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**Pro-anorexia, Weight –loss Drugs and the Internet: an
‘Anti-recovery’ Explanatory Model of Anorexia**

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loss

Abstract

This paper explores the online 'pro-anorexia' underground, a movement that supports those with anorexia and adopts an 'anti-recovery' perspective on the disease. While encouraging a 'healthy' diet to sustain an anorexic way-of-life, the movement also recommends the radical use of weight-loss pharmaceuticals to pursue and maintain low body weight, in contrast to their conventional use to treat obesity. Using ethnographic and interview data collected from participants in the '*Anagrll*' website and online forum, we analyse the pro-anorexia (or 'pro-ana') movement in terms of its underlying 'explanatory model' of the disease, and contrast it with medical, psychosocial, sociocultural and feminist models that encourage a 'normalisation' of body shape and weight. We suggest that for participants in pro-ana, anorexia represents stability and control, and *Anagrll* offers support and guidance for those who wish to remain in this 'sanctuary'. We discuss the pro-anorexia movement's use of the Internet to facilitate resistance to medical and social theories of disease, and its subversion of pharmaceutical technologies.

Pro-anorexia, Weight –loss Drugs and the Internet: an ‘Anti-recovery’ Explanatory Model of Anorexia

Introduction

Anorexia nervosa is a medical diagnosis most often applied to young females who use fasting and stringent food restriction to achieve a radically slim body shape (Wolf 1991). As a disease category, it emerged in the nineteenth century, superseding medieval notions of female fasting as a manifestation of religious devotion (Brumberg 2000). Anorexia is today perceived by health professionals as a highly dangerous condition, by social scientists and feminists as a reaction to Western cultural preoccupations or to patriarchy, but by some of those in its embrace as a source of security and predictability (Shelley 1997). In this paper we explore the pro-anorexia or ‘pro-ana’ movement, which promotes a managed approach to anorexia and has sought to re-define it outside medical or other professional discourses. This movement has been facilitated by the development of Internet communication technology, and subsists within a shadowy world of semi-underground chat rooms and web sites. Some pro-anorexia groups promote the use of weight-loss pharmaceuticals as adjuncts in the quest for very low body weights: a use not conceived of by their manufacturers or drug licencers.

The pro-ana movement is a radical and largely socially-unacceptable approach to the management of anorexia, and has suffered a powerful media backlash, being characterised as encouraging ‘normal’ and ‘healthy’ girls and women to adopt anorexia as a glorified diet (Dias 2003, Doward and Reilly 2003). However, by theorising the understanding of anorexia in terms of rival ‘explanatory models’ (Kleinman 1980, 1988), we will present a sociological argument in this paper that the pro-ana movement challenges and rejects medical, social and feminist models that regard anorexia as a condition to be ‘cured’. In a disturbed life, the ‘anti-recovery’ stance of the pro-ana movement offers its participants a safe and positive place to share experience and gain further insight into their condition, away from the judgement, gaze and scrutiny of parents, boyfriends, husbands and the medical profession.

Anorexia is notoriously difficult to treat and has the highest mortality rate of all the psychiatric illnesses (Gremillion, 2003), and the pro-ana movement, albeit radical and

unconventional, may provide insight into the heart of the condition. The purpose of the paper is to report ethnographic research to elucidate the culture of the movement, the philosophy of its members and the strategies adopted to render anorexia a relatively 'safe' lifestyle. We begin by comparing and contrasting the different models of anorexia that have emerged from biomedical and social science, and assess the extent to which all serve as explanatory models of a disease to be remedied: a classification firmly rejected by the pro-anorexia movement.

Following a description of methods, we report ethnographic data gathered during fieldwork in pro-ana Internet communities and websites¹, to consider how participants construct their social identities in relation to their anorexic condition, and how technologies such as weight-loss drugs have been appropriated for purposes not intended by their manufacturers or health professionals. In a discussion, we evaluate pro-ana movement as an 'anti-recovery' model that resists both medical and social scientific frameworks, and consider how the Internet may facilitate the subversion of medical technologies for alternative uses. We examine this in relation to recent emphases in UK health policy on the 'expert patient' (Department of Health 1999, 2001). Expert patients, capable of participating actively in the management of their conditions, are a key element in the public health according to these perspectives (Shaw and Baker 2004), but critical analyses suggest that the concept is medico-centric and retains a subordinate role for lay definitions of health and illness (Thorne et al 2000, Wilson 2001). We assess how the pro-ana movement creates a distinct 'expertise' that runs counter to the medical explanatory model of anorexia.

Explanatory Models of Anorexia

Anorexia has been variously theorised by medical, social science and feminist scholarship. While the biomedical model evaluates anorexia as a disease with an underlying organic cause to be treated and cured (Urwin et al 2002), other models have emerged that have concluded that the condition has psychological, social or cultural roots. Several competing explanations have been developed, including psychological models that locate anorexia as a problem in identity development or familial relations (Berg et al 2002, Bruch 1973), and cultural models in which a societal bias towards slimness leads to extreme eating behaviour (Gordon 2000, Grogan 1999). Feminist-cultural models conceive anorexia either as an inscription by culture

of the gendered body (Bordo 1993, Orbach 1993), or as a resistance by women to these sociocultural forces (Malson 1998, MacSween 1993, Gremillion 2003).

The social anthropologist and physician Arthur Kleinman has suggested (1980, 1988) that we can compare and contrast different ways of understanding health and illness, including biomedicine, through the notion of 'explanatory models': narrative frameworks used by lay and professional people, Western and non-Western, modern and pre-modern, to make sense of disease or other abnormal experiences or behaviours. An explanatory model (EM) emerges as people ask such questions as 'What is the nature of this problem? Why has it affected me? Why now? What course will it follow? What do I fear about this condition? What outcome do I desire?' (Kleinman 1988: 121). Be it medical or lay, an EM thus covers matters of definition, causation, timing and distribution, prognosis and management, and frameworks as disparate as gene therapy and witchcraft may be understood as grounded in an explanatory model that seeks to make sense of some derangement in the body physical or social (Goodman 2001: 175, Hedgecoe 2001, Patel 1995).

An EM is grounded in a cluster of culturally-defined concepts, experiences and expectations about illness (Patel 1995: 1291). In the modern period, Western health care has been dominated by biomedicine -- an EM that establishes a scientific narrative framework not only for disease but also a range of other 'deviant behaviours' and 'natural life events' (Conrad 1992). Refinements to this EM have constructed more comprehensive 'biopsychosocial' (Engel 1977) and 'psychoneuroimmunological' (Levin and Solomon 1990) EMs. These incorporate social science evidence into narratives retaining scientific reasoning from aetiology to diagnosis to treatment, while the emergence of genomics has strengthened narratives of illness that emphasise the genetic basis of conditions such as schizophrenia (Hedgecoe 2001). The 'healthicisation' (Williams 2002) of life and a culture of 'healthism' represent a further colonising narrative that emphasises individual responsibility for health and well-being.

Despite this 'encirclement' of behaviour by scientific and clinical EMs, studies have documented resistance, as people seek to make sense of their lives beyond these professional EMs. For example, Hislop and Arber's (2003) study of how women manage sleep

disturbances suggest that despite medicalisation and healthism, this problem is addressed within personalised strategies that locate sleep disruption within the contexts of women's lives. Some of those living with HIV and AIDS have created narrative frameworks for their lives from a mix of spirituality, communally oriented value system, and an emphasis on self-discovery and creativity that challenged modernist EMs (Ezzy 2000: 616). Political activism and religious faith were frameworks drawn on by parents of autistic children to resist professional models in Gray's (2001) study.

The different theories of anorexia listed earlier may thus be understood as rival EMs, and this formulation provides an analytical tool to consider the various ways in which anorexia nervosa is currently understood, but also to explore the alternative EM offered by the pro-ana movement. We will suggest here that, while the differing EMs of anorexia analyse the cause of the condition variously, all remain committed to a framework in which anorexia is a negative condition to be remedied, be it through medical treatments or psychosocial intervention, a perspective rejected by pro-ana. To illustrate this point, we summarise within Table 1 the differing theories of anorexia that we will now discuss in terms of Kleinman's analytical framework for comparing and contrasting EMs.

(Note to Editor: insert Table 1 about here)

Biomedical Models of Anorexia

Anorexia nervosa was first described in the 1870s, replacing the earlier *anorexia mirabilis*, a fasting associated with spiritual discipline and the apparent ability to achieve sustenance from prayer. In the Victorian era, scientific medicine established anorexia as a nervous disease in its own right, observed to affect 'high born' girls from wealthy families (Brumberg 2000, Gooldin 2003). Biomedical models of anorexia have since established the condition as a disease category, and it is cited in the Diagnostic and Statistical Manual of Mental Illnesses (DSM-IV) as a mental health problem, although some consider it to have an underlying organic cause (Urwin et al 2002). Any effort to fully document the biomedical model of anorexia remains beyond the scope of this brief review, but according to medical texts (for example, Luck et. al. 2002; Patton et. al. 1999; Abraham and Llewellyn-Jones 1997), anorexia

is a condition characterised by fasting and subsequent emaciation, in which body mass index (BMI) is less than 17.5. Typically it emerges at 14 years and may be partly triggered by pressure from the media and weight loss industry that ‘induces women to diet, fast intermittently, or exercise’ (Abraham and Llewellyn-Jones 1997: 11), as well as a tendency towards dieting and levels of psychiatric morbidity (Patton et al 1999). Treatments for anorexia seek to normalise eating patterns and body weight, typically by ‘re-feeding’. Abraham and Llewellyn-Jones (1997: 111) suggest that a patient increases her (sic) weight ‘so that it is within the normal range’, with a BMI of between 19 and 20, slightly ‘on the thin side of the normal range’, to ensure the patient does not suffer anxiety about weight gain. In addition, they note the importance of correcting erroneous beliefs about food and nutrition to enable an individual to feel she has control over abnormal eating patterns and no longer relentlessly pursues thinness.

From Kleinman’s perspective, this reflects an EM grounded firmly in a biomedical approach to disease. There is a ‘medicalisation’ of behaviour and embodiment, establishing over- and under-eating as suitable subjects for medical analysis and intervention, and the EM addresses definition, causation, epidemiology, prognosis and treatment within a biomedical frame. The influence of the biomedical EM can be seen in terms of Conrad’s (1992: 211-3) three-fold analysis of medicalisation as ‘interactional’, ‘organisational’ and ‘conceptual’. At an interactional level, the typification of anorectic eating patterns in terms of aetiology, epidemiology, management and treatment bolsters a medical model of these conditions as pathological, and to be treated by health professionals (Luck et al 2002). The second level of medicalisation establishes conditions within organisational frameworks governed by medical models. Thus, Tierney (2001) notes that anorexia, as a medically-defined disability (Hurst 2000) is a legitimate condition for purposes of claiming state benefits. As an example of ‘conceptual medicalisation’, in which a medical vocabulary, biomedical mode of explanation, or a pathologising approach to treatment becomes dominant (Conrad 1992: 211-213), we may cite Mizrachi’s (2002) analysis of how historically, anorexia narratives in an academic journal changed from an emphasis on mind and body to a focus on the ‘anorexic body’ alone, in a bid to establish legitimacy within a dominant biomedical domain.

Social Science and Feminist Models of Anorexia

Biomedical approaches to the treatment of anorexia tend to ignore patient accounts and pathologise feelings (Brain 2002). However, social scientists have moved away from an individualised EM, arguing that disordered eating is less a consequence of individual or bodily malfunction, and more a reflection of social and cultural meanings associated with food, fatness and the female body (Hughes 2000: 15). Even the strict biomedical EM has adapted to incorporate this analysis, so that, for example, a publication by the British Medical Association (2000) notes the significance of body image in anorexia. A substantial literature in the social sciences has addressed the cultural aetiology of disordered eating, in an effort to move treatment away from a strict medicalised and individualistic approach, and to recognise the social factors that lead to these predominantly female conditions. Thus, in psychodynamic EMs, Bruch (1973) conceives anorexia as a reaction against the development of adult sexuality, while Berg et al (2002) suggests an aetiology emerging from self-esteem, cognitive distortions, stress and family problems. On the other hand, cultural models emphasise Western society's bias towards slim, lean bodies and how these icons contribute to extreme eating behaviour (Gordon 2000, Grogan 1999). The role of the media and the culture of 'celebrity' have been implicated in these EMs as mediating the iconography of the lean female body as the epitome of beauty and object of sexual desire (BMA 2000, Harrison 2000).

Feminist perspectives on the causes and treatments of eating disorders have developed these psychodynamic and cultural perspectives. Rather than pathologising eating behaviours and focusing on the individual's 'faulty' body, feminist EMs look beyond the individual towards the subjugation of women in society and the meanings of slenderness in the West. Bordo (1993) and MacSween (1993) both note the tyranny of 'body fascism' in Western ideals of beauty. Bordo suggests that fatness and being overweight are associated with low morality, sloth and laziness, whereas slimness is associated with control and order. Similarly, MacSween argues that male and female bodies are constructed through a set of oppositions in which patriarchal ideology identifies the latter as a threat to social order. Women strive to create a firm, toned body that no longer poses this challenge, while the pursuit of the anorexic body is an attempt to transform a de-valued feminine body into one that is owned and active (MacSween, 1993). In Orbach's (1993) analysis, modern Western women are caught

between pursuing ideals of femininity and achieving success in the work place. While traditionally having responsibility for feeding others in the home, working women may seek to restrict their own appetite and eating. By controlling needs and desires, she can become desire-less, de-feminised and invisible (ibid: 10).

These 'social science' EMs challenge the individualising emphasis in the biomedical EM's approach to aetiology and treatment. As can be seen from Table 1, the aetiology and epidemiology of the condition are variously described. However, while non-biomedical EMs vary in their approaches to management of anorexia, they share with biomedical EMs a view of anorexia as a negative condition that needs treatment. Among sociocultural studies, Gilbert (2000) advocates cognitive-behavioural therapy while Moorey (1991) promotes a mix of self-help and therapy and Bruch (1974) applies a psychodynamic model to the treatment of anorexia. Feminist writers on anorexia have suggested a variety of approaches to treatment including self-help (Orbach 1993), assertiveness training and improvements to body image (Grogan 1999), ontological 'self-forgiveness' resulting in empowerment and a return to eating and drinking (Chernin 1983: 199) and a hope that accounts of others' experiences 'will shock (sufferers) into finding the determination to fight their illness and find within themselves the will to live' (Shelley 1997: 7). As we now turn to consider the data from our research on pro-anorexia, we shall consider how the pro-ana movement represents a radical break from these EMs, be they medical or sociocultural.

Research Design

The pro-anorexia (henceforth 'pro-ana') movement has been nurtured by two technologies: information and communication technology such as the Internet, and the development of effective pharmaceuticals for weight loss. As part of a wider study of pharmaceutical drugs and the Internet¹ we wished to explore sub-cultures that have emerged as challenges to mainstream approaches to illness, treatment and medication. Elsewhere (Authors, in press), we suggested that over-weight and obese users of the weight-loss drug Xenical who participated in an Internet message forum '*X-Online*', constructed themselves within dominant medical discourses surrounding obesity and its treatment. In this study, we

explored the use of an Internet website and discussion forum where pro-ana ideology was promoted and the use of diet drugs debated from a non-medical perspective.

To explore the dynamics of the pro-ana underground and the ways in which participants subvert the biomedical model of eating disorders, we studied the pro-ana '*Anagrrl*'² website for seven months between May and November 2003. The methodology of the study was 'virtual participant observation': an emerging approach that has adapted 'face-to-face' ethnographic methods (Mann and Stewart 2000), and can be used to explore the dynamics of computer-mediated communication (Hine 2000).

Internet-mediated ethnographic methods of research are still in development, and new technologies for real-time interaction between researchers and participants may enhance this mode of data collection in the future (O'Connor 2001, Paccagnella 1997). Researchers using these methods have identified a number of advantages and limitations. Internet interviewing may be particularly appropriate for sensitive subjects not amenable to face-to-face interviews (Illingworth 2001), and Glaser et al (2002: 189-190) suggest that the anonymity of the Internet permits research into marginal groups for whom self-disclosure may have costs, and where participants may be suspicious of researchers and outsiders. Nosek et al (2002) argue that Internet research can be used where a sample population is small or hard to find: the emergence of a large number of specialist Internet fora can afford an efficient way to recruit subjects (Illingworth 2001).

However, there are a number of issues specific to Internet-mediated research concerning validity and access, as well as ethical considerations concerning covert research and confidentiality. Glaser et al (2002: 191), in their study of racism, considered the possibility that the presence of a researcher might have encouraged more extreme views or false claims to be expressed. Anonymity, while enhancing openness about sensitive or embarrassing topics, increases the potential for intentional or unintentional deception and for identity manipulation (Hewson et al 2003: 115, Nosek et al 2001: 172). Efforts must be taken to enhance generalisability and a number of writers have argued that Internet samples will under-represent poor and minority groups (Nosek et al 2001: 168), although Hewson et al (2003: 32) consider that this bias is disappearing with the rapid spread of Internet access.

Participants need access to hardware, skills in typing and motivation to participate in what can be lengthy online interviews (Chen and Hinton 1999).

The unique character of the Internet means an absence of visual cues, and these can limit the validity of data analysis in comparison with face-to-face interviewing, and create problems in establishing rapport, while some interviewees may be affronted by the physical absence of a researcher (Chen and Hinton 1999, Illingworth 2001). Illingworth suggests that skills are needed to create trust via a keyboard, and while self-disclosure may be a key element in this process, this can threaten the impartiality of the research relationship. In a study of motherhood, O'Connor and Madge (2001) concluded that rapport may be facilitated where a woman is interviewing women online, as their respondents were delighted to have an opportunity to share with another female. Chen and Hinton (1999) suggest that online respondents may be inclined to 'type before they thought', which can be both an advantage in gaining sensitive data but limit reflectivity. On the other hand, unlike traditional interviewing, there may be considerable editing and revision (and collusion between respondents) before a participant sends a response to a question. Leaving the field may also be harder online, as some participants may wish to sustain the relationship developed with a researcher, and e-mail contacts cannot be easily severed without causing offence and potentially muddying the water for future researchers (Illingworth 2001).

Despite the lack of direct engagement with participants as in traditional ethnography, Thomsen et al (1998) suggest that multi-method triangulation, involving textual analysis, prolonged participant observation and qualitative interviews can provide valid and reliable data. In our study, data were obtained from a mix of participant observation of 'virtual' interactions and participation in the message boards, documentary analysis of the non-interactive elements of the website and a range of online interview methods with individual participants. As with most qualitative approaches, we did not claim to be establishing a 'representative' sample, but did apply a range of methods to gather data broadly and to triangulate between observation and interviews.

All data were collected by KW, the project research officer. To access the field of study, KW subscribed to *Anagrrl*, announced her 'presence', and explained that she was researching the

topic of the Internet and pharmaceutical drugs for weight loss. A period of acculturation to the norms of the values of the group ('lurking') was followed by participation in the forum, which involved asking questions of message board participants about their feelings towards weight loss, related drugs, the medical profession and their Internet use as it related to health and weight loss centred use. Some participants responded to the questions via the message board, while others chose to respond directly to KW, which then led to in-depth online interviews. A total of 20 participants were interviewed by these various methods. Following this, a series of discussions were initiated on a range of topics, which generated data in a way analogous to focused group interviews.

The use of interactive web based message fora for research purposes has sparked debate in the sociological community, with some arguing that posts to message fora should not be collected without the author's permission (Marx 1998; Reid 1996) and others suggesting that the posts made in public spaces may be considered open to public observation and scrutiny (King 1996). Since the pro-ana movement is provocative and sensitive, we felt it important to disclose KW's identity as a researcher to the users. She posted questions using her real name as opposed to a pseudonym, from the official university e-mail address. All names of participants used in this report are pseudonyms and usual efforts have been taken to protect anonymity. Any data from the web site or discussion forum not initiated by KW has been used here only after obtaining permission from its author.

Analysis of data was undertaken using thematic approaches, and the formulation by Kleinman (1988) of the elements of an explanatory model have been used here to structure the data and the report. As such, this is not a 'grounded' data analysis: what is of interest is not the 'underlying reality' of a situation, but rather the way that participants in a setting or interaction construct their social worlds and identities reflexively (Potter 1996). All data from the case study have been reported in the ethnographic past tense, and are reported verbatim.

Research Setting and Participants

The *Anagrll* website was created by 'Lily', and survived persecution and censorship from the mainstream media and web server owners. While it had been forced to close and re-open

under different names, at the time of the research it was a thriving, supportive and lively community that provided a comprehensive website. The site comprised a number of web pages and a message forum, which provided a busy interactive area where participants exchanged ideas, provided support and shared experiences, achievements and perceived failings. The home page of the website carried a warning common to many similar sites, that those entering understood that the site supported the pro-ana movement. Within the pages of the site, Lily offered an array of information relating to the anorectic state ('ana') and the pro-ana movement. This included a potted history of the pro-ana movement and its ethos, an archive on anorexia, recipes to promote healthy anorectic eating, and advice on nutritional supplements to sustain well-being. Most radically, the site contained '*thinspiration*': 'triggering' photographs of slim celebrities to inspire and sustain anorectic behaviour.

The *Anagrll* site attracted participants predominantly from the US, UK, New Zealand and Australia, who posted on a daily basis to an asynchronous message forum.³ The forum had a lively atmosphere, with numerous threads of conversation sharing experiences, support, misery and triumph. Most users posted daily to multiple threads, demonstrating a commitment to the site and the other users, who rapidly became 'ana-buddies'. The users were overwhelmingly females between 14 to 42 years, with the majority around the ages of 17 to 20. Most were in full time education, working part time or at weekend jobs to earn extra money.

Research Findings

In this section, we report our data from the ethnography of *Anagrll* and interviews with participants in terms of the elements of an EM. As has been shown in Figure 1, an illness EM can be described as narratives concerning:

- definition (answers to questions such as 'What is happening to me?')
- aetiology ('What is the nature and cause of the problem?')
- patterns of incidence ('Why has it affected me?'; 'Why now?')
- course and prognosis ('What course will it follow?'; 'What will happen if I ignore it?')
- treatment and management ('What treatment do I desire?'; 'What do I fear about this condition and its treatment?')

Beginning with definitions, we analysed our data in terms of these elements, to provide comparison with the EMs outlined in Figure 1. In the pro-ana EM, anorexia is perceived as a symptom of a more-deep-seated life disturbance, and causality is intricately associated with the social position of anorexia's sufferers, and for this reason it was inappropriate to attempt artificially to separate aetiology and patterns of incidence in the EM. In terms of disease course, we examine how pro-ana serves as a 'sanctuary', while in a section on management, we explore pro-ana's emphasis on anti-recovery, and the techniques promoted to sustain anorexia, including the use of pharmaceuticals to maintain low body weight. Throughout, we highlight the contradictory nature of the movement and its attitudes to the anorectic condition as both a damaging behaviour and as a condition to be maintained.

Defining the Pro-Anorectic Self

For those in the pro-ana movement, the definition of anorexia is experiential and aspirational, and contributes to a sense-of-self. In the pages of the *Anagrrl* website, Lily described pro-ana as a means to enable participants to take an active role in living with what society considers a debilitating, dangerous and shameful disease. Anorexia, she suggested, was defined by contradictory feelings, centring around insecurity and vanity on one hand, and self-satisfaction and the relentless striving for perfection on the other. For Lily, anorexia was all-consuming, and offered the 'wisdom of the truly beautiful,' providing power and control. Becoming pro-ana was a complex and risky process that required a dangerous and stringent regime of eating to restrict calorie intake to a 'survival level' of about 700 calories per day: the ana way-of-life: eating, fasting, purging and exercising would become 'an obsession', according to Lily. In addition to the adoration of 'thinspirational' celebrity pictures and self-punishment for not measuring up to these standards of feminine beauty, the pro-ana ethos was about *safety* in managing a highly dangerous condition.

Some participants such as Susan were keen to emphasise that anorexia was not just defined by low body mass.

Personally, I feel that if a person is starving themselves or throwing up *solely* because of the desire to look like kate moss, devon aoki (hehe...my favorite model),

gisesle, etc ...they don't have all the criteria to be considered anorexic. Anorexia is defined as a mental disease... the ability to play mind-games with yourself relating to anything food or exercise.

One manifestation of the pro-ana identity is participants' self-presentation in their contributions to the message board. Using a combination of text and photographs, participants framed their bodies to reflect and re-create the values of the pro-ana movement. For example, one forum was dedicated to posting photographs, and some were captioned with a comment about how the image may be 'disturbing' or even 'crack the screen', because the participant is fat and undesirable. But these photographs appeared to have been selected with care, to present a deliberately staged version of the self, where hair, make-up and clothes have obviously received considerable attention. They received much comment from other users, who would compliment the pictures, noting that the subject was exceptionally thin and beautiful, and a source of *thinspiration*.

Users who chose not to post their photographs constructed their online identities and selves using other methods, such as the creation of a 'signature'. Typically the signature contained the users current and goal statistics and measurements. Participants appeared to apply a standard format, incorporating their height, current weight (cw), high weight (hw), low weight (lw) and goal weights (gw). Users often provided two or three goals to work towards. For example, Jenny provided details of her height, weight and aspirations:

H: 5'2; cw:100 down five lbs; hw:120; lw:75lbs; 1st gw:90lbs; 2nd gw:80;
3rd gw:70lbs ~ I always was told to test the limits~

In addition to these statistics and goals, the users might provide a quotation, usually from film or music, which captured their feelings towards their self and towards ana. For example, Marcy used as her signature a lyric from the Manic Street Preachers' song *4 stone, 7 pounds*:

...i wanna be so skinny that i rot from view...

With such a marker, Marcy expressed both her obsessive desire for radical slimness and her insecurity and wish to disappear.

Causation and Patterns of Incidence: Anorexia as Symptom

The data from discussion forum messages and interviews suggest that for the participants in this pro-ana group, anorexia was both a disease in its own right and a symptom of an underlying disturbance in the lives of its sufferers. Like other cultural and feminist theorists of anorexia, Lily and other users of the site identified complex social relations surrounding the causality of anorexia: the beauty industry, an obsession with celebrity lifestyle that permeates current Western culture, and a desire and perpetual longing to be thin, and thus to be considered beautiful, successful, happy and healthy. In data elicited by questions posted to the forum, participants reflected on the causes of their disordered eating.

I think a lot triggered me to anorexia/bulimia...at that time I was sexually and emotionally abused...plus taking care of an ill parent at home...stress at school and with friends etc. ... it got to be too much so i thought things would be better if i just lost weight and looked better...things would get better...but that didn't happen and I have yet to shake this thing.

I've always been "thin" or so they've told me. But what triggered me was my best friend's boyfriend... He always used to criticise me and make fun of me and call me ugly. It hurt so much I contemplated suicide. Then it was probably May when my ED [eating disorder] started, I think it was because I thought, Well, I'm skinny, I have that much going for me, Maybe if he notices how skinny I am he won't bother looking at the rest of my imperfect body. I was 89 pounds then and now I'm 94, I think in July I noticed I had an ED, I started researching things on the internet about Anorexia, and everything applied to me...It was scary But I thought I would take control and show that fat ass a thing or two!

There is an element of paradox in this aspect of the pro-ana EM, between anorexia as a 'lifestyle' and as a 'disease', and this was reflected in postings to the discussions and in

interviews with participants. Participants suggested that becoming anorexic was both because slimness was deemed attractive and as a means of control.

... it started in 8th grade. I had never been really overweight, but i was average -- about 115 at 5'3. there was just too much going on in my life...mostly, I didn't know who I was. maybe I was having a really early mid-life crisis. I'm adopted, and my whole family is white, while I'm Asian. I had/have a lot of issues circling around feelings of abandonment, which I partially translated into 'no one loves me...not even my real parents' type stuff. I know it might not be true, but its the way I internalised stuff. I wanted to have people care about me...even if it was just boys on a physical level. and I did get a lot more attention. and it felt awesome. so I guess that's it. partially to be more aesthetically appealing, partially [because] I didn't feel I was good enough for anyone to care.

Many of the older, regular participants who posted daily suggested that there was a distinction between those looking for a glorified diet and 'true anas', whose anorexia was a consequence of some underlying malaise. In an interview, Susan emphasised the painful and destructive characteristics of anorexia:

"True anas" have much underlying pain or desperation for power, besides their desire to look "good." After a while, the desire to look good goes away ... an emaciated anorectic is not a pretty sight, and for the most part we believe it deep down.

There was conflict between those in the group who were using pro- anorexia as a 'cool' means to diet, and others who saw the purpose of pro-ana as a means of supporting individuals with a disease. Those choosing anorexia as a type of diet to achieve Western ideals of beauty could be instantly identified, claimed Beth:

Genuine sufferers- the [people], mostly female, who are in pain and really do suffer from some mental affliction or illness related to food, eating, weight, etc. There are a lot of dickheads on the Net, especially younger ones (13 or 14 who come onto sites

and ask how to 'become' ana, or say they are 'trying', but want tips other than fasting and purging- ones that require no effort or pain. I think there looking for a quick fix weight loss solution, probably coupled with ignorance, naivety, attention seeking or some form of needing help for some other problem they have. You can usually tell who's 'for real', just by the tone of their writing.

When Angela made a decision to leave the group, she sent a posting to the forum to explain herself. She wrote of irritation with those hanging on to pro-ana as a means to lose weight and diet, rather than being dedicated to supporting those with anorexia:

I think I'm going to leave this forum. ... It seems it's full of selfish people thriving on attention and I don't feel like anyone is being supported as they should be. . I love it when people join this board and I always welcome everyone. But not if you are selfish and looking for a quick diet. One girl, who will remain nameless, from this board [sent me a message] a few days ago and asked me how to become anorectic...I wouldn't help.

For these participants, anorexia could not be simply discarded at will like a diet: it was symptomatic of underlying pain and a need to exercise control.

Course and Prognosis: Ana as Sanctuary

In accordance with an acknowledgement of anorexia as a disease, many participants saw the process of becoming and sustaining an anorectic state as creating a place in which control and purity could be found. For example, Jenny, in a posting to the message forum, described how anorexia represented a form of security and comfort in an often-disordered environment:

I think of my ed [eating disorder] as a sanctuary from the pain that I've lived through. I have control over myself when I restrict, and I have control over my body when I purge and that is what has got me through the hard times in my life, the times when there was no control or stability in sight.

Similarly, Kathryn, in a posting to the message forum, revealed that her eating disorder provides a sense of support in a life that was often unbearable:

I don't want to die to escape my ed [eating disorder], I want to die to escape life. But, I'm trying to meet life head on, I use my ed to bolster me through. But, I know if I ever let go I will never make it as far as I was meant to be. Because then I obsess and wonder what would have happened if I hadn't let my ed go.

For Jenny and Kathryn, anorexia was a key support system in a life that they saw as out of control. Although anorexia was an all-encompassing obsession, it also represented a haven; a piece of life, the self, the body, experience that could be owned, moulded, shaped and presented as a pure and worthwhile achievement, as Susan also reflected in an interview.

... what holds me back from recovery... the fear of losing control of my body, of my life. I'm so used to my "lifestyle" that I don't want to even imagine going on without the structured schedule of knowing that I WILL work out everyday and not eat.... I think if I ever recover it'll be by myself.

Websites such as *Anagrll* provide a refuge for anorectics, according to another respondent.

I don't agree with promoting or encouraging anorexic tendencies at all. however, I do agree with giving anorexics a place to go, a place to find support and learn about the disorder. this way hopefully everyone will know how to do this as healthy as possible. the reason why anorexia is so hard to recover from is because it is just as much psychological and it is physical if not more actually. in the psychological sense ana makes you feel so alone, so depressed, completely isolated and unloved. pro-ana websites create a place for us to go, and talk with others and try and not feel quite so alone, however, sometimes even that isn't enough.

In pro-ana, the objective was to sustain life in the anorectic condition, as Angela emphasised in the following posting.

... this board SHOULD be used for pro-anorecticS. Not pro-anorexIA. We should not be in favour of the disease that kills thousands of girls a year, rather in favour of the girls and boys who have this horrible disease and help them the best way they can... whether it be by giving support to start another fast or advice on the "healthiest" way to handle low calories. Not to teach others how to die

Pro-ana was thus a space to manage and live with the disease in the safest way, as opposed to eradicating it and forcing the participants into recovery. We will consider this further in the following section.

Disease Management: Supporting Anti-recovery

From the pro-ana perspective, recovery was not an option for most anorectics. Unlike other anorexia EMs, the main objective of management in pro-ana was not treatment but the safe management of a dangerous condition. Pro-ana websites – according to one respondent -- offered support ‘in a non-judgmental way’, rather than a ‘politically-correct’ approach in which support was given to achieve recovery. The pro-ana movement rejects the assumption that recovery is the sole objective, and allows the anorectic space to play out routines and rituals that are valued and provide comfort in flailing, difficult lives and circumstances, as Charlotte remarked in an interview.

I joined a pro-recovery anti pro-ana site and they were all politically correct and trying the proper support in a recovery type position - but they had an article on pro-ana and I looked into it - at first just to get some triggering pics and stuff, but came across this site and have found on the whole that the support I receive on there is much better than the support I received on the other maybe one day I will be "ready" for recovery but i certainly am not yet - and I am sick and I like to know there are people out there who feel the same way as me.

Anagrrl illustrated three aspects of this commitment to survival and living with anorexia: tips on how to sustain health while living with a debilitating condition, for example by using multi-vitamins to supplement a restricted anorectic diet; encouragement in the form of ‘thinspiration’ and discussions of the use of weight loss pharmaceuticals.

The website supplied a range of recipes to sustain low body weight

Things no ana should EVER be without:

1. Snow cones! (Easy on the syrup, though!)
2. Soda crackers with ketchup and a LOT of black pepper
3. Sugarless gum
4. Water
5. Raisin bran (In moderation)
6. Vegetarian hot dogs! (Only 56 cals a piece as opposed to the whopping 130-140 something of normal ones)
7. Fresh fruit

We may not eat much, but when we do, we should be able to enjoy it!

... get a bowl of mustard. get a baby carrot. use the carrot as a spoon and eat the mustard. eat the carrot for dessert

and tips on how to manage anorectic on a daily basis. For example, this was a tip on how to cope with a gathering of nosy relatives.

- Eat protein foods, no carbs. Then they still think you're eating normally since no one concerned with their weight could eat stuff like fried chicken.
- Talk about the food at your school or work or any place out of the house and how inexpensive it is so they think you eat out of the house too (sounds stupid I know but it works for me)

'Thinspiration' was one of the most notable features of *Anagrrl*: photographs of thin celebrities provided encouragement to sustain low weights in the face of social pressures. While Lily acknowledged the congruence between these images and Western ideals of beauty, data collected during the study suggested that viewing this catalogue of admired 'thinspirational' celebrities was more than a desire to emulate Western heterosexual ideals of beauty, and was more a reassurance and a comfort to the anorectic. Susan felt that viewing pictures of slim celebrities would not in itself lead to anorexia.

I think the majority of the time, women or girls see those pictures and feel that's what they're supposed to look like...so they go on a normal, everyday diet. Nothing wrong with that. ... Maybe a boyfriend in the past criticized them on their weight while comparing them to plastic Pamela Anderson... maybe a father or mother had a past eating disorder or has control issues, and also constantly criticized. With the weight loss comes the approval of these people, giving a high to the ana, giving her a reason to please them more and go further. At this point however, pictures of celebrities are out the door... that's not what's in their mind... their mind is 'must get skinnier, thinner' ... I don't know if any of that really explains how I feel about pictures of skinny women... I just don't think they play into ana that much. It gives motivation, but it doesn't give a reason to starve yourself.

Thinspiration could also come in the form of behaviours.

Go to the mall and try on some clothes! I do that all the time on weekends. really works. there's nothing like a too-tight pair of jeans to stop that tummy from grumbling.

If you're already a size zero try the junior's division. I 'm a zero at most stores so what I do is I go to juniors. gosh! I 'm a size 11 there!!!!

One aspect of the pro-ana movement that related to this anti-recovery stance was the use of pharmaceutical and proprietary medications to sustain weight loss. Conventionally, weight loss drugs and treatments have been developed, prescribed and used as a means to treat overweight-ness and obesity, and their use has been defined and controlled by the

pharmaceutical industry and the medical profession (Authors, in press). In contrast, the users of the *Anagrrl* web site appropriated treatments for overweight-ness as a means to sustain low body weight, and as aid to the control and purity sought by anas. Diet pharmaceuticals such as Xenadrine were considered by participants in *Anagrrl* as a means to achieve the purity of thinness. The 'tips and tricks' page on *Anagrrl* suggested the most effective diet drugs, and where they could be obtained on the Internet.

During our research, a number of threads emerged on the *Anagrrl* message board that discussed the merits of weight-loss drugs and supplements. Discussions focused on the different types of drug that were available, the countries where they could be obtained, whether they could be acquired on the Internet and the expense of shipping, the side effects and effectiveness of the drugs, and the experiences of the users. Participants would offer advice and guidance on the use of the drugs and problems obtaining the products. For example, Emily expressed her preference for a particular drug:

Personally, I like the diet pill Xenadrine. I really liked the one with ephedrine it, but now its hard to find since ephedrine is so bad for you. But yeah, they work really really well.

Sometimes, participants used the *Anagrrl* message board to ask questions about drugs or where to obtain them.

I've been searching around diet pills I can get here in the UK, especially from GNC because I live in a flat above one, and I noticed these. They're the Xenadrine without ephedrine. Does anyone use them? What results have they experienced? They seem pretty expensive especially since one bottle only lasts a month so I wanted to check they actually work. (Elizabeth)

Susan, a participant from New Zealand, made a request for direct help in obtaining medication:

I'm really putting my trust into everyone here, money-wise. But I'm willing to take the risk. I would LOVE to have diet pills again. When in the states I had Metabolite plus and Mega T green tea supplements. HOWEVER, now I am back in New Zealand, and my supplies have RUN OUT! What I am asking is this: Is there anyone who would receive a money order from me, big enough to pay for pills + postage + packaging, or I could send a bank cheque, and buy me some supplements and send them to me?

They are not illegal in NZ, I just can't find any one who has them in stock, because they would be expensive after adding on the import costs. ...

I miss them like I would miss my right arm... I hate not having any. I'm so lethargic. ...

These postings to the forum demonstrated both the importance of the web site as a source of information for pro-ana participants and the extent to which the use of weight-loss technologies have become embedded into the ana project of sustaining the anorectic state and rejecting recovery as an option.

To summarise, the data we have presented suggest that features of the pro-ana EM differentiate it strongly from other models. These differences are most pronounced in the narratives concerning course, prognosis and management of the anorectic condition. In the following discussion, we will consider the implications of the pro-ana EM, both for its users and in terms of resistance to professional constructions of a disease and the subversion of technology.

Discussion

This ethnography of a pro-anorexia community provides an insight into an 'underground' group that challenges both medical and societal models concerning body shape and size and approaches to the treatment of anorexia. Our understanding of the complex and sometimes paradoxical nature of the movement became clear during the process of analysis, by recognising that the pro-ana way-of-life constitutes an explanatory model of anorexia that stands in opposition to both medical and social models.

The medical model has established anorexia as pathology, to be treated by various techniques including re-feeding, with recovery as the final objective. Social analyses have critiqued the medical model, identifying the psychological and social aetiology of eating disorders and implicating social and media representations of slimness and beauty and the patriarchal nature of Western society as factors in the creation of disordered perceptions of body shape (Berg et al 2002, Bruch 1973, Gilbert 2000, Grogan 1999, Orbach, 1993). Yet despite their sophisticated analyses of the causes of anorexia, as was seen earlier, these socio-cultural models support the normative perspective that anorexia is a condition to be treated and eradicated. In Figure 2, we contrast the pro-ana EM with those already described, in terms of the analysis conducted earlier.

Note to editor: insert Fig 2 about here

The pro-ana EM is a lay construction of an illness grounded firmly in the experiential and contextual reflections of participants. *Anagrll* users highly valued low body mass index, and employed dramatic descriptions of their current and aspirational body masses through statistics and photographs of themselves. However, this was tempered by a sophisticated understanding of the aetiology of anorexia. Like some of the cultural and feminist models, participants saw anorexia not as a disease in its own right but as a symptom of a more deeply-seated malaise emerging from psychological, emotional and social problems faced by sufferers (see, in particular, the work of Chernin 1983 and Orbach 1993). Anorexia was a ‘sanctuary’ into which these troubled individuals have fled, to cocoon themselves from their problems and from the oppression of a patriarchal society.

The fundamental divergence from other models appears in relation to prognosis and disease management. Unlike other models, the pro-ana EM takes its analysis to the logical conclusion: if anorexia is a response to social and emotional difficulties, and one that enables individuals to cope, then it makes no sense to ‘cure’ this coping mechanism. Instead what is advocated by pro-ana is damage limitation and a survival strategy to reduce the risks associated with extremely low body weight. As one respondent put it: ‘... giving anorexics a

place to go, a place to find support and learn about the disorder ... this way hopefully everyone will know how to do this as healthy as possible’.

In their ‘anti-recovery’ stance, pro ana communities acknowledge the symbolic import of anorexia to its sufferers: as noted, one respondent summarised this as being ‘pro-anorectics’ not ‘pro-anorexia’. In other words, the movement is there to support its members through life problems, helping them manage anorexia safely, without removing the crutch that it provides them. Contradictory elements of pro-ana, such as the use of thinspirational images that were also condemned as promoting unrealistic expectations of female body shape, can be understood from this analysis of the pro-ana EM. Like other lay EMs described by social anthropologists and sociologists, pro-ana emerges as a coherent system of understanding grounded in the shared experiences of being anorectic, as opposed to externally-imposed models of disease. As such it represents an example of an emergent community based around resistance to mainstream models of health and illness.

We wish to focus on two aspects of the pro-ana movement in our concluding remarks. The first concerns the use of an online community to support a body of ‘expertise’ that runs counter to dominant medical and social models. The second considers how such underground movements appropriate technologies to create and sustain an ‘anti-medical model’ of anorexia.

The notion of an ‘expert’ patient in UK health policy (Department of Health 1999, 2001) links patient expertise to empowerment and quality of life (Department of Health 2001). Expert patients are those who can manage their own illnesses and conditions by developing knowledge relevant to maintaining health and countering illness (Shaw and Baker 2004). However, this conceptualisation of the expert patient has been questioned. While there is a logic to developing patient expertise in an age where one in three people has a chronic illness or disability, and medical interventions manage rather than cure these conditions, the notion of the expert patient ignores entrenched professional power and structural constraints concerning access to resources (Tang and Anderson 1999), and conflates experience and education (Wilson 2001: 135). Paradoxically, patient expertise both assumes compliance and a degree of taking control of the management of health (Thorne et al 2000), while Wilson

(2001: 139) suggests it contributes to a medicalising surveillance of every aspect of a patient's life and self-care (see also Gastaldo 1997: 124).

In work on the use of weight management drugs by people defined medically as overweight or obese, we explored the development of expertise among lay people (Authors, in press). Participants in an Internet support group devoted to discussion of orlistat (Xenical) and similar pharmaceuticals were thoughtful and reflexive about the origin of their condition and its treatment. However, in their pursuit of weight loss and engagement with a medicalised programme and treatment of weight loss, the 'expertise' displayed by these users of weight-loss drugs conformed to a biomedical approach. Being overweight or obese was a dangerous and threatening condition to be remedied, with bodies restored to an acceptable and 'normal' shape and size. This kind of patient expertise, we suggested, did little to challenge medical dominance of how health and illness are to be understood and treated. Most participants adopted a biomedical model, and the role of the support group was conservative, offering a means to share experiences, while not challenging the mainstream of biomedical opinion and guidelines for the use of pharmaceutical drugs.

The data presented in this paper demonstrates such a challenge to medical (and social) definitions of health, illness and embodiment. In the *Anagrrl* web site we saw a profound rejection of established approaches to eating disorders in which anorexia is a condition to be cured. As one respondent suggested: '... maybe one day I will be ready for recovery but I certainly am not yet - and I am sick and I like to know there are people out there who feel the same way as me'. Rather than becoming 'expert patients' within a medical or biopsychosocial EM, pro-ana established an alternative, experiential model of anorexia, which made sense for those immersed in the routines and regimens of the illness. Here, expertise was not grounded in medical definitions, but opposed these, setting out an alternative, underground perspective that enabled and enhanced a life choice. It offered an alternative sense of 'health' in which a body size that the mainstream would consider unhealthy and morbid was to be managed pro-actively to sustain life.

The pro-ana movement is also of interest sociologically because of its exploitation of technology. First, it has been enabled by the technology of the Internet, which supplies a

medium for communication and information sharing independent of geographical constraints, and – despite efforts to suppress and censor web-sites, establishes a space free from the prejudices of a society that sees it as a pernicious and dangerous movement. The role of the Internet in supporting patients has been acknowledged in various studies (Mendelson 2003, Mitchell 2003, Turner et al 2001), but our study of a pro-ana community suggests that the Internet is also used by those who reject and resist mainstream models of health and illness.

Second, and perhaps of broader significance, we see in the pro-ana movement's use of weight-loss drugs to support the anorectic state a radical subversion of pharmaceutical technology. In their appropriation of drug treatments, pro-anas have requisitioned these pharmaceuticals for an application that was never intended by their manufacturers: not for the treatment of obesity within a medical regime, but to enable weight loss among people that, from a medical standpoint, should gain rather than lose weight. By adopting prescription and pharmacy medicines, the pro-ana movement has requisitioned for its own ends a pharmaceutical technology that was born within biomedicine and gained it legitimacy from use in a medical context.

There is a growing literature on drugs and medications used to enhance aspects of lifestyle. Gilbert et al (2000) suggest that sildenafil (Viagra) and orlistat (Xenical) can be considered 'lifestyle medicines', conceived by their consumers as enhancing life experience rather than simply treating a disease or medical 'problem' (Ashworth et al. 2002, Flower 2004). Users of Viagra range from those diagnosed with 'erectile dysfunction' to those using the drug to enhance and prolong sexual performance (Potts 2004). In a study of body builders, Monaghan et al. (2000) found that 'sensible drug-taking' and management of risk established meaningful social identities for these users of pharmaceuticals. Like participants in our study of pro-ana, body-builders normalised a lifestyle choice beyond the mainstream, and use and discussion of drugs became part of the routines of that lifestyle and a marker of their identity (ibid). This unofficial application of pharmaceutical technology adds a further twist to the licensing and governance of drugs in the age of the Internet (see Authors, forthcoming, for a full discussion of pharmaceutical governance), and reminds us that technology is socially constructed and can only be understood in social context.

In conclusion, we have provided here an analysis of the pro-anorexia movement in terms of a lay explanatory model that contrasts with both biomedical and social models of anorexia. From an ethnographic exploration, we have disclosed an internally-coherent model of causation, process and management of the condition, and shown how this emerges from the experiences of pro ana. What from the outside appears a bizarre and pernicious sect, can be understood as a reasoned world-view. Pro-anorexia is not a diet, nor is it a lifestyle choice. It is a way of coping and a damage limitation that rejects recovery as a simplistic solution to a symptom that leaves the underlying pain and hurt unresolved. Pro-ana's use of technologies (communication and pharmaceutical) have respectively enabled its organisation and supplied an effective tool for weight management, and these applications and subversions of technology are deserving of sociological attention. Yet above all, while the routines and rituals of pro-ana appear extreme and risky, they are normalised, controlled, justified and legitimated through the sharing of information, risk management and support. Our analysis may offer those practitioners working with anorectics a further insight into anorexia, its sufferers and its management.

Notes

1. This was part of a larger study into Internet pharmacy, which was funded by the Economic and Social Research Council Innovative Health Technologies programme (grant L218252057). Details may be found at <http://www.pharmakon.org.uk>.
2. The name of this group has been altered to protect anonymity of participants.
3. In asynchronous fora, messages are not read in 'real-time' but are archived for access at readers' convenience.

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	Medical	Psycho-social	Socio-Cultural	Feminist
Definition	Psychiatric disorder marked by dangerously low body mass index	Loss of appetite; life-threatening weight loss	Loss of appetite; life-threatening weight loss	Loss of appetite; life-threatening weight loss
Cause/Aetiology	Organic or mental health problem	Reaction to developing sexuality or to family relationships	Influence of the media and culture of celebrity.	Low self-esteem; body shape expectations in a patriarchal society;
Timing and Social Distribution	Adolescent females	Peri-pubertal	Young people influenced by culture and media	Women exposed to oppressive, sexist culture and media imagery
Course and Prognosis	Ill health/Fatality or Recovery	Ill health/Fatality or Recovery	Ill health/fatality or Recovery	Ill health/fatality or Recovery
Treatment/Management	Re-feeding; therapy	Re-feeding; therapy	Re-feeding; therapy	Re-feeding, self-help

Figure 1: Explanatory Models of Anorexia

	Explanatory Model				
	Medical	Psycho-social	Socio-Cultural	Feminist	Pro-anorexia
Definition	Psychiatric disorder marked by dangerously low body mass index	Loss of appetite; life-threatening weight loss	Loss of appetite; life-threatening weight loss	Loss of appetite; life-threatening weight loss	Experientially and aspirationally defined
Cause/Aetiology	Organic or mental health problem	Reaction to developing sexuality or to family relationships	Influence of the media and culture of celebrity.	Low self-esteem; body shape expectations in a patriarchal society;	Response to a difficult life situation
Timing and Social Distribution	Adolescent females	Peri-pubertal	Young people influenced by culture and media	Women exposed to oppressive, sexist culture and media imagery	Females seeking control and stability in a disturbed life
Course and Prognosis	Ill health/Fatality or Recovery	Ill health/Fatality or Recovery	Ill health/fatality or Recovery	Ill health/fatality or Recovery	Recovery not sought: health sustainable if managed
Treatment/Management	Re-feeding; therapy	Re-feeding; therapy	Re-feeding; therapy	Re-feeding, self-help	Safe management and maintenance of anorexic behaviour including use of drugs.

Figure 2 Explanatory Models including Pro-ana EM