Recovery of Normal Body Weight in Adolescents with Anorexia Nervosa: The Nurses’ Perspective on Effective Interventions

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PROBLEM: Little is known about effective nursing interventions for adolescents with anorexia nervosa. The purpose of this study was to discover which aspects of nursing care are most effective, according to nurses, in recovery of normal body weight in adolescents with anorexia nervosa.

METHODS: A qualitative descriptive research design was applied with individual in-depth interviews and a focus group. Thematic analysis was used to analyze the data.

FINDINGS: Nurses state that they are in a key position in guiding patients with anorexia nervosa toward a path of weight recovery. A good therapeutic relationship is essential to the implementation of targeted nursing interventions in the areas of eating and exercising, social support, and parent counseling.

CONCLUSIONS: The results of this research can be used to define more detailed nursing interventions, the effectiveness of which can be tested in follow-up research.

Introduction

Anorexia nervosa is an eating disorder predominantly affecting girls and young women. In industrial countries, the disorder’s prevalence is 370 per 100,000, with the yearly incidence being approximately 8 per 100,000 (Hoek & van Hoeken, 2003). Anorexia nervosa may affect a patient’s mental and physical condition to such an extent that involuntary hospital admission is inevitable. Approximately 15% of all patients suffering from anorexia nervosa die from the disorder: two-thirds from malnutrition, one-third as a result of suicide (Dutch Committee for the Development of Multidisciplinary Guidelines in Mental Health Care, 2006).

The Dutch Multidisciplinary Guideline for Eating Disorders (Dutch Committee for the Development of Multidisciplinary Guidelines in Mental Health Care, 2006) recommends that patients with severe symptoms of anorexia nervosa be treated in specialist clinics. The principal aim of inpatient treatment programs is for the patients to regain normal body weight, because the restoration of normal weight is considered a prerequisite for a patient’s full personal and social recovery.

Within the inpatient treatment setting, nurses play an essential part in the recovery process through their day-to-day involvement with the patients (King & Turner, 2000; Micevski & McCann, 2005; Ramjan, 2004). The following elements of attitudinal commitment are vital to the proper care and guidance of anorexia patients: acceptance, attentiveness, respect, empathy, show of interest, honesty, and recognition of the patient and her complaints. Nurses must, in addition, set firm rules and be a role model of health, particularly by exhibiting normal eating habits. Patients with anorexia nervosa have stressed the importance of a good therapeutic relationship (Button & Warren, 2001; Colton & Pistrang, 2004; de la Rie, Noordenbos, Donker, & van Furth, 2006; Federici & Kaplan, 2008; George, 1997; Tierney, 2008; Tzori, Sullivan, Fear, McKenzie, & Bulik, 2003). The fact is, however, that such a relationship may come under strain when mutual feelings of mistrust emerge, or when regulations are to be enforced, specifically regulations which serve to help patients conquer their dysfunctional eating and exercise patterns (King & Turner, 2000; Ramjan, 2004). Nurses must pay attention not only to the physical recovery, but also to the emotional and psychosocial recovery of their patients.
(Button & Warren, 2001; Colton & Pistrang, 2004; Tierney, 2008). Apart from the general attitudinal aspects described above, there is little information available about the specific role that nurses play in the care of patients with anorexia nervosa or about the specific nursing interventions that can be employed in this regard.

In 2006, a qualitative study was conducted among patients with anorexia nervosa to discover what they perceived as effective nursing care (van Ommen, van Meijel, van Elburg, Meerwijk, & Kars, 2009). Participants in the study were patients who had regained normal body weight after having been treated in a specialist clinic. They were asked which aspects of nursing care they believed had contributed to the recovery of their normal body weight. This article, which describes the nurses’ perspective of effective nursing interventions, is a follow-up on the earlier study.

The main question in the present study was as follows:

Which aspects of nursing care do nurses believe contribute to the recovery of normal body weight in patients with anorexia nervosa in the age group 12–18?

The purpose was to develop—from the nurses’ perspective—a tentative model explaining the effectiveness of inpatient nursing care of adolescents diagnosed with anorexia nervosa. The model can be used in combination with the earlier results from the study by van Ommen et al. (2009) to design nursing interventions that do justice to the needs of both patients and nurses.

**Methods**

**Research Design**

A qualitative research design was found to be the method most appropriate to describe and analyze the experiences and views of nurses. Within the context of this design, a choice was made to apply thematic analysis (Joffe & Yardley, 2004) for the analysis of our data.

**Population**

The study was conducted in a clinic specialized in the treatment of eating disorders. This clinic treats young people in the age group 12–18 who suffer from eating disorders, including anorexia nervosa. The clinic is recognized throughout the Netherlands as a center which assures the highest level of specialist nursing care. The treatment results are good. In 2006, 14 of the 15 anorexia patients left the clinic with a body mass index (BMI) within the normal range for age (>SD – 1.5 corresponding with a BMI of approximately 19 kg/m² for adults). This indicates that treatment in the clinic is successful as far as weight recovery is concerned.

Eight healthcare professionals were interviewed, including seven nurses and one social worker. For ease of reading, we will refer to the group of participants as nurses throughout. The following inclusion criteria were applied:

- at least one year of clinical experience with anorexia nervosa patients (APA, 2002) in the age group 12–18;
- degree in nursing or social work; and
- an employment contract providing for a workweek of no less than 24 hr.

**Data Collection and Analysis**

Data were collected by means of individual semi-structured in-depth interviews. Key topics were “normalization of eating and exercise habits,” “provision of structure,” and “assumption of responsibility.” These topics were derived from an earlier patient study conducted by van Ommen et al. (2009). Based on these key topics, the entire treatment process, from admission to discharge, was reviewed systematically with the respondents with a view to charting the various types of interventions applied throughout the process. Data were collected and analyzed in a cyclical pattern. Eight individual interviews of approximately 1 hr were held, followed by a 2-hr focus group interview. The focus group was scheduled to discuss the provisional conclusions drawn and to resolve questions that had arisen from the analysis of the eight individual interviews. More specifically, the purpose of the focus group meeting was to discuss subjects that had emerged as ambiguous, sometimes even conflicting, from the interviews. A focus group interview is particularly suitable to resolve such ambiguities, because it facilitates interaction between the participants, and can thus clarify the views on a specific topic (Kitzinger, 1995). The focus group meeting was attended by four nurses who had also been interviewed individually, as well as a psychologist and a dietician, both of whom worked for the treatment unit where the present study was conducted. The participation of the psychologist and dietician was aimed at enlightening the multidisciplinary perspective of the nursing interventions.

All interviews were audio taped. The individual interviews were transcribed verbatim and coded through thematic analysis (Joffe & Yardley, 2004) using MAXQDA, a software program for qualitative textual analysis.

The quality of the research was assured through peer reviewing: both content-related and methodological aspects of the research were discussed periodically within the research group. This led to procedural adjustments, as well as textual changes in the findings. In addition, a member check was arranged through the presentation of the draft study report for validation to four of the nurses who had participated in the interviews. Their comments were incorporated into the final study report.
The Scientific Committee of the clinic where the research was conducted reviewed the research protocol in terms of scientific merits and feasibility.

Findings

The elements of nursing care that the nurses believe contribute most to effective nursing can be divided into four main categories: (a) resumption of normal eating, (b) resumption of healthy exercising, (c) development of social skills, and (d) parent counseling. These four categories will be discussed below throughout the timeframe from admission to discharge. The three key topics used during data collection ("normalization of eating and exercise habits," "provision of structure," and "assumption of responsibility") are elaborated in the following presentation of the results.

Resumption of Normal Eating Habits

Taking Over Responsibility

The interviews revealed the importance of nurses offering the patients clarity about eating rules from the very beginning. This message set the tone for the entire treatment process. The dietician’s nutritional advice was generally ready at the time of the patient’s admission, and the nurses could begin to help the patient with her new diet. The nurses stressed how important it was at this stage of the treatment that they take over virtually full control and responsibility from the patients. Patients generally resisted the obligation to eat again, but, as the nurses reported, most of the patients conceded in retrospect that the pressure to eat had been crucial to their breaking with anorectic eating habits.

Taking over responsibility from the patients was also urgently needed in many cases because of the poor nutritional and health condition they were in upon admission to the clinic. When patients disregarded the nutritional advice prepared for them or failed to regain the amount of weight expected of them, they were offered replacement nutrition or, if everything else failed, were drip fed. The nurses stressed the importance of being able to convince the patients that the struggle was against the eating disorder, not against them in person. At this initial stage of treatment, the nurses continually repeated their expectations of the patients. Their attitude was one of empathy and understanding, but was otherwise directional and focused on a change in eating habits. In this phase, the nurses made all decisions for the patients, but did not at any time lose sight of the need to explain the rationale behind their approach to the patients. The nurses interviewed emphasized that their structure-based and directional interventions were always combined with the emanation of a sense of safety and comfort, all this to support the patient’s transition toward a normal eating pattern effectively. The following quote illustrates the methods employed by nurses during meals:

The basic rule is that all nutritional advice must be followed from the very beginning. This generally is an enormous shock, but experience has taught us that patients will know what to expect when they are forced to make this big step immediately. The new patients are escorted to the table and we nurses sit ourselves down next to them. We determine, we decide, we choose what they eat.

In this way, nurses exercise direct supervision on the eating habits of their patients. They define and discuss what they observe during meals and immediately give instructions on how to change specific habits.

The nurses reported that they also involved other patients in the process of helping new patients overcome their biggest fear during meals. The older patients, already partly recovered, were used as role models for the new patients. The nurses encouraged them to share that they had also experienced the difficulty of starting to eat again. The nurses asked these older patients to tell about their efforts to overcome their fears, so that the new patients actually heard that others had gone through the same experience. As one of the nurses explained:

They know of each other what the problems are and how difficult it is to eat again and to not exercise. How terrifying it is to gain weight. Once they hear from others what works and what does not, you see them starting to think about it.

Transparency about eating, and about the patient’s fears and inner obstacles, was paramount according to the nurses. They openly named and discussed the patient’s habits. This made the disorder less secretive, and, at the same time, helped to break through the patient’s emotional isolation. They could finally share their closely guarded secret with others and there was a prospect of change, even when change was regarded with ambivalence and opposition.

Giving Back Responsibility

Once a patient regained a sufficient amount of body weight and showed a corresponding change in eating habits, the nurses gradually allowed the patient to take back responsibility. The nurses no longer sat next to her during meals, but still kept her in eyesight. The patient was given the opportunity to choose her own between-meal snacks. If all went well, she could also choose her own sandwich toppings and hot meals. One of the nurses described this gradual re-assumption of responsibility by the patients as follows:

The patients start with choosing their between-meal snacks, which they put on the table themselves. They work with this exercise for a week. The patient puts the snack on
the table, the nurse checks it. Sometimes the patient tries too hard and chooses too big a snack. We then have a little chat about that. If all goes well, the freedom of choice is extended. It is our job as a nurse to monitor continually whether patients make the right choices.

Nurses thus give patients the confidence that they can learn to make appropriate food and exercise choices on their own. The interviews showed that the nurses actively questioned their patients about the choices made. Specific cognitions that apparently played a role in making choices were discussed openly in order to reveal rigid reasoning patterns that would lead to a continuation of maladaptive eating and exercise habits. According to the nurses interviewed, it was important to show understanding, but to also discuss the issue of the specific disorder-related cognitions and offer alternatives. At this stage, the role of the nurses was supervisory rather than directional in nature. According to the nurses, most of the patients regarded this supervision as supportive. If it became clear at this stage that a patient was unable to handle the responsibility required, the nurses would return to a more directional approach or, where necessary, take over full responsibility from the patient.

Making Choices

When a patient showed that she was able to make responsible eating choices—evident from further weight recovery and a proper eating and exercise pattern—the nurses would pull back and encourage patients to make their own independent choices. This process took place both within and outside the clinic, for example, during periods of weekend leave. Toward the end of the treatment, the nurses counseled and encouraged patients to participate in meals and other eating events in various social contexts, that is, at school, at home, with friends, and to exhibit normal eating behavior on such occasions. The events concerned were prepared and evaluated in detail with both the patient and her parents.

The nurses also stressed the importance of the patients drawing up a relapse prevention plan at this final stage of the clinical treatment. The plan described the specific pitfalls, the initial relapse symptoms, and actions to be taken to prevent a new process of weight loss. Drawing up a relapse plan also provided the patients with an opportunity to put their clinical learning experiences to paper, which made it easier for them to have a real understanding of their behavior, the risks of any future relapse, and feasible preventative action. Exercise situations were discussed in advance and afterwards. The purpose of all this was to help the patients gain a deeper insight into potential triggers for renewed unhealthy eating and exercise patterns. The nurses interviewed stated that this was a vital element of the treatment process, because it taught the patients how to apply their newly acquired eating patterns outside the clinic.

At this stage, the supervisory role of the nurses changed into a safety net function. They confined themselves to holding a mirror up to the patient’s face in order to help them realize their own perceptions and behavior and thereby to promote self-regulation and self-responsibility to the fullest extent possible with a view to the patient’s imminent discharge from the clinic.

Resumption of Healthy Exercising

Nurses reported that they were often confronted in the clinic with patients who showed compulsive exercise behavior. In this respect, too, the nurses stressed the importance of providing directional support and encouraging restraint from the very beginning. Recognizing abnormal exercise patterns was one of the first main tasks for the nurses, who stated that specialist knowledge and experience was an absolute requirement for a proper performance of this task. Ostensibly normal (but overly performed) daily exercises—such as “active sitting” (i.e., sitting with contracted abdominal muscles and lifted legs), unnecessary walking or standing up, or other unnecessary movements—were, in actual fact, dominated by a desire to burn extra calories. The urge to move or exercise was especially strong after meals, so that the nurses kept a close and direct watch on their patients at those times, particularly during the initial phase of the treatment. Sometimes, additional checks were scheduled at times at which the patients were not in the common room. The nurses would then look up the patients to verify that they did not break their promise to not exercise.

I continuously tell them what I want them to do. “Please sit back and keep your legs still for a minute.” Sometimes this is too much to ask of them, especially in the beginning. It is impossible for them to just stop moving. In such cases, it is important to tell them what they are doing, even though you know they can’t stop for long.

The stated purpose of the nursing interventions was to turn unhealthy, compulsive exercising into healthy exercising, and to help the patients experience healthy exercise behavior. The direct supervision of a patient’s exercising patterns at the beginning of the treatment gradually shifted towards the creation of training situations in which the patients were taught how to exercise normally. For example, the nurses accompanied patients on a walk and indicated the normal pace of walking. As treatment proceeded, more outdoor group activities were organized to train the patients how to exercise in a healthy way.

The nurses set an example by telling how they dealt with food and exercise in their private lives. They explained that it was normal to eat more in cases of heightened physical strain like jogging, swimming, or other forms of physical exercise. The nurses also impressed on their patients that healthy
exercise was a fun activity in which relaxation, not compulsive calorie burning, should come first.

Before a patient was granted leave from the clinic, the nurses discussed with the patient and her parents what kind of activities had been scheduled and what extra food was commensurate with those activities. After the period of leave, a joint evaluation was conducted to identify the successes and failures as regards the intake of food and the activities undertaken. This procedure ensured that new learning activities could be defined for the next phase of treatment.

Once a normal exercise pattern had been established in the patient’s day-to-day life, the nurses would turn the conversation to sports activities, asking questions such as: “Which sports do you like to play?” “What fears does the practice of sports evoke in you?” “How can we, nurses, help you find your exercise of choice?” In other words, the nurses redefined sports and physical exercise from an activity aimed at weight loss, to an activity that contributes to the health and relaxation of the patients. According to the nurses, the key problem for most patients in engaging in new sports activities was the fact that they had a “new body,” no longer the thin and slender body they had been used to. The fundamental challenge for them was to learn to feel at home in their new bodies.

**Development of Social Skills**

The interviews showed that nurses encouraged their patients in many ways to resume their social lives, especially after the patients had returned to more or less normal eating patterns. The re-development of social skills started within the clinic. The nurses acted as role models, for example, by raising subjects during dinner that had nothing whatsoever to do with food or exercise, but instead focused on social roles. The nurses emphasized the importance of the patients engaging in age-appropriate conduct, both in the clinic and in the outside world. The nurses also encouraged the patients to pursue group activities that would help them perform social roles appropriate to their age. One of the nurses stated as follows:

To encourage them to learn new experiences, that life can be fun. To explore with the patient what kind of activity she used to enjoy. The longer a patient stays in the clinic, the tenser and more stressful this all becomes. But it is important that she should participate in that kind of activity anyway.

The nurses indicated that it was essential to ensure that the patients kept in touch with the outside world throughout the treatment. Active involvement in social activities generally depended on the patients’ progress in terms of body weight recovery. The nurses supported the patients in their search for meaningful and satisfying activities. Cognitions that hindered the patients in pursuing those activities were discussed with them. According to the nurses, this explicitation often-times revealed the irrationality of the cognitions. The actual expression of the cognitions concerned was essential to challenge their irrationality and to replace them with other, more rational thought patterns.

After a patient’s involvement in social activities, the nurses always discussed with her how she had experienced the event. The parents were sometimes asked to participate in the discussion to open up communication channels within the family. Where appropriate, the nurses provided advice on how to deal with the situation the next time, or they complemented the patient on her choices. That would boost the patient’s self-confidence and allow her to make more and more choices independent of her eating disorder—choices that would help them regain their position in society.

**Counseling of Parents**

The nurses interviewed stated that the task of counseling parents played an important role in the treatment of the target group. In their opinion, it was not-at-on impossible to treat a patient if her parents did not back the treatment. Therefore, the interviewees felt, nurses should invest time and effort in creating a good relationship with the parents, for example, by informing them in detail of the treatment to be given. This approach generally resulted in the parents endorsing the treatment, and, as a consequence, in the patient feeling justified in applying herself during treatment. The process of informing the parents and warming them up for the treatment to come also contributes to the parents giving their child the necessary support when she is on home leave. The nurses reported that the parents had often lost control and would be glad if their child ate even the tiniest morsel of food. The parents felt completely incapable of convincing their child to return to a normal eating pattern. This is why parents were often invited to join a meal in the clinic at the outset of the treatment. On such an occasion, the nurse acted as a role model for the parents, showing them how the clinic provided support during meals. The nurses showed that there were eating rules and how people normally dealt with food and eating, and that it was possible for a patient to eat a normal meal within a reasonable period of time. They thereby taught the parents how to regain control over the eating habits of their child. The close involvement of parents was also essential to the further course of the treatment. The parents were informed of all developments in the presence of their child. In addition, periods of home leave, such as weekends and national holidays, were discussed in advance with the parents. According to the nurses, their role as a source of information was very important to the parents. The nurses also considered it important for them to be available for the parents and to answer any questions the parents might have. The parents, in turn, were also a source of information for the nurses. They were the persons who knew their child best, and
who were present during periods of leave. This made the parents an indispensable source of information for both the nurses and the other healthcare professionals involved in the treatment. In most cases, the exchange of information was responsible for the good relationship that would arise between the parents, their child, and the nursing staff. The nurses and the parents together created the foundation for the consistent and clear action taken in respect of the child. This contributed to a sphere of clarity toward the child, and the possibility for the parents to perform or resume their role as parents.

Figure 1 contains an integral overview of the four main intervention areas and the way in which the nurses’ attitudes and roles, and the interventions employed, develop during the clinical treatment of the adolescents.

**Conclusions**

This research, conducted at a best practice setting, illustrates which interventions the nurses employed there consider to be effective. These interventions are described within the domains of resumption of a normal eating pattern and normal exercising, development of the patient’s social skills to facilitate social recovery, and supporting the parents in their full parent role. The descriptive research design using thematic analysis proved to be well-suited to chart the experiences, opinions, and perceptions of the nurses. The findings of the study closely match those of the study conducted by van Ommen et al. (2009) into the patients’ perspective of effective nursing care. The two studies together provide a practical framework for a more detailed listing of nursing interventions in patients with anorexia nervosa. These interventions can then be tested on their effectiveness in a follow-up study. The two studies also provide a framework for internally testing the quality of care offered in individual treatment settings. The present research was carried out in a treatment center for adolescents in the age group 12–18. The results cannot be generalized to centers for adult patients with anorexia nervosa. Comparative research should be conducted into that specific group of patients in order to define the age-specific elements of nursing interventions. It should also be noted that the sample size was quite limited, and only workers from one clinical treatment setting participated in our study. Therefore, saturation of data could not be achieved.
The tentative model developed is evidently provisional in nature. Further descriptive and grounded theory studies are required to work out the details and refine the model.

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