

Acta Med. Okayama, 2011
Vol. 65, No. 3, pp. 185-192

Copyright©2011 by Okayama University Medical School.

Acta Medica
Okayama

<http://escholarship.lib.okayama-u.ac.jp/amo/>

Original Article

A One-Message Question in a Structured Interview: Investigating Psychological Needs of Children and Adolescents with Eating Disorders Directed toward Their Mothers

Kumi Watanabe^{a,b*}, Ayumi Okada^a, Nobuyuki Okabe^c,
Masaru Onishi^d, and Tsuneo Morishima^a

Departments of ^aPediatrics, and ^cNeuropsychiatry, Okayama University Graduate School of Medicine,
Dentistry and Pharmaceutical Sciences, Okayama 700-8558, Japan, ^bDepartment of Nursing,
Faculty of Health and Welfare Science, Okayama Prefectural University, Okayama 719-1197, Japan, and
^dHealth Service Center, Okayama University, Okayama 700-8558, Japan

The purpose of this study was to investigate the psychological needs of children and adolescents with eating disorders (ED) directed toward their mothers. Patients with ED have low self-assertion and various abnormal eating behaviors. Therefore, mothers face difficulty in understanding their children's psychological needs, and the mother-child relationship is sometimes strained. We developed a One-Message Question (OMQ)-structured interview. The OMQ was easy to answer, and it helped the patients with ED. We examined the relationship between psychological needs and illness phase of the children and adolescents, and we discuss the viability of implementing the OMQ in clinical settings. The subjects were 23 patients and their parents. Their parents were just asked about the patients' background. The mean age of the patients was 15.8 years, and the average age of ED onset was 13.5 years. The EDs were anorexia nervosa (n = 20) and bulimia nervosa (n = 3). The phases of patients' illness were identified as anorexic (n = 5), bulimic (n = 7), chronic (n = 3), and stable (n = 8). All subjects provided specific responses to the OMQ-structured interview. Data analyses revealed the following seven categories of patients' psychological needs directed toward their mothers: attachment, cooperation in meeting their goals, longing for love, changing attitude toward family members, respect for self-reliance, expression of apology, and expression of appreciation. These findings suggested that the OMQ-structured interview may prove useful for mothers to understand their children's psychological needs and may encourage positive interactions as a foundation for future recovery.

Key words: family support, mother-child relationships, eating disorders in children and adolescents, interview methods, team approach

Family understanding and cooperation are indispensable for the successful treatment of children and adolescents with eating disorders (EDs) [1]. However, even mothers, who are the primary parental

caretakers, experience difficulties understanding their own children who suffer with EDs. One reason is that the abnormal eating and obsessive-compulsive behaviors demonstrated by such patients greatly confuse the family [2]. However, the key hindrance in mothers' understanding of their own children is their children's inability to verbally express themselves, known as alexithymia, which tends to appear concurrently with

Received November 19, 2010; accepted December 10, 2010.

*Corresponding author. Phone: +81-866-94-2170; Fax: +81-866-94-2170

E-mail: kumiw@fhw.oka-pu.ac.jp (K. Watanabe)

EDs [3-6].

Healthcare professionals have recently tried to address the unmet needs of mothers of children and adolescents with EDs. Uehara *et al.* reported that family psychoeducational approaches to ED might lower distress and encourage positive interactions within the family [7]. Instead, however, many mothers, have shown a genuine desire to obtain information from recovered patients and their families [8-10], who seem to have successfully discovered their own individual ways of caring for such patients. If the patients' psychological needs directed toward their mothers could be clearly elucidated, then the mothers might better understand their children and adolescents and also learn more effective ways to handle such problematic situations. To date, no studies have been published on the psychological needs of children and adolescents with an ED directed toward their mothers.

With the goal of developing a new tool to identify the psychological needs of patients with an ED, we reviewed the "One Question Question (OQQ)" by L. Wright *et al.* [11, 12]. The OQQ is a single question asked to elicit the family members' most pressing needs or concerns. In the context of therapeutic conversations with families, many of the responses were found to pertain to hardships experienced by the family [13]. Based on the OQQ, a new question was developed for patients with ED to convey their most pressing message to their mothers. This was named the One-Message Question (OMQ) and was designed to elucidate the one and only message patients with ED wanted to communicate exclusively to their mothers. The OQQ is a single question asked and discussed in a therapeutic conversation [12], whereas the OMQ is introduced in a structured interview after patients are asked a few questions to refresh their memories about the incidents that occurred between them and their mothers. This different approach was utilized to compensate for the patients' inability to describe their feelings and to facilitate verbal expression of their

needs.

The purposes of this study were to (1) investigate the psychological needs of children and adolescents with ED directed toward their mothers, (2) examine the associated tendencies between the needs ascertained and the phases of illness, and (3) discuss how the OMQ-structured interview could be implemented in clinical settings.

Materials and Methods

Subjects. Inclusion criteria for the research subjects were based on the DSM-IV-TR of the American Psychiatric Association diagnosis of EDs [14]. Additional criteria, were age 18 years or younger at the onset, age 11-25 years at the time of the study, and adequate stability to be interviewed. Age was applied as one of the criteria because patients under 11 years are cognitively not mature enough to think logically about the stage of their disorder and treatment [15], and 25 years is the upper age limit for adolescence [16]. Only female subjects were recruited for the study, as children's psychological needs directed toward their mothers are gender-specific.

Subjects who agreed to participate were given an explanation about the purposes and methods of this research as well as the rights of the participants (voluntary participation, withdrawal option, confidentiality, and anonymity). Consent for study participation was obtained from all subjects prior to the study. The study was conducted from June 2007 to April 2009. The ethics committee of Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences approved the research protocol.

Instrument. To allow the patients to describe their psychological needs directly to their mothers, we developed the aforementioned OMQ-structured interview to make it easier for patients to answer the OMQ (Table 1). The interview began with a warm-up question about any changes the patients might have

Table 1 Structured interview including the One-Message Question (OMQ)

Q1	How did your mother change her attitude when you began to receive treatment?
Q2	What support did your mother provide that you felt was useful in recovering from the illness? (Useful support)
Q3	What did you want your mother to do to help you recover from the illness? (Request)
Q4	What is the one and only message you want to give your mother right now? (OMQ)

seen in their mothers' attitudes since the initiation of their treatment for EDs. This approach was used to encourage reflection about what had happened with regard to the mother-child relationship. Next, the patients were asked about any useful support received from their mothers (hereafter *useful support*), and what they wished to request from their mothers (hereafter *request*). These 2 questions were used to help patients remember that they may already be satisfied with the support given by their mothers and to become aware of their requests. Next, the patients were asked to answer the OMQ. The sequence of the questions was designed to help the patients focus on their psychological needs directed toward their mothers. According to the theory of L. Wright *et al.*, the expectation was that the OMQ responses would help identify the patients' most urgent psychological needs that involved their mothers.

Data collection. The interviews with patients and their parents were conducted separately and lasted about 30 min and 1 h, respectively. The parents were asked to provide the following information: (1) age, (2) family structure, (3) occupation, (4) patient's condition when symptoms occurred, and (5) current state of patient's daily life (Table 2). All interviews were tape recorded with the consent of participants and later were transcribed verbatim.

Data analysis. The collected data were analyzed inductively. First, we evaluated the subject's ease in answering each question in the structured interview by assessing the number of specific responses for every question item. Next, we used content analysis to generate categories from the interview data by utilizing an adaptation from Burnard's model of thematic content analysis [17]. Two researchers, including a specialist in ED treatment, examined each subject's responses and, by process of consensus, identified concepts that could be combined into categories. If the subject's response provided multiple concepts, the most pertinent response was selected.

We also examined, the associated tendencies between the categories of psychological needs generated and the phases of illness. The patients were grouped into 4 phases, anorexic, bulimic, chronic, and stable, based on the interview data with parents and the typical classification of EDs by S. Murakami *et al.* and S. Shigman [18-20]. The anorexic phase was defined as the period during which there was no

Table 2 Patient and family background

Patient		
Clinical diagnosis		
anorexia nervosa	20	(87.0%)
bulimia nervosa	3	(13.0%)
Family type		
nuclear family	18	(78.3%)
extended family	5	(21.7%)
Treatment setting		
outpatients	20	(87.0%)
inpatients	3	(13.0%)
Phase		
anorexic	5	(21.7%)
bulimic	7	(30.4%)
chronic	3	(13.1%)
stable	8	(34.8%)
Onset Year		
mean \pm SD [range]	13.5 \pm 2.4	[9-18]
Duration of illness		
mean \pm SD [range]	2.2 \pm 2.0	[0- 6]
Family		
Family relationship		
mother	22	(95.7%)
father	1	(4.3%)
Parent occupation		
full-time housewife	9	(39.1%)
employed	14	(60.9%)
Parent age		
mean \pm SD [range]	43.8 \pm 3.6	[36-52]

(n = 23)

sign of any significant weight recovery, the bulimic phase was when the food intake increased and weight returned, the chronic phase was when more than 3 years had passed since the onset of the illness; and the patient showed no obvious impulsivity, but continued to demonstrate symptoms, such as overeating, and the stable phase was when the symptoms had generally stabilized and the patient was coping with daily life. In bulimia nervosa, the bulimic phase was defined as less than one year after the onset date whereas the chronic phase was defined as more than 1 year after onset.

Results

Subjects characteristics. Twenty-three patients and their parents agreed to take part in the study. When one mother declined to participate, the father was asked instead and he consented. At the

time of the interview, the mean age of the patients was 15.8 years (range 11–24). The types of EDs were anorexia nervosa ($n = 20$) and bulimia nervosa ($n = 3$), and the mode of treatment was outpatients ($n = 20$) and inpatients ($n = 3$). The mean age of the parents was 43.8 years (range 36–52). The illness manifested in the patients as follows: anorexic phase ($n = 6$), bulimic phase ($n = 6$), chronic phase ($n = 3$), and stable phase ($n = 8$). The mean age of onset was 13.5 years (age range 9–18). A summary of the 23 patients and their parents is shown in Table 2.

Evaluation of the interview responses.

Responses to each question in the structured interview were divided into those that were specific and those that were non-specific, e.g., “nothing in particular,” or “I don’t know,” etc., and the ratios of the 2 types of response were compared. The results are shown in Table 3. One patient gave a non-specific response, “It is rather difficult to answer” to *useful support* (4.3%). Four patients gave non-specific, ambiguous responses, e.g., “Well, I don’t think I have anything . . . in particular . . .,” “I don’t know,” “I can’t really think of anything,” etc., to *request* (21.7%). Specific responses to the OMQ were obtained from all patients, and 2 patients cried while responding. Of interest was that a total of 6 patients referred to eating behaviors in response to both *useful support* and *request* (13.0%), but no such responses to the OMQ were evident. Examples of *useful support* were “She has bought me something I could eat,” “She has fed me,” etc., and those of *request* were “Please do not buy snacks and sweets,” and “I feel daunted when she tells me to eat.”

A striking example of unmet psychological need was elicited by the OMQ. One patient evaluated her mother positively for *request* by saying, “There is nothing in

particular and at present, I am happy now,” but in the next breath, she tearfully shared a deep need to be understood (psychological need) while responding to the OMQ.

Categories of psychological need directed toward mothers and their association with the phases of illness.

The responses to the OMQ were classified into 7 categories of need directed toward mothers: attachment, cooperation in meeting their goals, longing for love, changing attitudes toward family members, respect for self-reliance, expression of apology, and expression of appreciation. The concepts comprising each category and the interview data are shown in Table 4. The definitions and the patients’ phases of illness as they were associated with the categories are described below.

1. Attachment

Patients expressed a psychosocial and behavioral need for a close relationship with their mothers. They expressed anxiety that their mothers might become less concerned with them as they recovered from illness, and they wanted to spend time with their mothers. The 2 patients ($n = 2$) in this category were both in the anorexic phase.

2. Cooperation in meeting their goals

Patients desired support in their efforts to meet their goals. They may have been unaware of their particular unhealthy behavior but wanted support in prioritizing their various after-school activities more than in gaining control over their daily habits such as sleeping and efforts to lose weight as well. The 2 patients ($n = 2$) in this category were in the anorexic and bulimic phases, respectively.

3. Longing for love

Patients yearned for displays of sensitive and heartfelt feelings from their mothers. The patients revealed limited experience with being understood by their mothers and that they longed for deeper maternal love. The three patients ($n = 3$) in this category were in the anorexic, bulimic and chronic phases, respectively.

4. Changing attitudes toward family members

Patients requested that their mothers change their attitudes toward other family members. Some patients complained of psychological burdens caused by quarrels between the mothers and other family members and perceived some unfair treatment of siblings by their mother. The 2 patients ($n = 2$) in this category

Table 3 Structured interview responses

Question		Giving specific responses		Referring to meals and food	
		number of case	(%)	number of case	(%)
Useful support	Yes	22	(95.7%)	4	(17.4%)
	No	1	(4.3%)	19	(82.6%)
Request	Yes	18	(78.3%)	2	(8.7%)
	No	5	(21.7%)	21	(91.3%)
OMQ	Yes	23	(100.0%)	0	(0.0%)
	No	0	(0.0%)	23	(100.0%)

($n = 23$)

Table 4 Classification of psychological needs of patients with eating disorders directed toward the mothers

Category (n)	Concept	Data
Attachment (2)	Separation anxiety	Do you really think it is ok if I recover?
	Desire to be with mother	I would like to go for a drive together.
Cooperation in meeting their goals (2)	Support for after-school activities	I want her to tell me to practice the piano rather than to go to bed early.
	Support for losing weight	I want her to help me lose weight because I want to be slim.
Longing for love (3)	Desire to be understood	[Silence] I just want her to understand me, [crying] not only about the illness, but also about everything, probably. . . . She has never said to me, 'I see.'
	Loneliness from being left out	I don't want her to say that it is fate even if I die of eating disorders.
Changing attitudes toward family members (2)	Heartache on arguments	I don't want her to quarrel with my grandfather.
	Sibling rivalry	I am always treated as if I were to blame, not my younger sister.
Respect for self-reliance (2)	Rejection of excessive control	I don't want her to ask me where I'm going, who I'm going with, etc. all the time.
	Desire to be trusted	I want her to trust me more.
Expression of apology (3)	Feeling guilty about being a nuisance	I apologize for having been a nuisance.
Expression of appreciation (9)	Appreciation before complaints	In fact, I have a lot to complain about, but to sum up, I just want to say, 'Thank you very much.'
	Happy about growing closer	Both mother and I were able to grow up and it was good.

were both in the bulimic phase.

5. Respect for self-reliance

Patients desired psychological independence with parental protection. The patients were unhappy with the types of attitudes mothers displayed and the interventions performed by the mothers. The 2 patients ($n = 2$) in this category were both in the chronic phase.

6. Expression of apology

Patients wanted to apologize to their mothers for causing them anxiety. They expressed regret and wanted to apologize for creating such a burden on their parents. Three patients ($n = 3$) were in this category: 2 in the bulimic phase, and 1 in the stable phase.

7. Expression of appreciation

The patients wanted to express their satisfaction with and appreciation for the support they had received thus far. They were grateful for their mothers' cooperation during treatment, and were glad to be growing closer with their mothers. Nine patients ($n = 9$) were in this category: 1 in the anorexic phase, 1 in the bulimic phase, and 7 in the stable phase.

Discussion

Significance of the OMQ-structured interview for eliciting the patients' psychological needs

directed toward their mothers. As shown in Table 3, 6 patients gave non-specific responses in answer to *useful support* and *request*, whereas all the patients gave specific responses to the OMQ. Additionally, 6 patients referred to meals and food in answer to *useful support* and *request*, but none of the subjects referred to meals or food in their responses to the OMQ, despite their constant obsession with meals and food. Although a few patients had neither responded specifically nor expressed contentment with their mothers' support in response to *Request*, they did reveal unmet psychological needs and wept while answering the OMQ. Their responses partially validated the decision to use the OMQ in the structured interview, *i.e.*, the OMQ may have helped respondents to contemplate and verbally express their psychological needs, even though they were preoccupied by pressure to lose weight and were unaware of their own unmet needs.

Association tendencies between the psychological needs categories and the phases of illness. The patients' psychological needs directed toward their mothers were classified into 7 categories. The associated tendencies between the psychological needs categories and the phases of illness are shown in Fig. 1. Attachment occurred in the first phase of the illness (the anorexic phase). According to the attachment theory, an infant's attachment behavior is

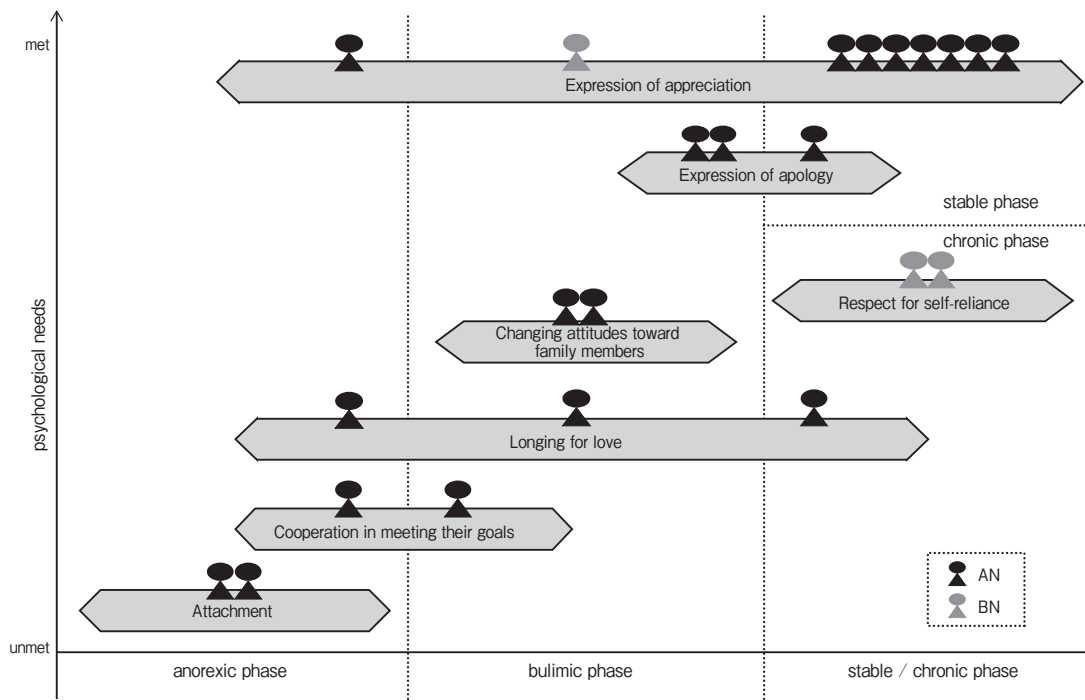


Fig. 1 Associated tendencies the psychological needs ascertained and the phases of the illness. Initially, *Attachment* occurred in the anorexic phase, and *Cooperation in meeting their goals* occurred from the anorexic phase through the bulimic phase. *Longing for love* extended across the anorexic, bulimic and chronic phases. *Changing attitudes toward family members* occurred in the bulimic phase, and *Respect for self-reliance* occurred in the chronic phase. *Expression of apology* occurred from the bulimic phase through the stable phase. *Expression of appreciation* extended across the anorexic, bulimic and stable phases, although most of the patients in this category were in the stable phase. AN, anorexia nervosa; BN, bulimia nervosa.

used to seek closeness during stressful situations [21]. This implied that attachment was the reaction by patients to extremely stressful situations that they encountered prior to the onset of illness. Cooperation in meeting their goals occurred in the first and second phases of illness (the anorexic and bulimic phases). This category, perhaps resulting from patients' inner conflict due to low self-confidence, was possibly replaced with an obsessive focus on attaining achievements. Changing attitudes toward family members occurred in the second phase of illness (the bulimic phase). Although the interviews with the mothers did not reveal any remarkable domestic conflicts, the patients wanted their mothers to change their attitudes toward other family members. This need can be attributed to the patients' sensitivity. Respect for self-reliance extended to the third phases of the illness (the chronic phase). This category may reflect the patients' feelings that their growing self-assertiveness was always being suppressed by their mothers. The latter 2 categories revealed that the patients were

experiencing some psychological conflict related to familial interpersonal relationships. Such conflict usually exists in normal children. Therefore, these needs may lie within the range of normalcy and may indicate signs of patient recovery. Longing for love extending across 3 phases of the illness, but not including the stable phase, can be considered the underlying psychological need in patients with EDs. This category seems similar to *starving for attention* (described by Boone O'Neill, 1992) [22], in a renowned autobiography by an author with an ED) and may reflect a need for deeper bonding between mother and child [23]. Expression of apology as well as expression of appreciation manifested in the third phases but were concentrated in the stable phase. These 2 categories indicated that the patients' compassion for their mothers took precedence over their own needs and that they were satisfied with their mothers' attempts, whatever they were, to offer assistance.

As reported above, significant associated tenden-

cies were observed between the categories of psychological needs in patients and the phases of illness. First, the patients yearned for physical and psychological attachment with their mothers. Then, the psychological needs controlled by their illness became apparent. Subsequently, patients experienced psychological conflict with others influenced by the stresses of familial interpersonal relationships. Eventually, the patients were able to empathize with their mothers' difficult situation and expressed their apologies and appreciation. Longing for love existed throughout this process except during the stable phase.

Advantages of the OMQ-structured interview and its application in clinical settings. First, the OMQ-structured interview is a convenient and simple method that can be used quickly at a patient's bedside. In Japan, where patients are concentrated in a few specialized facilities with over-extended medical professionals [24], nurses and other staff, who provide patient care, could conduct interviews on a continual basis and share information obtained with not only the mothers in their efforts to assist patients but also relevant staff members. Second, during the OMQ-structured interview, responses related to meals and foods can be averted, and psychological needs can be elicited. Therefore, utilizing the OMQ-structured interview in clinical settings may help provide information about the patients' needs and refocus the families away from the eating behaviors and toward the patients' needs. This approach may assist mothers to understand patients' needs "here-and-now" and to build positive interactions without pressure related to eating behaviors. Last, we found that the patients' psychological needs directed toward their mothers were related to phases of their illness. The OMQ-structured interview method, therefore, could serve as an index to the status of needs "here-and-now" during the recovery process. Continued utilization may therefore gradually assist mothers to understand the real cause of patients' struggles and facilitate caring for them.

In current clinical practice, the family has become a collaborator in treatment [25], and treatment interventions have occurred through family cooperation [26, 27]. The findings from this study suggest that information obtained using an OMQ-structured interview may be useful not only to health professionals but also to mothers as collaborators to understand their children better and improve interactions with a goal of

future recovery.

Limitations of research. Because this cross-sectional study used a newly developed OMQ-structured interview with a limited number of subjects, the possibility exists that more psychological needs remain to be identified. Investigating the relationships between the patients' psychological needs directed toward their mothers and the phases of their illness was difficult. Further research with larger sample sizes is thus required for the longitudinal investigation of the relationships between the patients and their mothers and to also evaluate the efficacy of information obtained from the structured interviews for mothers to promote a greater understanding of such patients.

Acknowledgments. We extend our sincere appreciation to the patients and families for their cooperation. We also thank Dr. S. Ogita, Kawasaki Medical School; Dr. C. Kiuchi, Kiuchi Women's Clinic; Dr. J. Ohta, Okayama City Mental Health and Welfare Center; Dr. T. Inagaki, Shimane University; and Dr. M. Yamamoto, Coral Okayama, Dr. N. Kodani and Ms. S. Hirabayashi, Matsuyama Red Cross Hospital, for their invaluable support in referring patients and coordinating the arrangements for this study. The research was funded in part by The Mental Health Okamoto Memorial Foundation.

References

1. Federici A and Kaplan AS: The patient's account of relapse and recovery in anorexia nervosa: a qualitative study. *Eur Eat Disord Rev* (2008) 16: 1–10.
2. Treasure J, Sepulveda AR, Macdonald P, Whitaker W, Lopez C, Zabala M, Kyriacou O and Todd G: The assessment of the family of people with eating disorders. *Eur Eat Disord Rev* (2008) 16: 247–255.
3. Okada A, Munemori E, Nakamura A, Hosogi M, Watanabe K, Ootyou K and Morishima T: The study of forty six patients with maladaptive eating behaviors and the role of pediatrician. *J Jpn Pediatr Soc* (2008) 112: 463–470 (in Japanese).
4. Schmidt U, Jiwany A, and Treasure J: A controlled study of alexithymia in eating disorders. *Compr Psychiatry* (1993) 34: 54–58.
5. Ricca V, Mannucci E, Zucchi T, Rotella CM and Faravelli C: Cognitive-behavioural therapy for bulimia nervosa and binge eating disorder: A review. *Psychother Psychosom* (2000) 69: 287–295.
6. Fairburn CG, Jones R, Peveler RC, Hope RA and O'Connor M: Psychotherapy and bulimia nervosa. longer-term effects of interpersonal psychotherapy, behavior therapy, and cognitive behavior therapy. *Arch Gen Psychiatry* (1993) 50: 419–427.
7. Uehara T, Kawashima Y, Goto M, Tasaki S and Someya T: Psychoeducation for the families of patients with eating disorders and changes in expressed emotion: a preliminary study. *Compr Psychiatry* (2001) 42: 132–138.
8. Haigh R and Treasure J: Investigating the needs of carers in the area of eating disorders: development of the carers' needs assessment measure (CaNAM). *Eur Eat Disord Rev* (2003) 11: 125–141.
9. Graap H, Bleich S, Herbst F, Trostmann Y, Wancata J and Zwaan M: The needs of carers of patients with anorexia and buli-

10. McMaster R, Beale B, Hillege S and Nagy S: The parent experience of eating disorders: interactions with health professionals. *Int J Ment Health Nurs* (2004) 13: 67–73.
11. Wright L and Leahey M: Maximizing time, minimizing suffering: the 15-minute (or less) family interview. *J Fam Nurs* (1999) 5: 259–274.
12. Wright L and Leahey M: Nurses and families, 5th Ed, how to do a 15-minute (or shorter) family interview. F. A. Davis Company, Philadelphia (2009) pp 245–260.
13. Duhamel F, Dupuis F and Wright L: Families' and nurses' responses to the "One Question Question": reflections for clinical practice, education, and research in family nursing. *J Fam Nurs* (2009) 15: 461–485.
14. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders. 4th Ed, Text Revision (DSM-IV-TR), American Psychiatric Association, Washington D.C. (2000) pp 583–595.
15. Piaget J: Six psychological studies (Tenzer A, Trans and Elkind D, Ed). Random House, New York (Original work published in 1964) (1967).
16. Society for Adolescent Medicine. A position statement of the society for adolescent medicine. *J Adolesc Health* (1995) 16: 413.
17. Burnard P: A method of analyzing interview transcripts in qualitative research. *Nurs Educ Today* (1991) 11: 461–466.
18. Murakami S: Treatment for anorexia and bulimia. *Human Mind* (2003) 112: 28–34 (in Japanese).
19. Murakami S and Aoki S: Treatment for anorexia nervosa. *Jap J Clin Psychiatry* (2006) 35: 168–172 (in Japanese).
20. Sigman GS: Eating disorders in children and adolescents. *Pediatr Clin North Am* (2003) 50: 1139–1177.
21. Bowlby J: Attachment and loss, vol. 1: attachment, 2nd Ed, Basic Books, New York (1982).
22. O'Neill BC: Starving for attention, The Continuum Publishing Company, New York (1982).
23. Shimosaka K: Anorexia nervosa essay. Kongo publishing, Tokyo (1988) pp 302–308 (in Japanese).
24. Ishikawa T: Investigation of the practical guideline for eating disorders at primary care. Annual Report of the Research on Nervous and Mental Disorders (2002) 3–7 (in Japanese).
25. Nishizono-Maher A: Changes in family role in the treatment of eating disorders. *Jpn Bull Soc Psychiat* (2005) 13: 137–144 (in Japanese).
26. Treasure J, Sepulveda AR, Whitaker W, Todd G, Lopez C and Whitney J: Collaborative care between professionals and non-professionals in the management of eating disorders: a description of workshops focused on interpersonal maintaining factors. *Eur Eat Disord Rev* (2007) 15: 24–34.
27. Whitaker W and Macdonald P: Collaborative caring in eating disorders: families and professionals. *Psychiatry* (2008) 7: 171–173.