicians may ease this process by early detection, i.e. acknowledging that EDs do occur among males, and by initiating a problem-solving treatment plan.

Strengths and limitations of this study

- Strengths are its originality as being one of few studies of the recovery process among males with an ED across age and treatments as well as the richness and variations in the experiential accounts because of a large sample size.
- Limitations are that some standardized validation procedures were not supplementing the qualitative data regarding diagnoses and recovery

Introduction

Eating disorders (ED) are uncommon in the general population, particularly among males[1,2, 3]. ED are relatively common among younger girls, and in comparison with other ED-diagnoses, binge eating disorders are most common among males[1,2,3]. In the field of ED a strong focus on females in theories of aetiology and in diagnostic criteria reflect the gender disparate epidemiological figures. Fewer identified number of males with ED than females[3] has led to fewer male studies, but overall, those who have included males have found few gender differences in terms of aetiology, symptomatology, treatment response, and outcome[4]. In the literature on females with ED, some studies have focused on the outcome *process*, and the nature of recovery in particular[5]. In the present paper, we aim to explore the nature of this process among males.

There are several possible reasons why the nature of males' recovery could differ from those of females. First, it could be that trigger factors and personal reasons for taking actions to recover may be different from those of females. A second possibility relates to feelings of shame of having a "female" illness. This shame may delay seeking treatment, with the consequences of increasing the risk of a slower recovery process, and thereby prolong the duration of illness and raising the probability of a poorer prognosis[2]. Moreover, although a recent review of ED in males[6] indicates substantial improvements in clinician's ability to detect and treat males with ED, treatment services may still be suboptimal. In general suboptimal clinical services may negatively affect the nature of the recovery process, and particularly so among males given that the shame of having a "female illness" may make a male with ED more vulnerable to experiences of being ignored or misunderstood by a therapist[7]. In addition due to possible shame of having a "female

illness", males may be more concealed about their ED and thereby blocking for the contribution from their social network to their recovery process.

Study of the recovery process can benefit from a qualitative approach, since it enables a deeper understanding from the patient's perspective. This perspective is often missing in traditional outcome studies[1,2,8]. The recovery process, as described in studies of women, starts with a wish to change, often facilitated by important persons in their lives[9-11]. Moreover, it is important to develop the ability to identify and express feelings, in an empathic, non-judgmental understanding milieu[12] as well as improving self-esteem, body experience and to learn more functional problem-solving skills[13]. A review of female studies[14] shows a number of "recovery-promoting agents", notably interpersonal relations, treatment, self-help, and positive life events that trigger self-determination and motivation to explore alternatives to an ED-identity.The recovery process appears as continuous rather than dichotomous in nature, where the individual need time to come to terms with grief over lost time and finding other ways of living the life without an ED, and learn to practice more functional self-regulative behaviours[15, 16]. Women also tend to experience the recovery as spiritual process or like a journey to self, with turning points and shifts in relationships that enabled different ways of belonging, self-acceptance and agency[17]**.** An integrative model of the nature of female's recovery process[8, 14] outlines weight normalisation and reduction of symptom frequency and severity as the *necessary* prerequisites for progress of the *sufficient* domains, i.e., the resolving of psychological issues, existential issues, as well as interpersonal and social aspects[8].

Qualitative studies of males' experiences of recovery are still sparse and make our knowledge incomplete. However, there are a few studies from a male perspective, indicating barriers for

help-seeking and delay in seeking treatment due to shame or an inability to recognise symptoms and behaviour as signs of an ED, for example drive for muscularity and erection-problems[18,19]. Results also highlighted a lack of appreciation of male issues in treatment services, a lack of consensus about the relevance of gender, and too little attention to males' experiences of the treatment-process. Negative treatment experiences were too short treatment episodes, experiences of care as control [19]. The importance of feeling understood, listened on and care for in treatment was also emphasized by males[20]. Key factors identified by males in the recovery process were eating regularly and healthy, to avoid alcohol, and paying attention to both the content of the food and what time it was eaten. Beneficial forms of treatment were individual counselling, support groups consisting of other sufferers and partners, or hospitalization in order to get away from home, family and work[21]. Hence, we lack evidence for practicing gender-neutral treatment models. Moreover, there is a need to explore factors that may facilitate therapy with male ED-patients as well as a need to discover how male patients' experience the recovery process in order to provide optimal support and aftercare. Knowledge about the nature of the recovery process may increase the possibility of actually influencing this process in treatment settings, and in return, shorten the duration of the illness and raise the probability of a favourable course. Hence, the aim of our study is to investigate what males experiences as helpful in their recovery process from ED.

Method

This study is a part of three studies, where the first one[22] focused on the males' experiences of life after recovery and the second focused on the attributed causes of their ED[23]. The present study focuses on the recovery process.

Patients and procedure

Eligible participants were former male patients who had completed their treatment for a DSM-IV ED in specialised ED-units in Norway or Sweden, and who had experienced recovery.

After approval from the Regional Ethical Committees of Medical and Healthcare Research in Northern Norway and Sweden, respectively, 17 men were provided proper study information by their former therapists. Of these, 15 gave their written consent to be qualitatively interviewed by the authors for about 1-2 hours about their experiences of recovery. Every interview was recorded and transcribed consecutively, and was guided by the following gender neutral question- "what was helpful for you in your recovery process? Geographical distances made it convenient to perform interviews at the participants' home or other locations chosen by participants and researcher of practical reasons. The participants included came from all socioeconomics strata. Moreover, the males had received a wide range of treatments during their stay at the specialised ED-clinics, like medications, individual treatments, group or family treatments, dietary advice and physiotherapy, often given simultaneously and in a mixture of in- or outpatient status. The participants' age ranged from 19-52 years (mean = 23 years). By external clinical evaluation made by the participants' therapists, 10 participants had anorexia nervosa (AN), four had bulimia nervosa (BN) and one had an unspecified ED (NOS), and the age range for onset for the ED was from 10-20 years and the range for duration of ED reported having was 2-25 years. Hence all had a long history of considerable symptom load and those low in weight had been hospitalised for medical complications. Compulsive physical exercise was common, as were high self-demands low self-esteem, depressive episodes, inner beliefs of not being good enough and likable to others. In addition, they reported body dissatisfaction and feelings of not being thin or

muscular enough, a long duration of symptoms, a delay in treatment seeking as well as a massive hiding of symptoms from family members and other close relations for years. Vocational problems elicited by the ED-symptoms were also present.

Data analysis

The analysis was inspired by principles outlined by Graneheim and Lundman[24] and the interviews were analysed according to the principles of content analysis. In order to reach a general interpretative consensus related to the analysis, all three authors independently read the interview texts several times to get an overall impression of the material. The transcripts were then compared with the audiotaped interviews to check the accuracy of the texts (by all three authors). Moreover, all statements containing the word "recovery" or other words related to the aim were marked by the first author (GP). The next step included rereading and coding, where additional notes on the themes and ideas that emerged from each interview were made, and condensed units of meaning reflecting the texts were identified. The third step included a further reading of the texts in order to filter out irrelevant information, reduce the main meaning-carrying units and to identify pattern and nuances. The meaning units were defined, condensed and reformulated, continuously checking the text for relevancy. The next step was coding according to the meaning units, to identify the categories. Hence, the categories were derived from the transcribed texts, and not from the pre-set guideline questions for the interviews. A validation process followed in order to secure the credibility of the results; the other authors (KW, TB) serutinized the statements of the participants in relation to the categories, as recommended by Graneheim and Lundman[24,]in the process of qualitative content analysis. The three authors discussed the results of the analysis until agreement was reached, and finally sorted the chosen units of meaning into four categories, i.e. "the need for a change", "commitment to leave the ED

behind", and "interpersonal changes" All participants reported issues relevant for all categories, but for obvious reasons these were not represented in all the quotes, i.e. the condensed units of meaning.

Results

Category 1 – The need for change

This category concerns issues from the period when they understood that something was wrong, that their relation to food, weight, body and exercising dominated in a negative way, and where they experienced the need for a change. This need is sub-categorised into "admitting the problem", "treatment needs in the early phase" and "stabilising nutrition and weight", respectively.

Admitting the problem

The process of understanding and admitting that they had an ED had taken a long time, and some reported many years with struggling without speaking with others about their problems. To admit having an ED included admitting that food, weight and body appearance controlled or dominated all domains of life, like for instance their relations to family members, friends or others. Thus, they experienced daily life as rather chaotic and with feelings of being worried and "fed up". Some reported even having to quit job or education either temporary or permanently because of living with the ED. Some of the males had been exercising like elite athletes do, and with a high drive to "perfect" training. In sum then, the males retrospectively recalled the periods of their life with the ED before seeking treatment as chaotic or "meaningless". As a result, some of the males reported having nearly given up and described it like being in a crisis, for some exacerbating into suicidal ideations. Whether or not they understood or admitted that they had an *ED* certainly

varied, but they came to a point where they understood that they needed help in order to move further.

Patric, 24 years, (AN), stated:

"I came to a point I realised the need for help. I couldn't manage to eat and my only thought was- I can't live like this anymore, it's no life".

Realising the negative consequences and admitting having a problem was thus important the first period of the recovery process.

Treatment needs in the early phase

Realising the need for help, some of the males contacted health professionals themselves. However, most of them reported having been pushed into it, or even forced by a close family member or a friend, however, not due to their social or family role as a male. In retrospect, many realised that by so doing their parents or close friends almost saved their life. Indeed, they were grateful, at least in retrospect that someone else took over the control and of feeding and eating. A citation from Oscar, 21 years, (AN) may illustrate:

"It was a relief that others just could take the control over the food and decide what I should eat and the hospital stay could provide structure and frames to regulate my eating".

Some of the males started their recovery process with hospitalisation due to severe weight loss and food avoidance. Others contacted a general practitioner or started with outpatient treatment. No matter what kind of treatment they sought, the need was somewhat the same; they needed help because they had realised that they could not manage the situation on their own.

Stabilising nutrition and weight

The males highlighted the importance of stabilising eating, nutrition and weight in the early phase of the recovery, and many recalled the structure of hospital treatment as helpful, notably as facilitating work on more difficult issues like overeating and purging, which some had strived with for years.

As Christopher, 21 years, (AN) expressed:

"*I needed a break from everything- I wanted to be hospitalised and I hoped that they could close the doors so I didn't get the opportunity to overeat and throw up".*

Owen, 31 years, (BN) said it in this way;

"*I joined a "luncheon group" at the hospital and that changed my attitude markedly. I got another and better structure around food and managed to keep the meals to fixed time during the day."*

Others also reported the benefit of having had to relearn "how to eat". It was a process learning to eat in a new way, and it took time, as Paul, 48 years, (BN) said:

"It took at least one year before I learned to eat. I went to a dietician who taught me how to organise my eating into breakfast, lunch and dinner. Even if ED are not just a matter of food, it is also about food and I was totally "out of place" on this food thing".

As the citation illustrates, gaining structure was a time consuming struggle.

Category 2 Commitment to leave the ED behind

After the initial stabilising of food intake and weight, the main issue was how to leave the ED behind. This category consists of the subcategories "searching for a balance", "expectations towards treatment".

Searching for a balance

The males reported being challenged to let the ED behind and replace it with new coping strategies. Despite the fact that the males had experiences all the negative consequences related to the ED, they also reported that the ED had been their functional coping strategy for years. Some even described their ED as having been their best friend. Hence, a challenge was to handle the ambivalence of change, i.e., looking for ways towards a less chaotic life, but also letting go of some "advantages" that the ED represented.

The males reported challenges in finding a balance between rest, sleep, and activity. Moreover, from previously being compulsive about physical exercise, the recovery process meant learning to convert exercise into a positive contribution in terms of balance and a contact with own needs. As Mike, 36 years, (AN) expressed it:

"I exercised several times a day and it was very compulsive… On the other hand, the exercise has been very important for my recovery and I will never live a life without exercise. Now, however, I have learned to ask myself- why do I have to exercise now? In addition, I learned to sit down and think that I need both rest and activity. I also had to be more flexible about when to exercise".

The citation illustrates the need to examine the motives for exercising, and search for the joy of exercising, instead of pursuing the aim of burning calories. Almost the same process was relevant with respect to the rules related to meals. Gradually, the males managed to loosen up their detailed mealtime schedules, but also to gain more flexibility by challenging personal rules about what one "can" do and "not do". The males described how the focus on regulation of food and activity as well as self-care made them gradually stronger and improved in many areas of their life.

Promoted by therapy the males started a process with increasing self-care and more regular patterns of living. Also, they gradually learned to think better about themselves, be more kind to oneself, to discover own needs and be able to fulfil them, and thus, to "deserve" entering a recovery process. Another issue was to understand which kind of purposes or functions ED-symptoms served in their life and, in essence, why they developed an ED in the first place. As consequence, the males came to understand that the ED-symptoms served as a twisted way to express themselves emotionally.

Later in the recovery process many of the males step-by step restarted with activities they liked before, with the result that there was less time to think of food and a positive circle emerged. Others began with new activities, of which the ED earlier had been a barrier. For some it was important to keep up leisure activities like sports, travelling or playing music, while others managed to take up again their activities after more intensified treatment. Overall, leisure activities became "a free space", where it was easier to manage the ED-symptoms.

More time to do things was frequently mentioned along with other positive circles because of symptoms being more stable. Being able to have a daily occupation, being able to have a job, go to school or having a daily occupation were of some participants highlighted as important in the recovery process. Some though, asked for a sick leave in order to concentrate more fully on their treatment and recovery process.

Expectations of treatment

In general, the males had high expectation towards treatment. It was important for them to find a therapist that they could trust and talk to about their ED-related problems. Some expressed that

when they first should recover, and put so much effort in treatment, they would not like to waste their time on a service that they did not experience as helpful. Some were thus quite goal-orientated and instrumental and did not hesitate to quit treatment if they after some time did not come along with their therapist. Some were eager to come to grip with the "whys", but the main development was just to learn how to find a way «out» of the illness. The demands were also evident in terms of the personal effort, investment and engagement they put in therapy in order to get the most out of it.

The therapist was the person they spoke most openly with and sometimes the only person they talked to about the ED. All participants reported high personal investment and engagement in their therapy. This is shown in the huge effort they were willing to take to get most out of their treatment illustrated as follows:

"I drove my car 150 kilometres each way to the therapist, so I was rather motivated on that time and I used my self-determination. When I decide to do something, I really make an effort, and when I decided to give treatment a try, the driving distance was not a problem at all." Darry, 34 years, (AN)"

Thus, the males gave themselves some credit for their recovery, but all of them said that they would not have made it without professional help, as "Robert, 45 years, (BN) said:

"It has been a struggle, but I have had the fortune of receiving good treatment. I could not have manages it on my own, but at the same time I have my resources inside me that made me go through with recovery and start a life without the ED. I have gradually learned to use my strength and my resources in a right way."

Category 3 - Interpersonal changes

This category includes interpersonal changes, notably acquiring more flexibility in the social relations and learning to express better own needs. The sub-categories were "expressing own needs" and "relating to others in new ways".

Expressing own needs

The males reported how they gradually learned to become more aware of own needs and to express them to others. The males changed their history from being pleasers, who always said "yes" if someone asked for something, and seldom asserted their own needs and boundaries to becoming "boundary setters". As stated by Philip, 31 years (AN):

"Before it was very important for med that my friends thought I was ok, but now it is more important for me that I think it is ok to be with my friends. If I think it is ok, I am sure they do as well. I have started to ask myself – what are my needs?"

Relating to others in new ways

The recovery process also included a change in their understanding of relations. Facilitated by treatment, they understood more about ED and the mechanisms of symptoms, and this made it easier to find the right words to explain their ED-symptoms to family members and close friends. Some reported an indirect benefit from interpersonal relations in the sense that job, colleagues and friends made a supportive impact by providing social control and an external structure in order to control the frequency of symptoms. Some also understood that in order to start to recover and to secure continuing the recovery process, they had to distance themselves from difficult relationships, like a violent father or a mentally sick mother, realising that no support could ever be provided. When being more social, they became more self-confident and therefore, they stood up for their own needs when relating to others. As said by Alexander, 22 years (AN).

"I have learned a lot about myself during this process and now I know more what kind of life I want to live. It is important with social network and to see the value of friends and having someone to really care about. It is also like – you have to accept yourself before you are able to love others. It is hard to have close relationships when you have so much trouble yourself. After a while, I was able to be social with others, and I managed to keep a conversation going without thinking of other things, I could really listen to others and I became more participating and present in the moment."

Category 4 – Searching for a life without the ED

The males had spent years of their lives living with an ED, thus missing other experiences and opportunities. The recovery process included feelings of grief over such losses, but also the need for reconciliation and a search for normality and an identity without an ED were experienced as important. This category consists of the subcategories "accepting the losses" and "finding oneself".

Accepting the losses

Nearly all the males struggled with a grief related to having been preoccupied with the ED and the related problems for so many years. They had experienced that the years with an ED had caused losses, for instance a dropout of school, a sick leave from work or having sparse or no experiences with being in close relationships. Gary, 21 years (AN) said:

"I can feel a grief because I have spent 25 years of my life on the bulimia, and now I feel that many trains have passed by".

Even if the males in general could feel a grief over the losses, at the same time they had some expressions that described how this process had made them stronger and more and more aware of their own needs.

"When I had my bulimia, I didn't have a need for or place in my life to have a close relation, but during the recovery process the need for a family and own children came up" (Robert, 45 years, (BN).

This citation also illustrates progress and recovery in the sense that new needs elicited grief for something (i.e., bulimia) which previously had been experienced as "functional". Moreover, to understand development of the ED was described as helpful to realise the psychological pain in order to be able to look ahead. After years of struggling with the ED many of the males also

expressed that they had become more empathic, understanding and compassionate with others who were experiencing problems in their lives.

Finding oneself

Due to the years of suffering from the ED a common description was that the disorder had become a part of their identity. They reported that during the recovery process they were uncertain about what is defined as normal and what actually a recovery from an ED is all about. Hence, during the recovery process the males had asked themselves "who am I without the ED?", and "how will my life be without an ED? These rather existential questions were in essence, partitioned out into many daily life contexts. Apart from their relearning of basic regulative issues with respect to food, sleep, activity, emotions and reactions, they were furthermore occupied with a relearning of ordinary behaviours and emotional reactions and daily rules of ordinary social interaction with others. The males reported difficulties with for example to know whether a strong emotional reaction was "normal" or due to their ED-history. As Jonathan, 34 years (ED-NOS) asked:

"*How sad is it normal to be after a split-up with a partner*".

This citation illustrates that the males felt it difficult to sort out whether their reactions or feelings were coloured by their former identity as an ED-sufferer" (and hence possibly not "normal") or whether they mirrored their "true selves". Several of the males also remarked that they characterised themselves as vulnerable.

During the recovery process, the males were taking more part in social life, but there were variation on how open they were about their ED. Some had a fear of as well as an experience with being stigmatised and that others should attribute all kinds of behaviours to their ED-history.

To avoid stigmatisation and additional problems in the reorientation of identity, some of them had made a choice to be selective with respect to whom they shared this ED-history. However, there were also males that had good experiences with openness in the recovery process and males who described openness as a relief that helpful for the reorientation process

Discussion

This study focused on how the males described their recovery process from ED. We found four descriptive categories, i.e., "the need for a change", "a commitment to put the ED behind", "interpersonal changes", and "searching for a life without an ED. During treatment, parallel recovery processes were going on, yet these categories may also be sorted in a timeline. Hence, the first category was more relevant to the first phases and the fourth one to the final stages of the process.

Hardly surprising, admitting to having an ED was the first theme the males mentioned as initiating their recovery. This is almost a prerequisite for even starting a recovery process. Prior to this, the males reported a chaotic period where ED- symptoms dominated all domains of life. All of the males realised that they had problems for which they needed professional help, but there were variations in realising that the problems indicated ED in particular. Although some kind of "decision" or the experience of a "turning point" is necessary, previous studies on women have shown that ambivalence is an important issue in the initial phases of recovery[25, 26, 27] as well as in the later stage of the recovery process[16]. The current study shows that the ambivalence towards change is truly gender neutral.

While the males achieved more structured eating behaviour, they gradually also learned to better recognise and understand their own personal needs. In return, this led to ability to being more self-caring and compassionate. Our findings indicate that increased self-care as well as self-regulation are important aspects of the recovery process in the sense that they set in motion positive circles with opening up the often strict cognitive schemas and rules, a better structure and relation to food, resulting in less shame, more self-acceptance, and eventually, in a better social functioning. Moreover, our findings indicate that regulative issues should not be restricted to affective control, but may comprise the full spectrum of life domains, similar to what has been reported[15] among females in recovery from an ED.

The interviews also revealed the importance of health care professionals for a good recovery process, notably in terms of helping the males to sustain self-regulation and self-care activities. Moreover, it is noteworthy that professional helpers were for some of the males almost the only persons they talked with about the ED and the associated problems. Even so, they were not afraid of setting demands, and they would not "waste" their time with treatment, which they believed were not beneficial to them. In some ways then, these males took a rather instrumental approach in own recovery process (once they had made a decision to recover), and in this process they made use of a sometimes strong and positive willpower. Nevertheless, this goal-orientation did not seem to shorten the often long and demanding journey towards recovery. The instrumental approach to treatment stands out as a possible gender specific finding in need of future explorations.

Our findings indicate that the recovery process consists of several elements. One element is the control of ED-symptoms and their complicating elements. Hence, the males reported that

recovery is a matter of lowering the symptom load, to loosen strict rules for food intake, to let go of self-stigmatisations, to experience less somatic complications and to experience that symptoms do not dominate daily life.

Another element of the recovery process comprises psychological and social issues. The males reported how the ED prevented them from taking part in social activities. However, during the recovery process they began to strive for social support and more openness about their problems. The social network consisted of many sources, i.e., people who stand for continuity, who had been there all the time and knew the person before the development of the ED. An important aspect of recovery was depicted in the participant's wish to make better use of the social network as a platform for hope and a wish to function well in social settings. This theme concerned developing the intrinsic need to take part in, and enjoying social activities and not just to please other people.

Our results show that the later stages of males' recovery process consisted of existential elements, like questioning their opinions about the meaning of life without the ED. This part of the recovery process indicates a cognitive and attentional shift from being preoccupied with the beliefs of controlling food intake by dieting, vomiting or excessive exercise. Obviously, this shift released an important "psychological free space", and a rethinking of one's identity and goals of life.

Taken together, our findings concur with themes and change processes, which have been identified among women in recovery from an ED[8, 14-16]. This may indicate a universal nature of change and recovery from ED. The other side of the coin, and possibly equally gender related is

the fact that the males had concealed their ED for a long time and delayed to seek treatment. This is indicated by the high frequency of hospitalisation as the first line of treatment due to symptom severity.

This study's strengths is its originality as being one of few studies the recovery process among males with an ED across age and treatments and the first one to support overall gender neutral nature of the recovery processes. In addition, our sample is large, yet our findings may be tempered by the lack of formal diagnostic validation procedures as well as standardised measures of recovery, both explaining why the interviews detected that some participants were still suffering from ED-symptoms. In these few cases, accounts of later phases of recovery may have reflected wishes and expectations rather than actual personal experience. Finally, the relevance of our findings are related to Caucasian males. Hence, how former male patients from non-western cultures experience their recovery process remains to be investigated in future studies. The strengths related to the richness and variations of experiential accounts may counter a possible limitation related to the fact that participants in the current study had been recruited from special ED-clinics.

Conclusion

A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement. Moreover, and similar to findings on females' recovery process, our study points to the need to address a wider perspective, i.e., to support patients recovery through social reorientations, personal reconciliations and coming to terms with existential issues. In a real world of limited health resources, this wider perspective may seem unrealistic to accomplish. However, we firmly believe that taking such a perspective will pay off as it may prevent

incomplete recovery processes and relapses, and in return, future societal and personal burdens. Such treatments implications are, however, not specific to males. Male specific recommendations to therapists are rather, to acknowledge that eating disorder symptoms do occur among males, to design a straightforward treatment plan to deal with current symptoms and future challenges.

Contributors GP, KW and TB were all responsible for the planning of the study, the data collection and the analysis. Moreover, all authors contributed to the manuscript.

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Competing interest None

Ethical approval Regional Ethical Committee of medical and healthcare research and the regional Ethics Review Board in Uppsala Sweden (D. no 2009/118) and the Regional Ethical Committee for Medical and Health Care Research in Northern Norway.

Data sharing statement No additional data are available

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No	Item	Guide questions/description
Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	All authors (GP,KW,TB) interviewed the patients (i.e four to six patients each), (page 6).
2.	Credentials	The researcher's credentials were PhD (GP, TB) and BSc (KW), (page 1)
3.	Occupation	Their occupations were associate professor (GP) psychotherapist (KW) and clinical researcher (TB), (page 1, 6),
4.	Gender	Females
5.	Experience and training	The researchers (GP, TB) have several years of experience in applying qualitative method as well as teaching at university level. The psychotherapist and also PhD-student (KW) has extensive experience in interviewing patients, and training in qualitative methodology
Relationship with participants		
6.	Relationship established	No relation was established before the interview, only an appointment were to meet (page 6)
7.	Participant knowledge of the interviewer	The researchers explained their reasons for conducting the study before the interview, (page 6) as well as their current occupation.
8.	Interviewer characteristics	To minimize bias, due to former patient – psychotherapist relationship, none of the authors interviewed a former patient (page 6). No other characteristics were found necessary to report.
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	The methodological approach was guided by principles in qualitative analysis in nursing reseach outlined by Graneheim and Lundman, and interviews were analysed according to content analysis (page 7).
Participant selection		
10.	Sampling	The recruitment procedure started with a written request to all specialist ED-units in Sweden and Norway. Therapists were asked to contact their male ex-patients if they fulfilled inclusion criteria, to and inform them about the study and ask if they were willing to participate in the study (page 6)
11.	Method of approach	The males who were willing to participate were contacted by phone by one of the authors (GP,KW,TB), to make an appointment of time and day to conduct the face to face interview (page 6)
12.	Sample size	17 males fulfilled the inclusion criteria and were requested. At time-point for interview 15 participated in the interview (page 6)

13.	Non-participation	Two participants failed to appear at the agreed place - one for practical reason, one for unknown reason (page 6).
Setting		
14.	Setting of data collection	The locations of the interviews were chosen by the participants, often close to their homes (eg. at their homes, working places or former treatment units) (page 6)
15.	Presence of non-participants	Only the participant and a the interviewing author was present during the interview
16.	Description of sample	Important characteristics of the sample were male gender, age distribution (19-52 yrs) and the experiences of recovery from different ED-diagnoses.
Data collection		
17.	Interview guide	An interview guide was created for the study. No pilot was carried out (page 6)
18.	Repeat interviews	No repeated interviews (page 6)
19.	Audio/visual recording	All interviews were audio recorded (page 6)
20.	Field notes	No field notes was made during and/or after the interview
21.	Duration	The duration of the interviews varied between one and two hours (page 6)
22.	Data saturation	Data saturation was discussed, with a conclusion that 15 rich interviews were sufficient.
23.	Transcripts returned	No transcripts were returned to participants. They were invited to take contact with the interviewer, if they had some questions or wanted to make changes.
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	One author (GP) coded the data, but a validation process followed were all three authors discussed the analysis process as a whole. (page 7)
25.	Description of the coding tree	No description of a coding tree.
26.	Derivation of themes	Themes derived from the data (page 7).
27.	Software	The software Nvivo was used in an early phase of the analyzing process (page 7)
28.	Participant checking	Participants did not provide feedback on the findings
Reporting		
29.	Quotations presented	Quotations were presented to illustrate the themes, but without identifying participant numbers (page 9-17).
30.	Data and findings consistent	There was consistency between the data presented and the findings.
31.	Clarity of major themes	The major themes were clearly presented in the findings (page 8)
32.	Clarity of minor	Clarity and discussion of minor themes and diverse

themes cases are also included (page 8, 18-20)

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How do males recover from eating disorders? An interview study

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How do males recover from eating disorders? An interview study

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Abstract

Objectives: This study aims to fill a gap of knowledge about how former male patients with eating disorders experiences their recovery process, and what kind of challenges and needs they describe.

Methods: Qualitative in-depth interviews within a phenomenological approach, and using content analysis to excavate overarching text themes

Setting: Norway and Sweden

Participants: Included were 15 males with an age range from 19 to 52 years. All had a 3-25 years of experience with anorexia nervosa (n=10), bulimia nervosa (n= 4) or eating disorders NOS (n=1).

Results: The content analysis revealed four main categories, i.e., "the need for a change", "a commitment to leave the eating disorder behind", "interpersonal changes", and "searching for a life without an eating disorder". These categories comprise features like motivation to change, gaining structure in eating situations, a re-learning of personal and interpersonal skills as well as accepting losses and starting a reorientation of identity and meaning. We noted a rather goal-oriented approach to help seeking and a variation in how the males engaged their social network in resolving the challenges associated with the recovery process. Still, the overall nature of the recovery process highly accords with what has been reported for women.

Discussion: A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement, but that the nature of the recovery process would require a wider perspective in treatment. Clinicians may also be informed about challenges related to an instrumental approach to help seeking reported in this study.

Strengths and limitations of this study

- Strengths are its originality as being one of few studies of the recovery process among males with an ED across age and treatments and where the sample size was sufficient to capture the richness and variations in the experiences of recovery.
- Limitations are that some standardized validation procedures were not supplementing the clinical judgment regarding diagnoses and recovery. Although all participant reported within every theme, we did not collect the exact number of participants.

Introduction

Eating disorders (ED) are uncommon disorders[1,2, 3] and the historically skewed gender ratio is reflected in theories of aetiology, former diagnostic criteria, and clinical research. However, those studies, which have included males, have found few gender differences in terms of aetiology, symptomatology, treatment response, and outcome[4]. In the literature on females with ED, some studies have focused on the outcome *process*, and the nature of recovery in particular[5]. In the present paper, we aim to explore the nature of this process among males, where there is a gap of knowledge in the literature.

There are several possible reasons why the nature of males' recovery could differ from those of females. First, it could be that trigger factors and personal reasons for taking actions to recover may be different from those of females. A second possibility relates to feelings of shame of having a "female" illness. This shame may delay seeking treatment, with the consequences of increasing the risk of a slower recovery process, and thereby prolong the duration of illness and raising the probability of a poorer prognosis.[2.] Moreover, although a recent review of ED in males[6] indicates substantial improvements in clinician's ability to detect and treat males with ED, treatment services may still be suboptimal in various treatment settings. If so, suboptimal clinical services may halt a recovery process given that the shame of having a "female illness" may make a male with ED more vulnerable to experiences of being ignored or misunderstood by a therapist[7]. In addition due to possible shame of having a "female illness", males may be more concealed about their ED and thereby blocking for the contribution from their social network to their recovery process.

Study of the recovery process can benefit from a qualitative approach, since it enables a deeper understanding from the patient's perspective. This perspective is often missing in traditional outcome studies[1,2,8].

Much is known about the recovery process among women, and it starts with a wish to change, often facilitated by important persons in their lives[9-11]. Other elements contain the development of the ability to identify and express feelings, in an empathic, non-judgmental understanding milieu[12] as well as improving self-esteem, body experience and to learn more functional problem-solving skills[13]. A review of female studies[14] shows a number of "recovery-promoting agents", notably interpersonal relations, treatment, self-help, and positive life events that trigger self-determination and motivation to explore alternatives to an ED-identity. The recovery process appears as continuous rather than dichotomous in nature, where the individual need time to come to terms with grief over lost time and finding other ways of living the life without an ED, and learn to practice more functional self-regulative behaviours[15, 16]. Women also tend to experience the recovery as spiritual process or like a journey to self, with turning points and shifts in relationships that enabled different ways of belonging, self-acceptance and agency[17]**.** An integrative model of the nature of female's recovery process[8, 14] outlines weight normalisation and reduction of symptom frequency and severity as the *necessary* prerequisites for progress of the *sufficient* domains, i.e., the resolving of psychological issues, existential issues, as well as interpersonal and social aspects[8].

Some is known about males' experiences from previous studies, like barriers to recovery[18,19] (e.g. shame and poor services rendered in the health care systems) and factors promoting such recovery[20, 21] (e.g. feeling understood by partners, therapists and fellow sufferers, hospitalization to get away from home, family, and work, adopting as well as adopting regular eating patterns).

Previous studies do however suffer from small samples. Moreover, their focus on treatment-related issues does not take into account possible treatment-unrelated factors contributing to recovery. A more complete account of the recovery process may be relevant to put treatment into a context, which in sum contribute to ease the recovery process and thereby shorten the duration of the illness and raise the probability of a favourable course. This study is the third one in our research project, where one previous study focused on the males' experiences of life after recovery. Questions in the first study concerned whether they perceived themselves as recovered, and in what areas it was evident and in what way[22]. The second study focused on the attributed causes of their ED, and the participants were asked to identify their perceived causes of their ED and to share how their social, family and personal situation functioned at time for onset[23].The aim of the current study is to investigate what males experience as helpful in their recovery process from ED.

Method

Patients and procedure

Eligible participants were former male patients who had completed their treatment for a DSM-IV ED in specialised ED-units in Norway or Sweden, and who had experienced recovery.

After approval from the Regional Ethical Committees of Medical and Healthcare Research in Northern Norway and Sweden, respectively, 17 men were provided proper study information by their former therapists. Of these, 15 gave their written consent to be qualitatively interviewed by the authors for about 1-2 hours about their experiences of recovery. Every interview was recorded and transcribed consecutively, and was guided by the following gender neutral question- "what was helpful for you in your recovery process? Geographical distances made it convenient to

perform interviews at the participants' hometown or other locations chosen by participants and researcher of practical reasons. Judging from statements about current job status, income, and present or previous occupation or profession appearing during the interviews the participants included appeared to come from all socioeconomics strata. Moreover, the males had received a wide range of treatments during their stay at the specialised ED-clinics, like medications, individual treatments, group or family treatments, dietary advice and physiotherapy, often given simultaneously and in a mixture of in- or outpatient status. The participants' age ranged from 19-52 years (mean = 23 years). By external clinical evaluation made by the participants' therapists, 10 participants had anorexia nervosa (AN), four had bulimia nervosa (BN) and one had an unspecified ED (NOS), and the age range for onset for the ED was from 10-20 years and the range for duration of ED reported was 3-25 years. Hence all had a long history of considerable symptom load and those low in weight had been hospitalised for medical complications. Compulsive physical exercise was common, as were high self-demands, low self-esteem, depressive episodes, inner beliefs of not being good enough and likable to others. In addition, they reported body dissatisfaction and feelings of not being thin or muscular enough, a long duration of symptoms, a delay in treatment seeking as well as a massive hiding of symptoms from family members and other close relations for years. Vocational problems elicited by the ED-symptoms were also present.

Data analysis

The analysis was guided by principles outlined by Graneheim and Lundman[24] and the interviews were analysed according to the principles of content analysis. In order to reach a general interpretative consensus related to the analysis, all three authors independently read the interview texts several times to get an overall impression of the material. The transcripts were then

compared with the audiotaped interviews to check the accuracy of the texts (by all three authors). Moreover, all statements containing the word "recovery," or other words related to the aim were marked by the first author (GP). The next step included rereading and coding, where additional notes on the themes and ideas that emerged from each interview were made, and condensed units of meaning reflecting the texts were identified. The third step included a further reading of the texts in order to filter out irrelevant information, reduce the main meaning-carrying units and to identify pattern and nuances. The meaning units were defined, condensed and reformulated, continuously checking the text for relevancy. The next step was coding according to the meaning units, to identify the categories. Hence, the categories were derived from the transcribed texts, and not from the pre-set guideline questions for the interviews. A validation process followed in order to secure the credibility of the results; the other authors (KW, TB) scrutinized the statements of the participants in relation to the categories, as recommended by Graneheim and Lundman[24,] in the process of qualitative content analysis. The three authors discussed the results of the analysis until agreement was reached, and finally sorted the chosen units of meaning into four categories, i.e. "the need for a change", "commitment to leave the ED behind", "interpersonal changes," and "searching for a life without the ED". All participants reported issues relevant for all categories, but for obvious reasons these were not represented in all the quotes, i.e. the condensed units of meaning. All quotes from participants are presented with pseudonyms, age at the time of the interview, and with their former ED-diagnosis.

Results

Category 1 – The need for change

This category concerns issues from the period when they understood that something was wrong, that their relation to food, weight, body and exercising dominated in a negative way, and where

they experienced the need for a change. This need is sub-categorised into "admitting the problem", "treatment needs in the early phase" and "stabilising nutrition and weight", respectively.

Admitting the problem

The process of understanding and admitting that they had an ED had taken a long time, and some reported many years with struggling without speaking with others about their problems. To admit having an ED included admitting that food, weight and body appearance controlled or dominated all domains of life, like for instance their relations to family members, friends or others. Thus, they experienced daily life as rather chaotic and with feelings of being worried and "fed up". Some reported even having to quit job or education either temporary or permanently because of living with the ED. Some of the males had been exercising like elite athletes do, and with a high drive to "perfect" training. In sum then, the males retrospectively recalled the periods of their life with the ED before seeking treatment as chaotic or "meaningless". As a result, some of the males reported having nearly given up and described it like being in a crisis, for some exacerbating into suicidal ideations. Not everyone had a full understanding that their problem was an *ED,* but they came to a point where they understood that they needed help in order to move further.

Patric, 24 years, (AN), stated:

"I came to a point I realised the need for help. I couldn't manage to eat and my only thought was- I can't live like this anymore, it's no life".

Realising the negative consequences and admitting having a problem was thus important the first period of the recovery process.

Treatment needs in the early phase

Realising the need for help, some of the males contacted health professionals themselves. However, most of them reported having been pushed into it, or even forced by a close family member or a friend, however, not due to their social or family role as a male. In retrospect, many realised that by so doing their parents or close friends almost saved their life. Indeed, they were grateful, at least in retrospect that someone else took over the control and of feeding and eating. A citation from Oscar, 21 years, (AN) may illustrate:

"It was a relief that others just could take the control over the food and decide what I should eat and the hospital stay could provide structure and frames to regulate my eating".

Some of the males started their recovery process with hospitalisation due to severe weight loss and food avoidance. Others contacted a general practitioner or started with outpatient treatment. No matter what kind of treatment they sought, the need was somewhat the same; they needed help because they had realised that they could not manage the situation on their own.

Stabilising nutrition and weight

The males highlighted the importance of stabilising eating, nutrition and weight in the early phase of the recovery, and many recalled the structure of hospital treatment as helpful, notably as facilitating work on more difficult issues like overeating and purging, which some had strived with for years.

As Christopher, 21 years, (AN) expressed:

"*I needed a break from everything- I wanted to be hospitalised and I hoped that they could close the doors so I didn't get the opportunity to overeat and throw up".*

Owen, 31 years, (BN) said it in this way;

"*I joined a "luncheon group" at the hospital and that changed my attitude markedly. I got another and better structure around food and managed to keep the meals to fixed time during the day."*

Others also reported the benefit of having had to relearn "how to eat". It was a process learning to eat in a new way, and it took time, as Paul, 48 years, (BN) said:

"It took at least one year before I learned to eat. I went to a dietician who taught me how to organise my eating into breakfast, lunch and dinner. Even if ED are not just a matter of food, it is also about food and I was totally "out of place" on this food thing".

As the citation illustrates, gaining structure was a time consuming struggle.

Category 2 Commitment to leave the ED behind

After the initial stabilising of food intake and weight, the main issue was how to leave the ED behind. This category consists of the subcategories "searching for a balance", "expectations towards treatment".

Searching for a balance

The males reported being challenged to let the ED behind and replace it with new coping strategies. Despite the fact that the males had experiences all the negative consequences related to the ED, they also reported that the ED had been their functional coping strategy for years. Some even described their ED as having been their best friend. Hence, a challenge was to handle the ambivalence of change, i.e., looking for ways towards a less chaotic life, but also letting go of some "advantages" that the ED represented.

The males reported challenges in finding a balance between rest, sleep, and activity. Moreover, from previously being compulsive about physical exercise, the recovery process meant learning to convert exercise into a positive contribution in terms of balance and a contact with own needs. As Mike, 36 years, (AN) expressed it:

"I exercised several times a day and it was very compulsive… On the other hand, the exercise has been very important for my recovery and I will never live a life without exercise. Now, however, I have learned to ask myself- why do I have to exercise now? In addition, I learned to sit down and think that I need both rest and activity. I also had to be more flexible about when to exercise".

The citation illustrates the need to examine the motives for exercising, and search for the joy of exercising, instead of pursuing the aim of burning calories. Almost the same process was relevant with respect to the rules related to meals. Gradually, the males managed to loosen up their detailed mealtime schedules, but also to gain more flexibility by challenging personal rules about what one "can" do and "not do". The males described how the focus on regulation of food and activity as well as self-care made them gradually stronger and improved in many areas of their life.

Promoted by therapy the males started a process with increasing self-care and more regular patterns of living. Also, they gradually learned to think better about themselves, be more kind to oneself, to discover own needs and be able to fulfil them, and thus, to "deserve" entering a recovery process. Another issue was to understand which kind of purposes or functions ED-symptoms served in their life and, in essence, why they developed an ED in the first place. As consequence, the males came to understand that the ED-symptoms served as a twisted way to express themselves emotionally.

Later in the recovery process many of the males step-by step restarted with activities they liked before, with the result that there was less time to think of food and a positive circle emerged. Others began with new activities, of which the ED earlier had been a barrier. For some it was important to keep up leisure activities like sports, travelling or playing music, while others managed to take up again their activities after more intensified treatment. Overall, leisure activities became "a free space", where it was easier to manage the ED-symptoms.

More time to do things was frequently mentioned along with other positive circles because of symptoms being more stable. Being able to have a daily occupation, being able to have a job, go to school or having a daily occupation were of some participants highlighted as important in the recovery process. Some though, asked for a sick leave in order to concentrate more fully on their treatment and recovery process.

Expectations of treatment

In general, the males had high expectation towards treatment. It was important for them to find a therapist that they could trust and talk to about their ED-related problems. Some expressed that when they first should recover, and put so much effort in treatment, they would not like to waste their time on a service that they did not experience as helpful. Some were thus quite goal-orientated and instrumental and did not hesitate to quit treatment if they after some time did not come along with their therapist. Some were eager to come to grip with the "whys", but the main development was just to learn how to find a way «out» of the illness. The demands were also evident in terms of the personal effort, investment and engagement they put in therapy in order to get the most out of it.

The therapist was the person they spoke most openly with and sometimes the only person they talked to about the ED. All participants reported high personal investment and engagement in their therapy. This is shown in the huge effort they were willing to take to get most out of their treatment illustrated as follows:

"I drove my car 150 kilometres each way to the therapist, so I was rather motivated on that time and I used my self-determination. When I decide to do something, I really make an effort, and when I decided to give treatment a try, the driving distance was not a problem at all." Darry, 34 years, (AN)"

Thus, the males gave themselves some credit for their recovery, but all of them said that they would not have made it without professional help, as "Robert, 45 years, (BN) said:

"It has been a struggle, but I have had the fortune of receiving good treatment. I could not have manages it on my own, but at the same time I have my resources inside me that made me go through with recovery and start a life without the ED. I have gradually learned to use my strength and my resources in a right way."

Category 3 - Interpersonal changes

This category includes interpersonal changes, notably acquiring more flexibility in the social relations and learning to express better own needs. The sub-categories were "expressing own needs" and "relating to others in new ways".

Expressing own needs

The males reported how they gradually learned to become more aware of own needs and to express them to others. The males changed their history from being pleasers, who always said "yes" if someone asked for something, and seldom asserted their own needs and boundaries to becoming "boundary setters". As stated by Philip, 31 years (AN):

"Before it was very important for med that my friends thought I was ok, but now it is more important for me that I think it is ok to be with my friends. If I think it is ok, I am sure they do as well. I have started to ask myself – what are my needs?"

Relating to others in new ways

The recovery process also included a change in their understanding of relations. Facilitated by treatment, they understood more about ED and the mechanisms of symptoms, and this made it easier to find the right words to explain their ED-symptoms to family members and close friends. Some reported an indirect benefit from interpersonal relations in the sense that job, colleagues and friends made a supportive impact by providing social control and an external structure in order to control the frequency of symptoms. Some also understood that in order to start to recover and to secure continuing the recovery process, they had to distance themselves from difficult relationships, like a violent father or a mentally sick mother, realising that no support could ever be provided. When being more social, they became more self-confident and therefore, they stood up for their own needs when relating to others. As said by Alexander, 22 years (AN).

"I have learned a lot about myself during this process and now I know more what kind of life I want to live. It is important with social network and to see the value of friends and having someone to really care about. It is also like – you have to accept yourself before you are able to love others. It is hard to have close relationships when you have so much trouble yourself. After a while, I was able to be social with others, and I managed to keep a conversation going without thinking of other things, I could really listen to others and I became more participating and present in the moment."

Category 4 – Searching for a life without the ED

The males had spent years of their lives living with an ED, thus missing other experiences and opportunities. The recovery process included feelings of grief over such losses, but also the need for reconciliation and a search for normality and an identity without an ED were experienced as important. This category consists of the subcategories "accepting the losses" and "finding oneself".

Accepting the losses

Nearly all the males struggled with a grief related to having been preoccupied with the ED and the related problems for so many years. They had experienced that the years with an ED had caused losses, for instance a dropout of school, a sick leave from work or having sparse or no experiences with being in close relationships. David, 52 years (BN) said:

"I can feel a grief because I have spent so many years of my life on the bulimia, and now I feel that many trains have passed by".

Even if the males in general could feel a grief over the losses, at the same time they had some expressions that described how this process had made them stronger and more and more aware of their own needs.

"When I had my bulimia, I didn't have a need for or place in my life to have a close relation, but during the recovery process the need for a family and own children came up" (Robert, 45 years, (BN).

This citation also illustrates progress and recovery in the sense that new needs elicited grief for something (i.e., bulimia) which previously had been experienced as "functional". Moreover, to understand development of the ED was described as helpful to realise the psychological pain in order to be able to look ahead. After years of struggling with the ED many of the males also expressed that they had become more empathic, understanding and compassionate with others who were experiencing problems in their lives.

Finding oneself

Due to the years of suffering from the ED a common description was that the disorder had become a part of their identity. They reported that during the recovery process they were

uncertain about what is defined as normal and what actually a recovery from an ED is all about. Hence, during the recovery process the males had asked themselves "who am I without the ED?", and "how will my life be without an ED? These rather existential questions were in essence, partitioned out into many daily life contexts. Apart from their relearning of basic regulative issues with respect to food, sleep, activity, emotions and reactions, they were furthermore occupied with a relearning of ordinary behaviours and emotional reactions and daily rules of ordinary social interaction with others. The males reported difficulties with for example to know whether a strong emotional reaction was "normal" or due to their ED-history. As Jonathan, 34 years (ED-NOS) asked:

"*How sad is it normal to be after a split-up with a partner*".

This citation illustrates that the males felt it difficult to sort out whether their reactions or feelings were coloured by their former identity as an ED-sufferer" (and hence possibly not "normal") or whether they mirrored their "true selves". Several of the males also remarked that they characterised themselves as vulnerable.

During the recovery process, the males were taking more part in social life, but there were variation on how open they were about their ED. Some had a fear of as well as an experience with being stigmatised and that others should attribute all kinds of behaviours to their ED-history. To avoid stigmatisation and additional problems in the reorientation of identity, some of them had made a choice to be selective with respect to whom they shared this ED-history. However, there were also males that had good experiences with openness in the recovery process and males who described openness as a relief that helpful for the reorientation process

Discussion

This study focused on how the males described their recovery process from ED. We found four descriptive categories, i.e., "the need for a change", "a commitment to put the ED behind", "interpersonal changes", and "searching for a life without an ED. These categories as a whole depict a timeline and the total recovery process ending with a reorientation of life where the ED was history. Moreover, and hardly surprising, admitting to having an ED was the first theme the males mentioned as initiating their recovery. This is almost a prerequisite for even starting a recovery process.

Prior, and in the opposite end of the recovery process the males reported a chaotic period where ED- symptoms dominated all domains of life. All of the males realised that they had problems for which they needed professional help, but there were variations in realising that the problems indicated ED in particular. Moreover, prior to some kind of "decision" or the experience of a "turning point", the males reported considerable doubts and ambivalence. These findings concur with those reported for women[25, 26, 27] thus indicating truly gender neutral change processes.

While the males achieved more structured eating behaviour, they gradually also learned to better recognise and understand their own personal needs. In return, this led to ability to being more self-caring and compassionate. Our findings indicate that increased self-care as well as self-regulation are important aspects of the recovery process in the sense that they set in motion positive circles with opening up the often strict cognitive schemas and rules, a better structure and relation to food, resulting in less shame, more self-acceptance, and eventually, in a better social functioning. Moreover, our findings indicate that regulative issues should not be restricted to affective control, but may comprise the full spectrum of life domains, similar to what has been reported[15] among females in recovery from an ED.

The interviews also revealed the importance of health care professionals for a good recovery process, notably in terms of helping the males to sustain self-regulation and self-care activities. Moreover, it is noteworthy that professional helpers were for some of the males almost the only persons they talked with about the ED and the associated problems. Even so, they were not afraid of setting demands, and they would not "waste" their time with treatment, which they believed were not beneficial to them. In some ways then, these males took a rather instrumental approach in own recovery process (once they had made a decision to recover), and in this process they made use of a sometimes strong and positive willpower. Nevertheless, this goal-orientation did not seem to shorten the often long and demanding journey towards recovery. The males were driven by compliance, following the instructions from therapists in order to reach recovery. The instrumental approach to treatment stands out as a possible gender specific finding in need of future explorations.

Our findings indicate that the recovery process consists of several elements. One element is the control of ED-symptoms and their complicating elements. Hence, the males reported that recovery is a matter of lowering the symptom load, to loosen strict rules for food intake, to let go of self-stigmatisations, to experience less somatic complications and to experience that symptoms do not dominate daily life.

Another element of the recovery process comprises psychological and social issues. The males reported how the ED prevented them from taking part in social activities. However, during the recovery process they began to strive for social support and more openness about their problems. The social network consisted of many sources, i.e., people who stand for continuity, who had

been there all the time and knew the person before the development of the ED. An important aspect of recovery was depicted in the participant's wish to make better use of the social network as a platform for hope and a wish to function well in social settings. This theme concerned developing the intrinsic need to take part in, and enjoying social activities and not just to please other people.

Our results show that the later stages of males' recovery process consisted of existential elements, like questioning their opinions about the meaning of life without the ED. This part of the recovery process indicates a cognitive and attentional shift from being preoccupied with the beliefs of controlling food intake by dieting, vomiting or excessive exercise. Obviously, this shift released an important "psychological free space", and a rethinking of one's identity and goals of life.

Taken together, our findings concur with themes and change processes, which have been identified among women in recovery from an ED[8, 14-16]. This may indicate a universal nature of change and recovery from ED. The other side of the coin, and possibly equally gender related is the fact that the males had concealed their ED for a long time and delayed to seek treatment. This is indicated by the high frequency of hospitalisation as the first line of treatment due to symptom severity.

This study's strengths is its originality as being one of few studies the recovery process among males with an ED across age and treatments and where the sample size was sufficient to capture the richness and variations in the experiences of recovery. On the other hand, three limitations should be mentioned. First, although all participant reported within each of the four themes, we

did not collect the exact number of participants within each theme. Secondly, no semi structured diagnostic procedure was run neither when entering treatment nor at recruitment to this study to validate experienced clinicians' judgment. In addition, no standardized measures were used to capture current level of ED-symptoms, but it may be argued that this limitation is of less importance because we were interested in the experiential perspective, and that at present, no standardized instrument available has sufficient content validity to capture the multiple concept "recovery". Finally, our findings are relevant for Caucasian males, and how former male patients from non-western cultures experience their recovery process remains to be investigated in future studies. Also a matter for future studies is to investigate whether the present findings also apply to males recruited from general clinics, or from the general population.

Conclusion

A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement. Moreover, and similar to findings on females' recovery process, our study points to the need to address a wider perspective, i.e., to support patients recovery through social reorientations, personal reconciliations and coming to terms with existential issues. Male specific recommendations to therapists are to acknowledge that ED-symptoms do occur among males, and to design a straightforward treatment plan to deal with current symptoms and future challenges.

Contributors GP, KW and TB were all responsible for the planning of the study, the data collection and the analysis. Moreover, all authors contributed to the manuscript.

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Competing interest None

Ethical approval Regional Ethical Committee of medical and healthcare research and the regional Ethics Review Board in Uppsala Sweden (D. no 2009/118) and the Regional Ethical Committee for Medical and Health Care Research in Northern Norway.

Data sharing statement No additional data are available

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No	Item	Guide questions/description
Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	All authors (GP,KW,TB) interviewed the patients (i.e four to six patients each), (page 5).
2.	Credentials	The researcher's credentials were PhD (GP, TB) and BSc (KW), (page 1)
3.	Occupation	Their occupations were associate professor (GP) psychotherapist (KW) and clinical researcher (TB), (page 1, 6),
4.	Gender	Females
5.	Experience and training	The researchers (GP, TB) have several years of experience in applying qualitative method as well as teaching at university level. The psychotherapist and also PhD-student (KW) has extensive experience in interviewing patients, and training in qualitative methodology
Relationship with participants		
6.	Relationship established	No relation was established before the interview, only an appointment were to meet (page 6)
7.	Participant knowledge of the interviewer	The researchers explained their reasons for conducting the study before the interview, (page 6) as well as their current occupation.
8.	Interviewer characteristics	To minimize bias, due to former patient – psychotherapist relationship, none of the authors interviewed a former patient (page 6). No other characteristics were found necessary to report.
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	The methodological approach was guided by principles in qualitative analysis in nursing reseach outlined by Graneheim and Lundman, and interviews were analysed according to content analysis (page 6,7).
Participant selection		
10.	Sampling	The recruitment procedure started with a written request to all specialist ED-units in Sweden and Norway. Therapists were asked to contact their male ex-patients if they fulfilled inclusion criteria, to and inform them about the study and ask if they were willing to participate in the study (page 5)
11.	Method of approach	The males who were willing to participate were contacted by phone by one of the authors (GP,KW,TB), to make an appointment of time and day to conduct the face to face interview (page 6)
12.	Sample size	17 males fulfilled the inclusion criteria and were requested. At time-point for interview 15 participated in the interview (page 6)

13.	Non-participation	Two participants failed to appear at the agreed place - one for practical reason, one for unknown reason (page 5).
Setting		
14.	Setting of data collection	The locations of the interviews were chosen by the participants, often close to their homes (eg. at their homes, working places or former treatment units) (page 6)
15.	Presence of non-participants	Only the participant and a the interviewing author was present during the interview
16.	Description of sample	Important characteristics of the sample were male gender, age distribution (19-52 yrs) and the experiences of recovery from different ED-diagnoses.
Data collection		
17.	Interview guide	An interview guide was created for the study. No pilot was carried out (page 6)
18.	Repeat interviews	No repeated interviews (page 6)
19.	Audio/visual recording	All interviews were audio recorded (page 6)
20.	Field notes	No field notes was made during and/or after the interview
21.	Duration	The duration of the interviews varied between one and two hours (page 6)
22.	Data saturation	Data saturation was discussed, with a conclusion that 15 rich interviews were sufficient.
23.	Transcripts returned	No transcripts were returned to participants. They were invited to take contact with the interviewer, if they had some questions or wanted to make changes.
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	One author (GP) coded the data, but a validation process followed were all three authors discussed the analysis process as a whole. (page 7)
25.	Description of the coding tree	No description of a coding tree.
26.	Derivation of themes	Themes derived from the data (page 7).
27.	Software	The software Nvivo was used in an early phase of the analyzing process (page 7)
28.	Participant checking	Participants did not provide feedback on the findings
Reporting		
29.	Quotations presented	Quotations were presented to illustrate the themes, but without identifying participant numbers (page 8-16).
30.	Data and findings consistent	There was consistency between the data presented and the findings.
31.	Clarity of major themes	The major themes were clearly presented in the findings (page 7)
32.	Clarity of minor	Clarity and discussion of minor themes and diverse

themes cases are also included (page 8, 18-20)

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How do males recover from eating disorders? An interview study

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How do males recover from eating disorders? An interview study

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Abstract

Objectives: The aim of the current study is to investigate what males experience as helpful in their recovery process from ED

Methods: Qualitative in-depth interviews within a phenomenological approach, and using content analysis to excavate overarching text themes.

Setting: Norway and Sweden.

Participants: Included were 15 males with an age range from 19 to 52 years. Duration of illness varied between 3-25 years of experience with anorexia nervosa (n=10), bulimia nervosa (n= 4) or eating disorders Not otherwise specified (n=1).

Results: The content analysis revealed four main categories, i.e., "the need for a change", "a commitment to leave the eating disorder behind", "interpersonal changes", and "searching for a life without an eating disorder". These categories comprise features like motivation to change, gaining structure in eating situations, a re-learning of personal and interpersonal skills as well as accepting losses and starting a reorientation of identity and meaning. We noted a rather goal-oriented approach to help seeking and a variation in how the males engaged their social network in resolving the challenges associated with the recovery process. Still, the overall nature of the recovery process highly accords with what has been reported for women.

Discussion: A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement, but that the nature of the recovery process would require a wider perspective in treatment. Clinicians may also be informed about challenges related to an instrumental approach to help seeking reported in this study.

Strengths and limitations of this study

- Strengths are its originality as being one of few studies of the recovery process among males with an ED across age and treatments and where the sample size was sufficient to capture the richness and variations in the experiences of recovery.
- Limitations are that some standardized validation procedures were not supplementing the clinical judgment regarding diagnoses and recovery. Although all participants reported within every theme, we did not collect the exact number of participants.

Introduction

Eating disorders (ED) are uncommon disorders, but studies shows that ED affects both males and females in different ages.[1,2,3] The historically skewed gender ratio is reflected in theories of aetiology, former diagnostic criteria, and clinical research. However, those studies, which have included males, have found few gender differences in terms of aetiology, symptomatology, treatment response, and outcome[4]. In the literature on females with ED, some studies have focused on the outcome *process*, and the nature of recovery in particular[5]. In the present paper, we aim to explore the nature of this process among males, where there is a gap of knowledge in the literature.

There are several possible reasons why the nature of males' recovery could differ from those of females. First, it could be that trigger factors and personal reasons for taking actions to recover may be different from those of females. A second possibility relates to feelings of shame of having a "female" illness. This shame may delay seeking treatment, with the consequences of increasing the risk of a slower recovery process, and thereby prolong the duration of illness and raising the probability of a poorer prognosis.[2] Moreover, although a recent review of ED in males[6] indicates substantial improvements in clinician's ability to detect and treat males with ED, treatment services may still be suboptimal in various treatment settings. If so, suboptimal clinical services may halt a recovery process given that the shame of having a "female illness" may make a male with ED more vulnerable to experiences of being ignored or misunderstood by a therapist[7]. In addition due to possible shame of having a "female illness", males may be more concealed about their ED and thereby blocking for the contribution from their social network to their recovery process.

Study of the recovery process can benefit from a qualitative approach, since it enables a deeper understanding from the patient's perspective. This perspective is often missing in traditional outcome studies.[1,2,8]

Much is known about the recovery process among women, and it starts with a wish to change, often facilitated by important persons in their lives.[9-11] Other elements contain the development of the ability to identify and express feelings, in an empathic, non-judgmental understanding milieu[12] as well as improving self-esteem, body experience and to learn more functional problem-solving skills.[13] A review of female studies[14] shows a number of "recovery-promoting agents", notably interpersonal relations, treatment, self-help, and positive life events that trigger self-determination and motivation to explore alternatives to an ED-identity. The recovery process appears as continuous rather than dichotomous in nature, where the individual need time to come to terms with grief over lost time and finding other ways of living the life without an ED, and learn to practice more functional self-regulative behaviours.[15, 16] Women also tend to experience the recovery as spiritual process or like a journey to self, with turning points and shifts in relationships that enabled different ways of belonging, self-acceptance and agency.[17] An integrative model of the nature of female's recovery process[8, 14] outlines weight normalisation and reduction of symptom frequency and severity as the *necessary* prerequisites for progress of the *sufficient* domains, i.e., the resolving of psychological issues, existential issues, as well as interpersonal and social aspects[8].

Although small-scaled a few studies provide some knowledge about males' experiences relevant to recovery. Most of them have focused on inverse factors, like barriers for help-seeking and delay in seeking treatment due to shame or an inability to recognise symptoms and behaviour as signs of an ED and a lack of appreciation of male issues in the treatment process[18,19]. Positive treatment factors relevant to recovery appear to be the importance of feeling understood, listened

to and cared for in treatment or in support groups[20] as well as hospitalization in order to get away from home, family and work[21]. General factors positively associated with a recovery process have been found to be to eat regularly and healthy, to avoid alcohol, and paying attention to both the content of the food and what time it was eaten. However, a heavy focus on treatment-related issues leaves much to be explored about possible treatment-unrelated factors contributing to recovery. A more complete account of the recovery process may be relevant to put treatment into a context, which in sum contributes to ease the recovery process and thereby shorten the duration of the illness and raise the probability of a favourable course. This study is the third one in our research project, where one previous study focused on the males' experiences of life after recovery. Questions in the first study concerned whether they perceived themselves as recovered, and in what areas it was evident and in what way[22]. The second study focused on the attributed causes of their ED, and the participants were asked to identify their perceived causes of their ED and to share how their social, family and personal situation functioned at time for onset[23]. The aim of the current study is to investigate what males experience as helpful in their recovery process from ED.

Method

Patients and procedure

Eligible participants were former male patients who had completed their treatment for a DSM-IV ED, and who had experienced recovery. We approached specialised ED-units in Norway or Sweden to help identifying such patients and deliver study information. We did not ask the ED-units for formal documentation according to the routines for diagnosing and there was no formal diagnostic interview for the purpose of the current study.

After approval from the Regional Ethical Committees of Medical and Healthcare Research in Northern Norway and Sweden, respectively, 17 men were provided proper study information by their former therapists. Of these, 15 gave their written consent to be qualitatively interviewed by the authors for about 1-2 hours about their experiences of recovery. We interviewed every participants once, and with three separate lines of questioning according to the focus of current study, as well as the two previous studies from this project.[22,23] Some overlap between the three parts were though present due to the dynamics of the conversation but this was handled in the analysis by keeping a sharp focus on the aim and research question for each study and by discussions in the research team.

Every interview was recorded and transcribed consecutively, and was guided by the following gender-neutral question- "what was helpful for you in your recovery process? Geographical distances made it convenient to perform interviews at the participants' hometown or other locations chosen by participants and researcher of practical reasons. The interviews were conducted from October 2010 to July 2011. Judging from statements about current job status, income, and present or previous occupation or profession appearing during the interviews the participants included appeared to come from all socioeconomics strata. Moreover, the males had received a wide range of treatments during their stay at the specialised ED-clinics, like medications, individual treatments, group or family treatments, dietary advice and physiotherapy, often given simultaneously and in a mixture of in- or outpatient status. The participants' age ranged from 19-52 years (mean = 23 years). The original diagnostisation made by the specialised ED-units yielded 10 participants with anorexia nervosa (AN), four with bulimia nervosa (BN) and one with an unspecified ED (NOS). The age range for onset for the ED was from 10-21 years and the range for duration of ED reported was 3-25 years. Hence, all had a long history of considerable symptom load, sometimes diffusing across the ED diagnoses. In addition, those males low in

weight had been hospitalised for medical complications. We did not ask specifically about comorbid mental conditions, but during the interviews participants themselves reported commonly compulsive physical exercise, high self-demands, low self-esteem, depressive episodes, as well as inner beliefs of not being good enough and likable to others. In addition, they reported body dissatisfaction and feelings of not being thin or muscular enough, a long duration of symptoms, a delay in treatment seeking as well as a massive hiding of symptoms from family members and other close relations for years. Vocational problems elicited by the ED-symptoms were also present.

Data analysis

Content analysis is suited to elicit meaning, interpretations, consequences and context and the analysis in this study was guided by the five steps outlined by Graneheim and Lundman.[24] In *the first step*, all authors compared the transcripts with the audiotaped interviews to check the accuracy of the texts, and then they independently read the interview texts several times to get an overall impression of the material. In the *next* step, the first author (GP) marked all statements containing the word "recovery," or other words related to the study aim. The *third step* included rereading the transcripts adding further notes and aspects related to "recovery" as a theme as well as identifying codes, i.e, units of meaning reflecting the texts. The *third* step included also a further reading of the texts in order to filter out irrelevant information, reduce the main meaning-carrying units and to identify pattern and nuances. The meaning units were defined, condensed and reformulated, continuously checking the text for relevancy and accuracy. The *forth step* was coding the meaning units, to identify the categories. Hence, the categories were derived from the transcribed texts, and not from the pre-set guideline questions for the interviews. The purpose of the final *validation step* was to secure the credibility of the results. Here the other authors (KW,

TB) scrutinized the participants' statements in relation to the categories. The three authors then discussed the results of the analysis until agreement was reached. In this study, consensus was reached with respect to four categories, i.e. "the need for a change", "commitment to leave the ED behind", "interpersonal changes," and "searching for a life without the ED". All participants reported issues relevant for all categories, but for obvious reasons these were not represented in all the quotes, i.e. the condensed units of meaning. All quotes from participants are presented with pseudonyms, age at the time of the interview, and with their former ED-diagnosis.

Results

Category 1 – The need for change

This category concerns issues from the period when they understood that something was wrong, that their relation to food, weight, body and exercising dominated in a negative way, and where they experienced the need for a change. This need is sub-categorised into "admitting the problem", "treatment needs in the early phase" and "stabilising nutrition and weight", respectively.

Admitting the problem

The process of understanding and admitting that they had an ED had taken a long time, and some reported many years with struggling without speaking with others about their problems. To admit having an ED included admitting that food, weight and body appearance controlled or dominated all domains of life, like for instance their relations to family members, friends or others. Thus, they experienced daily life as rather chaotic and with feelings of being worried and "fed up". Some reported even having to quit job or education either temporary or permanently because of living with the ED. Some of the males had been exercising like elite athletes do, and with a high

drive to "perfect" training. In sum then, the males retrospectively recalled the periods of their life with the ED before seeking treatment as chaotic or "meaningless". As a result, some of the males reported having nearly given up and described it like being in a crisis, for some exacerbating into suicidal ideations. Not everyone had a full understanding that their problem was an *ED,* but they came to a point where they understood that they needed help in order to move further.

Patric, 24 years, (AN), stated:

"I came to a point I realised the need for help. I couldn't manage to eat and my only thought was- I can't live like this anymore, it's no life".

Gary 21 years, AN described it like this:

"It was a general breakdown; I was so down on my knees that nothing mattered any longer. I felt that everything was meaningless and worthless. When I went to see the doctor, I just told him all, I had nothing to lose".

Realising the negative consequences and admitting having a problem was thus important the first period of the recovery process.

Treatment needs in the early phase

Realising the need for help, some of the males contacted health professionals themselves. However, most of them reported having been pushed into it, or even forced by a close family member or a friend, however, not due to their social or family role as a male. In retrospect, many realised that by so doing their parents or close friends almost saved their life. Indeed, they were grateful, at least in retrospect that someone else took over the control and of feeding and eating.

Jacob, 19 years, (AN) said it in this way:

"My parents took the initiative to seek for help. I was admitted to the hospital and I thought I should be discharged the same day, but they took an EKG and I was obviously very sick and needed tube feeding. I was kind of shocked, I didn't realise that I was in a so bad condition."

A citation from Oscar, 21 years, (AN):

"It was a relief that others just could take the control over the food and decide what I should eat and the hospital stay could provide structure and frames to regulate my eating".

Some of the males started their recovery process with hospitalisation due to severe weight loss and food avoidance. Others contacted a general practitioner or started with outpatient treatment. No matter what kind of treatment they sought, the need was somewhat the same; they needed help because they had realised that they could not manage the situation on their own.

Stabilising nutrition and weight

The males highlighted the importance of stabilising eating, nutrition and weight in the early phase of the recovery, and many recalled the structure of hospital treatment as helpful, notably as facilitating work on more difficult issues like overeating and purging, which some had strived with for years.

As Christopher, 21 years, (AN) expressed:

"*I needed a break from everything- I wanted to be hospitalised and I hoped that they could close the doors so I didn't get the opportunity to overeat and throw up".*

Owen, 31 years, (BN) said it in this way;

"*I joined a "luncheon group" at the hospital and that changed my attitude markedly. I got another and better structure around food and managed to keep the meals to fixed time during the day."*

Others also reported the benefit of having had to relearn "how to eat". It was a process learning to eat in a new way, and it took time, as Paul, 48 years, (BN) said:

"It took at least one year before I learned to eat. I went to a dietician who taught me how to organise my eating into breakfast, lunch and dinner. Even if ED are not just a matter of food, it is also about food and I was totally "out of place" on this food thing".

As the last citation illustrates, gaining structure was a time consuming struggle.

Category 2 Commitment to leave the ED behind

After the initial stabilising of food intake and weight, the main issue was how to leave the ED behind. This category consists of the subcategories "searching for a balance", "expectations towards treatment".

Searching for a balance

The males reported being challenged to let the ED behind and replace it with new coping strategies. Despite the fact that the males had experiences all the negative consequences related to the ED, they also reported that the ED had been their functional coping strategy for years. Some even described their ED as having been their best friend. Hence, a challenge was to handle the ambivalence of change, i.e., looking for ways towards a less chaotic life, but also letting go of some "advantages" that the ED represented.

The males reported challenges in finding a balance between rest, sleep, and activity. Moreover, from previously being compulsive about physical exercise, the recovery process meant learning

to convert exercise into a positive contribution in terms of balance and a contact with own needs. As Mike, 36 years, (AN) expressed it:

"I exercised several times a day and it was very compulsive. On the other hand, the exercise has been very important for my recovery and I will never live a life without exercise. Now, however, I have learned to ask myself - why do I have to exercise now? In addition, I learned to sit down and think that I need both rest and activity. I also had to be more flexible about when to exercise".

The citation illustrates the need to examine the motives for exercising, and search for the joy of exercising, instead of pursuing the aim of burning calories. Almost the same process was relevant with respect to the rules related to meals.

As Jacob, 19 years, (AN) said about how he found balance between resting and exercising:

"I exercise quite a lot together with my friends, well, occasionally I also run by myself and if I think to myself that I would like to run 4 to 6 times per week then I know it is a bit too much. You need maybe one or two days to recover after exercise. The day after exercise I rest and take it easy and do something completely different".

Gradually, the males managed to loosen up their detailed mealtime schedules, but also to gain more flexibility by challenging personal rules about what one "can" do and "not do". The males described how the focus on regulation of food and activity as well as self-care made them gradually stronger and improved in many areas of their life.

Promoted by therapy the males started a process with increasing self-care and more regular patterns of living. Also, they gradually learned to think better about themselves, be more kind to oneself, to discover own needs and be able to fulfil them, and thus, to "deserve" entering a recovery process. Another issue was to understand which kind of purposes or functions ED-symptoms served in their life and, in essence, why they developed an ED in the first place. As

consequence, the males came to understand that the ED-symptoms served as a twisted way to express themselves emotionally.

Later in the recovery process many of the males step-by step restarted with activities they liked before, with the result that there was less time to think of food and a positive circle emerged. Others began with new activities, of which the ED earlier had been a barrier. For some it was important to keep up leisure activities like sports, travelling or playing music, while others managed to take up again their activities after more intensified treatment. Overall, leisure activities became "a free space", where it was easier to manage the ED-symptoms.

More time to do things was frequently mentioned along with other positive circles because of symptoms being more stable. Being able to have a daily occupation, being able to have a job, go to school or having a daily occupation were of some participants highlighted as important in the recovery process. Some though, asked for a sick leave in order to concentrate more fully on their treatment and recovery process.

Expectations of treatment

In general, the males had high expectation towards treatment. It was important for them to find a therapist that they could trust and talk to about their ED-related problems. Some expressed that when they first should recover, and put so much effort in treatment, they would not like to waste their time on a service that they did not experience as helpful. Some were thus quite goal-orientated and instrumental and did not hesitate to quit treatment if they after some time did not come along with their therapist. Some were eager to come to grip with the "whys", but the main development was just to learn how to find a way «out» of the illness. The demands were also

evident in terms of the personal effort, investment and engagement they put in therapy in order to get the most out of it.

The therapist was the person they spoke most openly with and sometimes the only person they talked to about the ED. All participants reported high personal investment and engagement in their therapy. This is shown in the huge effort they were willing to take to get most out of their treatment illustrated as follows:

"I drove my car 150 kilometres each way to the therapist, so I was rather motivated at that time and I used my self-determination. When I decide to do something, I really make an effort, and when I decided to give treatment a try, the driving distance was not a problem at all." Darry, 34 years, (AN)"

Thus, the males gave themselves some credit for their recovery, but all of them said that they would not have made it without professional help, as "Robert, 45 years, (BN) said:

"It has been a struggle, but I have had the fortune of receiving good treatment. I could not have managed it on my own, but at the same time I have my resources inside me that made me go through with recovery and start a life without the ED. I have gradually learned to use my strength and my resources in a right way."

Category 3 - Interpersonal changes

This category includes interpersonal changes, notably acquiring more flexibility in the social relations and learning to express better own needs. The sub-categories were "expressing own needs" and "relating to others in new ways".

Expressing own needs

The males reported how they gradually learned to become more aware of own needs and to express them to others. The males changed their history from being pleasers, who always said

"yes" if someone asked for something, and seldom asserted their own needs and boundaries to becoming "boundary setters". As stated by Philip, 31 years (AN):

"Before it was very important for med that my friends thought I was ok, but now it is more important for me that I think it is ok to be with my friends. If I think it is ok, I am sure they do as well. I have started to ask myself – what are my needs?"

And Oscar, 21 years (AN) said it like this:
"I have become more independent as a person, I do not longer need to agree with others. I can tolerate disagreement and even speak my mind against other opinions".

Relating to others in new ways

The recovery process also included a change in their understanding of relations. Facilitated by treatment, they understood more about ED and the mechanisms of symptoms, and this made it easier to find the right words to explain their ED-symptoms to family members and close friends. Some reported an indirect benefit from interpersonal relations in the sense that job, colleagues and friends made a supportive impact by providing social control and an external structure in order to control the frequency of symptoms.

Some also understood that in order to start to recover and to secure continuing the recovery process, they had to distance themselves from difficult relationships, like a violent father or a mentally sick mother, realising that no support could ever be provided. When being more social, they became more self-confident and therefore, they stood up for their own needs when relating to others. As said by Alexander, 22 years (AN).

"I have learned a lot about myself during this process and now I know more what kind of life I want to live. It is important with social network and to see the value of friends and having someone to really care about. It is also like – you have to accept yourself before you are able to love others. It is hard to have close relationships when you have so much trouble yourself. After a while, I was able to be social with others, and I managed to keep a conversation going without thinking of other things, I could really listen to others and I became more participating and present in the moment."

Mike, 36 years (AN) explained it this way:

I have become more free and I am not longer so hard on myself- I have gone from being "looked" into myself to become "unlocked". For example, now I am able to enjoy and handle being touched by my girlfriend, I can cry together with her and I can feel everything more strongly than before. To feel more is a big thing for me."

Category 4 – Searching for a life without the ED

The males had spent years of their lives living with an ED, thus missing other experiences and opportunities. The recovery process included feelings of grief over such losses, but also the need for reconciliation and a search for normality and an identity without an ED were experienced as important. This category consists of the subcategories "accepting the losses" and "finding oneself".

Accepting the losses

Nearly all the males struggled with a grief related to having been preoccupied with the ED and the related problems for so many years. They had experienced that the years with an ED had caused losses, for instance a dropout of school, a sick leave from work or having sparse or no experiences with being in close relationships. David, 52 years (BN) said:

"I can feel a grief because I have spent 25 years of my life on the bulimia, and now I feel that many trains have passed by".

Even if the males in general could feel a grief over the losses, at the same time they had some expressions that described how this process had made them stronger and more and more aware of their own needs.

"When I had my bulimia, I didn't have a need for or place in my life to have a close relation, but during the recovery process the need for a family and own children came up" (Robert, 45 years, (BN).

This citation also illustrates progress and recovery in the sense that new needs elicited grief for something (i.e., bulimia) which previously had been experienced as "functional". Moreover, to understand development of the ED was described as helpful to realise the psychological pain in order to be able to look ahead. After years of struggling with the ED many of the males also expressed that they had become more empathic, understanding and compassionate with others who were experiencing problems in their lives.

Finding oneself

Due to the years of suffering from the ED a common description was that the disorder had become a part of their identity. They reported that during the recovery process they were uncertain about what is defined as normal and what actually a recovery from an ED is all about. Hence, during the recovery process the males had asked themselves "who am I without the ED?", and "how will my life be without an ED? These rather existential questions were in essence, partitioned out into many daily life contexts. Apart from their relearning of basic regulative issues with respect to food, sleep, activity, emotions and reactions, they were furthermore occupied with a relearning of ordinary behaviours and emotional reactions and daily rules of ordinary social interaction with others. The males reported difficulties with for example to know whether a strong emotional reaction was "normal" or due to their ED-history. As Jonathan, 21 years (ED-NOS) asked: "*How sad is it normal to be after a split-up with a partner?*"

This citation illustrates that the males felt it difficult to sort out whether their reactions or feelings were coloured by their former identity as an ED-sufferer" (and hence possibly not "normal") or whether they mirrored their "true selves". Several of the males also remarked that they characterised themselves as vulnerable. As Robert 45 years (BN) said:

"I know that I am an emotional and sensitive human being, and not very robust and not someone who takes easy on stresses and strains. When for instance my parents will die I think this will be very hard for me. However, it is reassuring that I can contact my general practitioner or other kind of help if needed."

During the recovery process, the males were taking more part in social life, but there were variation on how open they were about their ED. Some had a fear of as well as an experience with being stigmatised and that others should attribute all kinds of behaviours to their ED-history. To avoid stigmatisation and additional problems in the orientation of identity, some of them had made a choice to be selective with respect to whom they shared this ED-history. However, there were also males that had good experiences with openness in the recovery process and males who described openness as a relief that helpful for the reorientation process.

Discussion

This study focused on how the males described their recovery process from ED. We found four descriptive categories, i.e., "the need for a change", "a commitment to put the ED behind", "interpersonal changes", and "searching for a life without an ED. These categories as a whole depict a timeline and the total recovery process ending with a reorientation of life where the ED was history. Moreover, and hardly surprising, admitting to having an ED was the first theme the males mentioned as initiating their recovery. This is almost a prerequisite for even starting a recovery process.

Prior, and in the opposite end of the recovery process the males reported a chaotic period where ED- symptoms dominated all domains of life. All of the males realised that they had problems for which they needed professional help, but there were variations in realising that the problems indicated ED in particular. Moreover, prior to some kind of "decision" or the experience of a

"turning point", the males reported considerable doubts and ambivalence. These findings concur with those reported for women[25, 26, 27] thus indicating truly gender neutral change processes.

While the males achieved more structured eating behaviour, they gradually also learned to better recognise and understand their own personal needs. In return, this led to ability to being more self-caring and compassionate. Our findings indicate that increased self-care as well as self-regulation are important aspects of the recovery process in the sense that they set in motion positive circles with opening up the often strict cognitive schemas and rules, a better structure and relation to food, resulting in less shame, more self-acceptance, and eventually, in a better social functioning. Moreover, our findings indicate that regulative issues should not be restricted to affective control, but may comprise the full spectrum of life domains, similar to what has been reported[15] among females in recovery from an ED.

The interviews also revealed the importance of health care professionals for a good recovery process, notably in terms of helping the males to sustain self-regulation and self-care activities. Moreover, it is noteworthy that professional helpers were for some of the males almost the only persons they talked with about the ED and the associated problems. Even so, they were not afraid of setting demands, and they would not "waste" their time with treatment, which they believed were not beneficial to them. In some ways then, these males took a rather instrumental approach in own recovery process (once they had made a decision to recover), and in this process they made use of a sometimes strong and positive willpower. Nevertheless, this goal-orientation did not seem to shorten the often long and demanding journey towards recovery. The males were driven by compliance, following the instructions from therapists in order to reach recovery. The

instrumental approach to treatment stands out as a possible gender specific finding in need of future explorations.

Our findings indicate that the recovery process consists of several elements. One element is the control of ED-symptoms and their complicating elements. Hence, the males reported that the process of recovery is a matter of lowering the symptom load, to loosen strict rules for food intake, to let go of self-stigmatisations, to experience less somatic complications and to experience that ED-symptoms do not dominate daily life.

Another element of the recovery process comprises psychological and social issues. The males reported how the ED prevented them from taking part in social activities. However, during the recovery process they began to strive for social support and more openness about their problems. The social network consisted of many sources, i.e., people who stand for continuity, who had been there all the time and knew the person before the development of the ED. An important aspect of recovery was depicted in the participant's wish to make better use of the social network as a platform for hope and a wish to function well in social settings. This theme concerned developing the intrinsic need to take part in, and enjoying social activities and not just to please other people.

Our results show that the later stages of males' recovery process consisted of existential elements, like questioning their opinions about the meaning of life without the ED. This part of the recovery process indicates a cognitive and attentional shift from being preoccupied with the beliefs of controlling food intake by dieting, vomiting or excessive exercise. Obviously, this shift

released an important "psychological free space", and a rethinking of one's identity and goals of life.

Taken together, our findings concur with themes and change processes, which have been identified among women in recovery from an ED[8, 14-16]. This may indicate a universal nature of change and recovery from ED. The other side of the coin, and possibly equally gender related is the fact that the males had concealed their ED for a long time and delayed to seek treatment. This is indicated by the high frequency of hospitalisation as the first line of treatment due to symptom severity.

This study's strengths is its originality as being one of few studies the recovery process among males with an ED across age and treatments and where the sample size was sufficient to capture the richness and variations in the experiences of recovery. On the other hand, three limitations should be mentioned. First, although all participants reported within each of the four themes, we did not collect the exact number of participants within each theme. Secondly, no semi-structured diagnostic procedure was run neither when entering treatment nor at recruitment to this study to validate experienced clinicians' judgment. In addition, no standardized measures were used to capture current level of ED-symptoms, but it may be argued that this limitation is of less importance because we were interested in the experiential perspective, and that at present, no standardized instrument available has sufficient content validity to capture the multiple concept "recovery". Finally, our findings are relevant for Caucasian males, and how former male patients from non-western cultures experience their recovery process remains to be investigated in future studies. Also a matter for future studies is to investigate whether the present findings also apply to males recruited from general clinics, or from the general population.

Conclusion

A clinical implication from our findings is that symptom relief is important to facilitate good circles of improvement. Moreover, and similar to findings on females' recovery process, our study points to the need to address a wider perspective, i.e., to support patients' recovery through social reorientations, personal reconciliations and coming to terms with existential issues. Male specific recommendations to therapists are to acknowledge that ED-symptoms do occur among males, and to design a straightforward treatment plan to deal with current symptoms and future challenges.

Contributors GP, KW and TB were all responsible for the planning of the study, the data collection and the analysis. Moreover, all authors contributed to the manuscript.

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Competing interest None

Ethical approval Regional Ethical Committee of medical and healthcare research and the regional Ethics Review Board in Uppsala Sweden (D. no 2009/118) and the Regional Ethical Committee for Medical and Health Care Research in Northern Norway.

Data sharing statement No additional data are available

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No	Item	Guide questions/description
Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	All authors (GP,KW,TB) interviewed the patients (i.e four to six patients each), (page 5).
2.	Credentials	The researcher's credentials were PhD (GP, TB) and BSc (KW), (page 1)
3.	Occupation	Their occupations were associate professor (GP) psychotherapist (KW) and clinical researcher (TB), (page 1, 6),
4.	Gender	Females
5.	Experience and training	The researchers (GP, TB) have several years of experience in applying qualitative method as well as teaching at university level. The psychotherapist and also PhD-student (KW) has extensive experience in interviewing patients, and training in qualitative methodology
Relationship with participants		
6.	Relationship established	No relation was established before the interview, only an appointment were to meet (page 6)
7.	Participant knowledge of the interviewer	The researchers explained their reasons for conducting the study before the interview, (page 6) as well as their current occupation.
8.	Interviewer characteristics	To minimize bias, due to former patient – psychotherapist relationship, none of the authors interviewed a former patient (page 6). No other characteristics were found necessary to report.
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	The methodological approach was guided by principles in qualitative analysis in nursing reseach outlined by Graneheim and Lundman, and interviews were analysed according to content analysis (page 6,7).
Participant selection		
10.	Sampling	The recruitment procedure started with a written request to all specialist ED-units in Sweden and Norway. Therapists were asked to contact their male ex-patients if they fulfilled inclusion criteria, to and inform them about the study and ask if they were willing to participate in the study (page 5)
11.	Method of approach	The males who were willing to participate were contacted by phone by one of the authors (GP,KW,TB), to make an appointment of time and day to conduct the face to face interview (page 6)
12.	Sample size	17 males fulfilled the inclusion criteria and were requested. At time-point for interview 15 participated in the interview (page 6)

13.	Non-participation	Two participants failed to appear at the agreed place - one for practical reason, one for unknown reason (page 5).
Setting		
14.	Setting of data collection	The locations of the interviews were chosen by the participants, often close to their homes (eg. at their homes, working places or former treatment units) (page 6)
15.	Presence of non-participants	Only the participant and a the interviewing author was present during the interview
16.	Description of sample	Important characteristics of the sample were male gender, age distribution (19-52 yrs) and the experiences of recovery from different ED-diagnoses.
Data collection		
17.	Interview guide	An interview guide was created for the study. No pilot was carried out (page 6)
18.	Repeat interviews	No repeated interviews (page 6)
19.	Audio/visual recording	All interviews were audio recorded (page 6)
20.	Field notes	No field notes was made during and/or after the interview
21.	Duration	The duration of the interviews varied between one and two hours (page 6)
22.	Data saturation	Data saturation was discussed, with a conclusion that 15 rich interviews were sufficient.
23.	Transcripts returned	No transcripts were returned to participants. They were invited to take contact with the interviewer, if they had some questions or wanted to make changes.
Domain 3: analysis and findingsz		
Data analysis		
24.	Number of data coders	One author (GP) coded the data, but a validation process followed were all three authors discussed the analysis process as a whole. (page 7)
25.	Description of the coding tree	No description of a coding tree.
26.	Derivation of themes	Themes derived from the data (page 7).
27.	Software	The software Nvivo was used in an early phase of the analyzing process (page 7)
28.	Participant checking	Participants did not provide feedback on the findings
Reporting		
29.	Quotations presented	Quotations were presented to illustrate the themes, but without identifying participant numbers (page 8-16).
30.	Data and findings consistent	There was consistency between the data presented and the findings.
31.	Clarity of major themes	The major themes were clearly presented in the findings (page 7)
32.	Clarity of minor	Clarity and discussion of minor themes and diverse

themes cases are also included (page 8, 18-20)