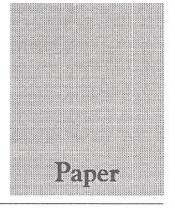
Relationship of Childhood Abuse to Psychiatric Distress, Social Adjustment, and Eating Disorder Severity in Japanese Bulimics



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The aim of this study was to investigate the childhood abuse histories of bulimic patients in order to characterize the effect of these histories, on their later social adjustment, psychiatric distress, and bulimic severity. Fifty Japanese female bulimic outpatients filled out a 28-item version of the General Health Questionnaire, the Dissociative Disorders Interview Schedule, the Bulimic Inventory Test, and a clinical database questionnaire. Among 50 bulimic patients, 16 reported a history of physical abuse, and 20 a history of sexual abuse. The nature of the sexual abuse reported was relatively mild compared to Western reports. Although the age of onset of dieting, anorexia, binge eating, vomiting, and severity of bulimia had no relationship to abuse history, the patients with sexual abuse histories had more absenteeism in junior high school and reported more sexual activity than those without such histories. The patients who reported physical abuse histories scored higher on the somatic symptom section of the General Health Questionnaire. The findings of this study suggest that, while abuse experiences themselves do not seem to be a cause of bulimia, these experiences may affect the style and level of adaptive functioning in later life, and the type of abuse may influence the nature of future psychological difficulties. Differences in the severity of child abuse between Japan and Western countries requires further study.

INTRODUCTION

There has been considerable interest in the relationship between eating disorders and childhood abuse recently. Especially since the mid-1980s, a number of studies have suggested that there is an aetiological link between eating disorders and childhood abuse (Sloan and Leichner, 1986; Hall et al., 1989; Shearer et al., 1990). There have been, however, various methodological limitations in these studies as Pope and Hudson have pointed out (Pope and Hudson, 1992; Pope et al., 1994).

These limitations include a lack of literature in this area from non-English-speaking countries, a paucity of studies that have rated the severity of the

abuse, and few studies that have assessed rates of depression, degree of bulimic symptomatology, and degree of body dissatisfaction in bulimic patients with histories of sexual abuse compared to those without abuse histories. An integrated case—control study by Welch and Fairburn (1994) suggested that sexual abuse appears to be a general risk factor for psychiatric problems rather than for eating disorders per se (Pope et al., 1994).

In Japan, there has been little systematic research on the relationship between eating disorders and childhood abuse. The main reasons for this are that the incidence of childhood abuse is low in Japan (Takahashi, 1990) and that the victims of childhood abuse usually do not want to talk openly about their experiences. A recent study by our group looking at the relationship of abuse history to dissociative symptoms in Japan (Berger et al., 1994) found that the subjects' rate of sexual abuse of 36 per cent was considerably higher than that of the official statistics for the general Japanese population (about 6.6 per 100 000 children under the age of 12) (Takahashi, 1990). Although physical abuse history was associated with high dissociation, no difference was seen between the high and low dissociators in sexual abuse histories.

Our group has also recently studied differences in parental bonding patterns in Japanese eating disorder subjects with and without histories of sexual or physical abuse (Berger et al., 1995), and with dissociation, using the Parental Bonding Instrument (PBI; Parker et al., 1979). While parental bonding scores significantly differed between those eating disordered patients with histories of physical abuse compared with those without on maternal care, and on both the paternal care and protection subscales, those with and without sexual abuse histories did not differ on any subscale. No relationship was found between dissociation and parental bonding patterns. Sexual abuse history may not have had the same traumatic impact, or when reported was mild in Japanese subjects, resulting in a lack of association with dissociation and paternal PBI scores.

In an attempt to address some of the limitations of prior studies we investigated the effect of childhood abuse history on social adjustment, psychosexual functioning, psychiatric symptoms, and eating problems in a non-English-speaking cohort. Data were collected on the nature of the abuse incurred as well as bulimic severity. Sociocultural differences between Japan and Western culture may also allow new insights into these disturbances.

METHODS

Subjects

Fifty female Japanese bulimic females (48 bulimia nervosa and two eating disorder not otherwise specified by DSM-III-R criteria (American Psychiatric Association, 1987) (average age 24.0 years, SD=4.5, age range 17–33)) attending an outpatient eating disorder group were studied. Participation was

voluntary and no remuneration was given. None of the patients had evidence of delusions or thought disorder, active mood disorder, organic mental disorder or mental retardation on clinical examination.

Instruments

Psychological distress was measured by a Japanese version of the 28-item modified General Health Questionnaire (GHQ; Goldberg, 1972). The GHQ is a self-administered screening instrument designed to detect current diagnosable psychiatric disorders in general population surveys, in primary medical care settings, or among general medical outpatients. The GHQ-28 consists of four subscales (somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression) that covers four identifiable distress elements: depression, anxiety, social impairment and hypochondriasis. The items were scored using a Likert-type scoring of 1, 2, 3, 4 for the response categories, later converted into two-point scores of 0, 0, 1, 1. Both the shorter 28-item version (GHQ-28) and the original 60-item version have been shown to have good reliability and validity (Goldberg and Hillier, 1979).

Data on childhood abuse was obtained from a modified self-report version of the Dissociative Disorders Interview Schedule (DDIS; Ross et al., 1989). The DDIS is a 131-item structured interview that makes DSM-III-R diagnoses of all the dissociative disorders, somatization disorder, major depression and borderline personality disorder. It also inquires about a history of substance abuse, childhood physical and sexual abuse (as described in the DDIS), trance states, schizophrenic symptoms and secondary features of multiple personality disorder. The DDIS also collects data on who did the abuse as well as the nature of the abuse.

The DDIS was translated by a bilingual Japanese psychiatrist into Japanese and the translations were checked by a bilingual American psychiatrist. Because Japanese subjects often do not respond directly about sensitive issues in interviews the DDIS was modified into a self-report questionnaire for this study (Berger et al., 1994).

The severity scale of the Bulimic Inventory Test (BITE; Henderson and Freedman, 1987) was used to measure the severity of bulimic behaviours. Other demographic and social adjustment data were collected from clinical databases. History of school refusal and frequency of sexual activity items were used as indicators of social adjustment and psychosexual functioning respectively. All the instruments used in this study were in Japanese.

Procedure

Subjects signed informed consent and were given the questionnaires to take home for completion. The primary treating clinicians both handed out, as well as collected completed questionnaires. Patients were informed that this was a study looking at various psychological and childhood experiences, and that the results of the study would in no way affect their treatment. Confidentiality was ensured.

Data analysis

Scores were analysed by correlation testing, *t*-testing of means, or chi square testing as described in Results section. An N for an item reported less than the total N for that group studied reflected either failure to record an answer for that item or an 'unsure' response.

RESULTS

Among 50 bulimic patients, 16 patients (32 per cent) reported a history of physical abuse (mean age 24.6 years, SD=4.2), and 26 (52 per cent) did not (mean age 24.1 years, SD=4.8), three were 'unsure' (6 per cent) (mean age 21.3 years, SD=1.2). The relationship to the abusers of physical abuse was as follows: father (11 cases), other male (six cases), mother (five cases), sibling (three cases), female relative (two cases), male relative (one case). About two-thirds of the abuse was carried out by fathers, one-third by other males, and one-third by mothers.

Twenty patients (40 per cent) reported having a history of sexual abuse (mean age 25.2 years, SD=4.8), 15 (30 per cent) denied this (mean age 23.4 years, SD=4.8), and four were 'unsure' (mean age 23.3 years, SD=2.6). The relationship to the abusers of sexual abuse was as follows: other males (15 cases), father (eight cases), sibling (three cases), mother (two cases), male relatives (two cases), other females (two cases). More than half of the abuse was by other males, one-third by fathers. Twenty subjects reported on the nature of the abuse: 'hand to genital touching' (11 cases), 'other types of fondling' (nine cases), 'other' (six cases), 'shown or forced to participate in pornography' (three cases), 'intercourse with a male' (two cases), 'performing oral sex on a male' (two cases), 'oral sex done by a male' (two cases), 'anal intercourse with a male' (two cases), 'anal intercourse with a female' (one case), 'oral sex done by a female' (one case).

Table 1 shows the mean ages of onset of dieting, anorexia, binge eating, and vomiting. The bulimic patients with histories of either sexual and/or physical abuse did not differ significantly in age of onset of these symptoms compared with those with no abuse history.

Table 2 shows the percentage of subjects who had histories of school refusal during school age. The number of eating disorder patients who reported histories of school refusal is high considering that in Japan almost all students go to and graduate from school. According to the 1994 annual report of the Ministry of Education of Japan, only one out of 81 junior high school students

Table 1. Mean age of onset of eating disorder symptoms

	Physical abuse		Sexual abuse	
	Yes (n=16)	No (n=26)	Yes (n=20)	No (n=15)
Dieting	13.9 ± 5.0	16.4 ± 4.1	14.8±5.7	16.8 ± 2.8
Anorexia	15.7 ± 3.1	16.8 ± 4.3	16.8 ± 4.5	16.1 ± 2.3
Binge eating	15.3 ± 5.4	18.1 ± 3.8	16.4 ± 6.1	17.0 ± 2.7
Vomiting	18.8 ± 4.7	17.8 ± 4.1	19.3 ± 2.0	16.9 ± 6.9

Table 2. Rates of patients who reported school refusal histories (%)

	Physical abuse		Sexual abuse	
	Yes	No	Yes	No
Elementary	15	18	11	15
Junior high	50	25	55*	10
High	89	57	55	67

^{*}p < 0.05.

did not attend school for more than 30 days during previous year due to psychological reasons. During junior high school, school refusal of patients with histories of sexual abuse was significantly more frequent than those without such histories. During high school, patients with histories of physical abuse refused to attend school more frequently than those without such histories, though the difference was not statistically significant.

The number of subjects who reported being sexually active was 20 (mean age 18.9 years, SD=3.0, age range 13–25). The subjects who answered 'yes' or 'unsure' to the sexual abuse question reported having sexual experiences significantly more often than those who answered 'no' to this question (19 of 26 with, and one of five without abuse histories, p=0.23).

GHQ scores and severity of bulimia assessed by the BITE were compared for those patients who reported histories of sexual abuse or physical abuse to those who did not report a history of that category of abuse (Table 3). Somatic symptom scores were significantly higher for those who reported histories of physical abuse compared to those who did not, though they did not differ significantly in those who did and did not report history of sexual abuse. Scores on the other three subscales, anxiety and insomnia, social dysfunction, and severe depression, did not differ significantly in either abuse group. Presence of physical abuse and/or sexual abuse histories showed no significant relation to BITE scores.

Table 3. GHQ and BITE score relationships to physical and sexual abuse

	Physical abuse		Sexual abuse	
	Yes	No	Yes	No
GHQ		ecanicações de la composiçõe de la compo		
Physical complaints	3.86 ± 1.79	$2.52 \pm 1.45*$	3.16 ± 1.54	2.93 ± 2.05
Anxiety/insomnia	4.07 ± 2.37	3.36 ± 2.14	4.11 ± 2.26	3.13 ± 1.89
Social function	5.29 ± 2.34	6.13 ± 1.04	5.78 ± 1.90	5.27 ± 1.87
Depression	2.54 ± 2.76	2.38 ± 2.18	2.00 ± 2.43	2.54 ± 2.44
Total	14.75 ± 8.64	14.17 ± 5.21	15.12 ± 5.98	12.60 ± 7.40
BITE				
Bulimic severity	12.29 ± 5.89	11.31 ± 6.36	10.20 ± 5.20	11.93 ± 6.11
Total	22.64 ± 5.05	20.83 ± 5.38	21.55 ± 5.57	20.23 ± 5.82

^{*}p=0.015.

DISCUSSION

Although a considerable number of subjects reported a history of abuse in this study, the nature of the sexual abuse experienced by the Japanese bulimic subjects seemed to be milder than that often reported in the Western literature on sexual abuse in eating disorders (Sloan and Leichner, 1986; Hall et al., 1989; Palmer and Oppenheimer, 1992). This is consistent with our clinical impressions and other literature in Japan (Takahashi, 1990). The mild degree of abuse in Japan may reflect the strong family bond and the high value put on children in Japan, though there may be other cultural factors such as the intense socialization pressure for homogeneity and lack of deviance (Christopher, 1984). Conclusions on this issue are difficult at this time because of potential difficulties in comparing Japanese data to Western studies due to sampling differences etc.

A possibility for the relatively high incidence of reported abuse histories is that, considering the less severe histories reported, the interpretation of the word 'abuse' may have a different connotation in Japanese subjects. Although this study was not aimed at clarifying this, based on our clinical experience we suspect that the Japanese subjects may have reported minor contacts as abuse that Western subjects would not have. Additionally, while sexual abuse seems to occur more frequently in Japan than is acknowledged publicly here, both the frequency and severity of the abuse when it occurs seems to be lower on average than that reported in Western studies, at least in the samples studied so far.

The fact that almost half of the patients without histories of childhood abuse also developed eating disorders with bulimic symptoms, that most childhood abuse reported by patients was mild, and that there was no difference in histories of abuse in age of onset of dieting, anorexia, binge eating or vomiting,

or on the severity of bulimic symptoms, indicates that the aetiological link between eating disorders and childhood abuse, if any, may be limited to individual cases. These findings are consistent with prior reports (Pope *et al.*, 1994; Welch and Fairburn, 1994).

Not only the actual experience of the abuse itself, however, but the psychological meaning and internal processing of the abusive experience may play an important role in its psychological affect on the victims. This point is highlighted by a recent study by Rorty et al. (1994) who found that bulimic women reported greater childhood physical, psychological, and multiple abuse compared to non-eating disordered controls. Sexual abuse was only relevant when in combination with other forms of abuse. Psychological abuse effects were deemed important here and this may be relevant to Japanese subjects.

Kinzl et al. (1994) reported results of a study which showed no significant differences on the Eating Disorder Inventory in women with or without histories of sexual abuse, though significant differences were seen in those reporting adverse family backgrounds. These results taken together with ours from a diverse culture support the notion that a complex biopsychosocial approach to eating disorders is more pertinent than a sexual abuse–eating disorder cause–effect relationship, the dangers of which including the 'coercive influence of therapists who are certain that the evocation and abreaction of such memories is the sine qua non of therapeutic success' have been discussed in an editorial (Esman, 1994).

The findings of this study suggest that abusive experiences may affect the style and level of adaptive function in later life and that the content of the abuse may determine the nature of patient's conflicts. For example, the increased frequency of school refusal during junior high school reported by patients with sexual abuse histories suggests that they may have conflict over early adolescent developmental tasks. Considering the surge of sexual drive during this developmental phase, the experience of sexual abuse during early adolescence might cause conflicts in psychosexual development. This is supported by the fact that these patients had more sexual relationships than those without such histories.

The increased severity of GHQ 'somatic symptoms' associated with those with physical abuse histories indicates that, at least for the subgroup with histories of physical abuse, these patients' traumatic experiences related to physical pain continues to affect their function. This finding is consistent with the findings of other reports, although some found that not only physical abuse survivors but also sexual abuse survivors are more likely than non-abused patients to report somatic symptoms (Arnold et al., 1990; Ross et al., 1990; Drosman et al., 1990; Williams et al., 1992; Pribr et al., 1993; Anderson et al., 1993). The reason that patients with sexual abuse histories in our study did not complain about somatic symptoms more than those

without such histories might be that the sexual abuse experiences as described in the DDIS were less severe in our subjects. This suggests that severity of abuse experiences should be considered in order to assess their effects on symptomatology. Attending to the content and severity of the abuse in patients with abuse histories who have somatic symptoms may help these patients psychologically rework the traumatic experience and may possibly improve somatic symptoms as well.

The limitations of this study include a relatively small sample size, and because the subjects were recruited from a self-help group, the findings may not be generalizable. Another limitation is that self-help group members may be more familiar with focusing on abusive experiences than patients in an outpatient clinic. They may, however, be more likely to report their abuse history with less hesitation. The self-report format used for this research may also have been a limitation, or alternatively, may have actually strengthened the reliability of the data due to the privacy afforded within the cultural context used (Berger et al., 1994). Furthermore, most of the questions rely on the subjects' own retrospective recollections rather than actual documentation. This means that the findings may not directly reflect the results of the subjects' actual experience and would require corroboration (Frankel, 1993).

This study is a further addition to the currently scarce literature on child abuse in psychiatric disorders in Japan and also adds to the concept of child abuse history acting as a general risk-factor for emotional problems. The sociocultural influences on the mild degree of abuse reported here should be further elucidated and confirmed as unattributable to sample or reporting bias. The results of this study should stimulate the Japanese psychiatric community to become better acquainted with the psychological effects of child abuse in order to promote improved detection and treatment of these problems as well as more intensive research in this area.

ACKNOWLEDGEMENTS

Supported in part through the National Institutes of Health Foreign Funded Research Program, Bethesda Maryland, by the Japanese Society For The Promotion of Science, Tokyo, Japan.

The authors thank Drs Yasuhiko Taketomo, Colin Ross and Joichiro Shirahase for their helpful comments and support, and Ms Yumiko Morio for technical assistance.

REFERENCES

AMERICAN PSYCHIATRIC ASSOCIATION (1987). Diagnostic and Statistical Manual of Mental Disorders, 3rd edn, revised. Washington, DC: American Psychiatric Association.

- ANDERSON, G., Yasenik, L. and Ross, C. A. (1993). Dissociative experiences and disorders among women who identify themselves as sexual abuse survivors. Child Abuse and Neglect, 17, 677–686.
- ARNOLD, R. P., Rogers, D. and Cook, D. A. (1990). Medical problems of adults who were sexually abused in childhood. *British Medical Journal*, 300, 705–708.
- BERGER, D., Saito, S., Ono, Y., Tezuka, I., Shirahase, J., Kuboki, T. and Suematsu, H. (1994). Dissociation and child abuse histories in an eating disorder cohort in Japan. *Acta Psychiatrica Scandinavica*, 90, 274–280.
- BERGER, D., Ono, Y., Saito, S., Tezuka, I., Takahashi, Y., Uno, M., Ishikawa, Y., Asai, M. and Suematsu, H. (1995). Relationship of parental bonding to child abuse and dissociation in eating disorders in Japan. *Acta Psychiatrica Scandinavica*, 91, 278–282.
- CHRISTOPHER, R. C. (1984). The Japanese Mind. London: Pan Books.
- DROSSMAN, D. A., Leserman, J., Nachman, G., Li, Z. M., Gluck, H. and Toomy, T. C. (1990). Sexual and physical abuse in women with functional or organic gastrointestinal disorders. *Annals of Internal Medicine*, 113, 828–833.
- ESMAN, A. H. (1994) 'Sexual abuse', pathogenesis and enlightened skepticism (Editorial). American Journal of Psychiatry, 151, 1101–1103.
- FRANKEL, F. H. (1993). Adult reconstruction of childhood events in the multiple personality literature. *American Journal of Psychiatry*, 150, 954–958.
- GOLDBERG, D. P. (1972). Manual of the General Health Questionnaire. Windsor (England): NFER Publishing.
- GOLDBERG, D. P. and Hillier, V. F. (1979). A scaled version of the general health questionnaire. *Psychological Medicine*, 9, 139–145.
- HALL, R. C., Tice, L., Beresford, T. P., Wooley, B. and Klassen Hall, A. (1989). Sexual abuse in patients with anorexia nervosa and Bulimia. *Psychosomatics*, 30, 73–79.
- HENDERSON, M. and Freedman, C. P. L. (1987). A self-rating scale for bulimia the 'BITE'. British Journal of Psychiatry, 150, 18–24.
- KINZEL, J. F., Traweger, C., Guenther, V. and Biebl, W. (1994). Family background and sexual abuse associated with eating disorders. American Journal of Psychiatry, 151, 1127–1131.
- PALMER, R. L. and Oppenheimer, R. (1992). Childhood sexual experience with adults: A comparison of women with eating disorders and those with other diagnoses. *International Journal of Eating Disorders*, 12, 359–364.
- PARKER, G., Tupling, H. and Brown, L. B. (1979). A parental bonding instrument. British Journal of Medical Psychology, 52, 1–10.
- POPE, H. G. and Hudson, J. I. (1992). Is childhood sexual abuse a risk factor for bulimia nervosa? *American Journal of Psychiatry*, 149, 455–463.
- POPE, H. G., Mangweth, B., Brooking Negrao, A., Hudson, J. I. and Athanassios Cordas, T. (1994). Childhood sexual abuse and bulimia nervosa: a comparison of American, Austrian and Brazilian women. *American Journal of Psychiatry*, 151, 732–737.
- PRIBR, F. F., Yutzy, S. H., Dean, J. T. and Wetzel, R. D. (1993). Briquet's syndrome, dissociation, and abuse. *American Journal of Psychiatry*, 150, 1507–1511.
- RORTY, M., Yager, J. and Rossotto, E. (1994). Childhood sexual, physical and psychological abuse in Bulimia nervosa. *American Journal of Psychiatry*, 151, 1122–1126.
- ROSS, C. A., Heber, S., Norton, G. R., Anderson, D., Anderson, G. and Barchet, P. (1989). The dissociative disorders interview schedule: A structured interview. *Dissociation*, 2, 169–189.
- ROSS, C. A., Miller, S. D., Reagor, P., Bjornson, L., Fraser, G. A. and Anderson, G. (1990). Structured interview data on 102 cases of multiple personality disorders from four centers. American Journal of Psychiatry, 147, 158–1581.

SHEARER, S. L., Peters, C. P., Quaytman, M. S. and Ogden, R. L. (1990). Frequency and correlates of childhood sexual and physical abuse histories in adult female borderline inpatients. *American Journal of Psychiatry*, 147, 214–216.

SLOAN, G. and Leichner, P. (1986). Is there a relationship between sexual abuse or incest and eating disorders? Canadian Journal of Psychiatry, 31, 656–660.

TAKAHASHI, Y. (1990). Is multiple personality really rare in Japan? Dissociation, 3, 57-59.

WELCH, S. L. and Fairburn, C. G. (1994). Sexual abuse and bulimia nervosa: Three integrated case control comparisons. *American Journal of Psychiatry*, 151, 402–407.

WILLIAMS, H. J., Wagner, H. L. and Calam, R. M. (1992). Eating attitudes in survivors of unwanted sexual experiences. *British Journal of Clinical Psychology*, 31, 203–206.

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