THE IMPACT OF CHILD SEXUAL ABUSE ON MENSTRUAL SYMPTOMS AND ATTITUDES

and

Research Portfolio

Marcella Cranney
THE IMPACT OF CHILD SEXUAL ABUSE ON MENSTRUAL SYMPTOMS AND ATTITUDES

and

Research Portfolio

Submitted in Partial Fulfilment of the
Degree of Doctor of Clinical Psychology
within the Faculty of Medicine, University of Glasgow.

Marcella Cranney
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For my Dad, who never got to see me finish the course.

Acknowledgements

I’d like to thank all the academic and clinical staff, but particularly Dr. Kate Davidson for her advice and support, which has frequently gone above and beyond the call of duty.

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On a personal note a big thanks to my West Highland Way companion, Lisa, for her invaluable friendship throughout the course. Lastly thanks go to Michael for his unfaltering faith and support.
Chapter One

LITERATURE REVIEW

GYNAECOLOGICAL DISORDER AS A LONG-TERM SEQUELAE OF CHILDHOOD SEXUAL ABUSE.

Target Journal: The British Journal of Medical Psychology (See Appendix 1.1)
Abstract- The existing literature on gynaecological disorder as a long-term consequence of childhood sexual abuse is reviewed. The most widely researched and supported physical association with a history of childhood sexual abuse is chronic pelvic pain, although a few studies have also postulated a link with premenstrual syndrome. To the author’s knowledge dysmenorrhea which is an integral component of premenstrual syndrome, has never been isolated as a possible sequelae of abuse. The methodological difficulties which are inherent in sexually abuse research are also discussed.

Introduction

Child sexual abuse has been associated with numerous sequelae in adult women, including sexual dysfunction, promiscuity, dependency, depression and somatisation. Several investigations have suggested an association between child sexual abuse and later development of high medical utilisation and multiple medical complaints. For example, a study by Arnold et al (1990) found that adults who had been sexually abused in childhood were vulnerable to physical symptoms and therefore vulnerable to investigation and intervention in the specialities of gynaecology, obstetrics, gastroenterology, urology, rheumatology, haematology, orthopaedics, neurology, and neuropsychiatry. Wurtele et al (1990) found that 39% of women with various pain disorders suffered from some form of prior sexual abuse, and an association has also been noted by Walker et al (1993) with irritable bowel syndrome, which incorporates abdominal pain. Drossman et al (1990) found that 44% of women attending a university based gastroenterology clinic over a 2-month
period had a history of sexual abuse. Abused patients were significantly more likely than non-abused patients to have chronic pelvic pain, unexplained medical symptoms, and a greater number of surgeries.

This review will focus on the literature which refers to gynaecological disorders associated with a history of sexual abuse. The primary sources for this were obtained through computer-assisted literature searches using MEDLINE, PSYCLIT and CINAHL databases through 1996. It is in chronic pelvic pain that a history of childhood sexual abuse has been found to be consistently over-represented. (Gross et al, 1980; Reiter and Gambone, 1990; Walker, Katon, Hanson et al, 1992; Walker et al, 1988; Walker, Katon, Neraas et al, 1992; and Walling et al, 1993).

Chronic Pelvic Pain

The first systematic study of psychological and social causes of chronic pelvic pain was performed by Duncan and Taylor (1952). Although not directly investigating experiences of sexual victimisation, they noted the appearance of several adult sexual maladjustment problems, such as inhibited sexual desire, inhibited orgasm, and dyspareunia that are frequently associated with earlier sexual victimisation. The first direct observation of a specific link between sexual abuse and chronic pelvic pain was made by Gross et al (1980), who reported that 36% of a sample of 25 women with medically unexplained chronic pelvic pain had histories of incest. They suggest that early traumatic sexual experiences result in anxieties in adulthood which, unless resolved, will manifest as pelvic pain. This
view is supported by Harrop-Griffiths et al (1988) who found that 64% of women who had a laparoscopy for chronic pelvic pain had histories of child sexual abuse compared with 23% among women who had undergone the procedure for infertility.

When compared with women without pain, the rates of sexual abuse in women with chronic pelvic pain appear to be high across all studies. 48% of patients with pelvic pain reported sexual abuse compared with 7% among age-matched pain-free controls (Reiter and Gambone, 1990). The studies of Walker et al (1988; 1992) and Walling et al (1993), in an attempt to overcome some of the methodological weaknesses of the pioneering research discussed later in this review, used a technique recommended by Russell (1983) and found even higher prevalence of victimisation.

Less rigorous studies also point to a significant association between sexual abuse and chronic pelvic pain. Reiter and Gambone (1990) used a self-report questionnaire with 106 women who were attending a multidisciplinary clinic for evaluation of this disorder. Compared with 96 pain-free patients, the women with pelvic pain had a significantly higher prevalence of overall sexual trauma, including childhood sexual abuse and sexual assault. Wood et al (1990) found that 25% of 81 women referred to a pelvagia clinic after negative laparoscopy for chronic pelvic pain reported sexual trauma on an intake form.

Kirkengen et al (1990) found that 24 (28%) of 85 women interviewed by their female G.P when consulting for a gynaecological problem reported childhood sexual abuse. In total they reported 32 abusive events, quite different as to the type of assault, the relation to the
offender, and the duration. A history of pelvic pain or gynaecological surgery showed a significant association with reported childhood sexual abuse. The authors concluded that since adverse sexual experiences may lead to somatisation as a coping strategy, certain findings might be indicators of childhood sexual abuse in patients presenting for gynaecological disorders.

Rapkin et al (1990), assessed the history of physical and sexual abuse in childhood and adulthood in 31 women with chronic pelvic pain, 142 women with pain in other locations, and 32 controls. They found that 39% of patients with chronic pelvic pain had been physically abused in childhood. This percentage was significantly greater than that observed in other chronic-pain patients or controls. However, contrary to prior research the prevalence of childhood sexual abuse did not differ among the three groups. The authors therefore suggested that pelvic pain is unlikely to be specifically related to sexual abuse but that it is the perinous nature of abuse, whether physical or sexual, which may promote painful conditions.

However Toomey et al (1993) found that physical abuse was reported less commonly than sexual abuse in chronic pelvic pain patients. They examined the incidence of sexual and physical abuse and its relationship to selected pain description and psychological variables in a sample of 36 patients. Abused and non-abused respondents were compared on 4 categories of variables expected to be related to the effects of abuse (pain description, functional impact of pain, other’s response to pain, and psychosocial impact of pain). The
results indicated that 19 of 36 patients reported prior abuse. In addition to lower reports of physical abuse, no differences between the abused and non-abused groups were noted on demographic, pain description, or the functional interference variables. On the psychological variables, however, the abused group reported less perceived life control, greater punishing responses to pain, and higher levels of somatisation and global distress than the non-abused group. These results indicated a high incidence of sexual abuse in patients with chronic pelvic pain.

**Premenstrual Syndrome**

Another gynaecological manifestation shown to be associated with sexual victimisation is premenstrual syndrome. This is heralded by changes that occur regularly during the luteal phase, including cognitive, affective, and somatic symptoms.

Paddison et al (1990) conducted a study which revealed that of 174 women presenting symptoms of premenstrual syndrome, 40% had a history of child sexual abuse and rape. The authors also found a connection between sexual abuse and psychiatric hospitalisation for women seeking treatment for premenstrual syndrome. Beck Depression Inventory scores were high, supporting the current research which indicates a prevalence of affective disorders in women seeking treatment for premenstrual syndrome. They felt therefore that specific questioning regarding a history of adverse sexual experiences is critical in evaluating all patients who present with premenstrual syndrome.
Friedman et al (1982) also examined the connection between premenstrual syndrome and sexual abuse, but this was based on a sample of 45 psychiatric inpatients. Of the 45 participants with schizophrenia, depression, borderline personality, 28 met criteria for probable or definite premenstrual syndrome. Of these 28, 16 had abnormal sexual histories, compared with only 1 of the 17 women who did not have premenstrual syndrome. Of the 12 patients with both depression and borderline personality disorder, 9 had both premenstrual syndrome and abnormal sexual histories. The 6 patients who had been raped all met the criteria for premenstrual syndrome. The authors suggested that premenstrual syndrome may signify unresolved sexual conflicts in subgroups of psychiatric patients.

Miccio-Fonseca et al (1990) hypothesised that women who had been traumatised sexually would report greater premenstrual discomfort. Nine hundred and sixty-eight 12-56 year old women were recruited for nonpaying voluntary participation in a menstrual cycle research study. The women completed questionnaires to measure severity and symptomatology with regard to premenstrual syndrome, life stressors, and gynaecological histories. The findings supported the hypothesis that women who have been sexually abused would report greater premenstrual discomfort.

**Nature of Sexual Abuse**

The context of childhood sexual abuse may influence its effects. The extent of psychological trauma has been found to vary according to: relationship to abuser; nature, duration and cultural context; emotional experience of the abuse; and associated violence.
Walker, Katon, Hansom et al (1992) in their investigation of the long term medical and psychiatric symptoms in women with childhood abuse, grouped the women by severity of childhood sexual abuse, no abuse, less severe childhood abuse (exhibitionism, aborted attempts before age 14), or more severe childhood abuse (incest, rape, oral contact, or repeated fondling before age 14). They found that risk for lifetime diagnoses of major depression, panic disorder, phobia, somatisation disorder and drug abuse, was significantly higher in the severely abused group compared with women with no abuse or less severe abuse.

Non-clinical Abuse Research

The majority of sexual abuse research has occurred with clinical samples, particularly in relation to the gynaecological problems discussed, however Briere’s (1988) study showed evidence of long-term effects of sexual abuse in non-clinical populations and therefore his findings are considered to be noteworthy. Women sexually abused before the age of 15 had higher levels of dissociation, somatisation, anxiety and depression than non-abused women. Abuse-related symptomatology was positively associated with the age of the abuser, the total number of abusers, use of force during victimisation, parental incest, completed intercourse, and extended duration of time. However, the only other published study on psychological symptomatology among non-clinical abuse victims by Fromuth (1986), does not confirm this relationship. She found no significant relationships between abuse and psychological symptomatology in 8 out of 9 symptom scales. As the author noted however
the range of experiences included under the definition of sexual abuse included non-
physical events (e.g., exposure to an exhibitionist), phenomena not typically shown to have
long-term effects. She concluded that “with such an inclusive definition, it should not be
surprising that quite small correlations were found”.

Methodological Problems in Sexual Abuse Research

Several methodological limitations are inherent in studies involving the relationship of
sexual trauma to psychological or physical symptoms. Unfortunately many of the early
studies were anecdotally descriptive and had significant methodological shortcomings.
However the findings of the early chronic pelvic pain studies are consistent with what was
to be later uncovered by more methodologically sophisticated research. The ideal design
for investigation of long-term victimisation sequelae is a prospective cohort study.
However, due to the long time intervals between childhood abuse and the appearance of
adult physical symptoms, these have been logistically unfeasible. Most investigations have
used retrospective, cross-sectional designs in which the evaluation of the physical
complaint and the taking of a sometimes distant sexual victimisation history are done at
the same point in time, however this may lead to recall biases.

Often sexual abuse is a symptom of a multiproblem family in which the children are
inadequately protected from many types of violence and neglect, but few studies have
attempted to assess the role of psychological function, family support and medical
treatment before the abuse, to establish a medical and psychological baseline. A more
serious concern may be the problem of proper case definition. Most investigators have used
their own non-standardised screening questions to define sexual victimisation for the subject or fail to provide a definition of abuse that takes into account the age of the patient when the abuse began, the severity and duration of the abusive experiences, and the relationship of the perpetrator to the victim. These factors can create heterogeneous populations that can make it difficult to compare samples across studies. Also, most studies have not incorporated abuse sensitive interviews and questionnaires that have known reliability and validity. Sexual trauma victims have been shown to use dissociative defences to a greater degree than non-abused individuals, and this increases the importance of using validated, structured assessment instruments to elicit historical information that is sometimes difficult to recall. Previous studies have also underestimated the problems involved in the selection of appropriate comparison groups, and many studies are uncontrolled.

Few studies of sexual trauma have incorporated all these methodological factors, however, some are significantly better than others. To obtain an overview of the long-term sequelae of childhood sexual abuse we need to accept the methodological imprecision of these earlier studies, but limit our interpretations accordingly.

Discussion

Despite Freud’s (1962) early attribution of somatisation to childhood sexual abuse, it has, until recently, been relatively neglected in the abuse research. Somatisation can be defined as the tendency to experience and communicate somatic distress in response to psychosocial stress. Implicit in the notion of somatisation is a preoccupation with bodily
processes and their vulnerability to disease or dysfunction. Such heightened concern may arise, in part, from the experience of physical invasion and vulnerability usually involved in sexual abuse. In addition the sexual locus of the abuse may result in increased awareness of and sensitivity to pain or sensation in the primary and/or secondary sexual regions, possibly producing symptoms such as chronic pelvic pain.

In an attempt to identify abnormal psychological characteristics in women with undiagnosed chronic pelvic pain some investigators have explored sexual attitudes. The view that women with pelvic pain have sexual difficulties and are concerned about female identity probably developed as a consequence of the site of the pain and the frequent clinical observation that pelvic pain is aggravated by sexual intercourse. Psychoanalytic writers, for example Gidro-Frank et al (1960), make a clear distinction between "organic" and "psychogenic" pelvic pain and view the latter as a symptom of underlying conflicts about femininity. Although there are problems in making such a distinction, there are findings to support the view that women with undiagnosed chronic pelvic pain may have anxieties about sex. Beard et al (1977) assessed sexual attitudes and found that women with no obvious cause for pelvic pain rated themselves significantly less positively on a number of sex related concepts than those with positive laparoscopic findings and a no pain control group. The research discussed strongly suggests that childhood sexual abuse may be an aetiological factor in the development of physical symptoms in the pelvic region.
Somatisation may provide patients who have been victims of childhood sexual with a way of describing their chronic distress. Arnold et al (1990) suggests that childhood sexual abuse may be an aetiological factor in the development of physical symptoms but recognises that causality is difficult to prove. Childhood sexual abuse is often accompanied by other disturbances in family relationships, which may themselves be aetiological factors.

If as postulated by Gidro-Frank et al (1960) that pelvic pain results from intrapsychic conflicts due to childhood sexual traumatisation and that the site of the pain is due to the locus of the sexual abuse, the same theory may apply to dysmenorrhea. Despite being an integral component of premenstrual syndrome, which has been shown to have an association with a history of childhood abuse, dysmenorrhea as a possible sequelae of abuse has not been specifically investigated. The forthcoming research hopes to address this issue.
References


Chapter Two

MAJOR RESEARCH PROPOSAL

THE IMPACT OF CHILD SEXUAL ABUSE ON MENSTRUAL SYMPTOMS AND ATTITUDES.
Applicants:

Ms. Marcella Cranney, Trainee Clinical Psychologist, Department of Psychological Medicine, Academic Centre, Gartnavel Royal Hospital, Glasgow.

Dr. Kate Davidson (Academic Supervisor). Address as above.

Summary:

Over the last 15 years there has been an increasing awareness of the high prevalence of childhood sexual abuse and its impact on the psychosocial functioning of adult women. However less research has been conducted on the reporting of physical symptoms in this population. Studies such as, Walling et al (1994) and Toomey et al (1993), have discovered a high incidence of sexual abuse in patients with chronic pelvic pain. Indeed most studies of physical symptoms in women who have been sexually abused has focused on chronic pelvic pain. Another gynaecological disorder which has been associated with victimisation is pre-menstrual syndrome. This is heralded by cognitive, affective, behavioural and somatic symptoms. Although an association has been identified between pre-menstrual syndrome and sexual abuse, there does not appear to be any literature focusing on a potential relationship between childhood sexual abuse and specific menstrual pain. Therefore this study hopes to address that gap by specifically examining the relationship of sexual abuse and dysmenorrhea.

I propose to assess the menstrual symptoms and attitudes of women who have been sexually abused in childhood. It is hoped that this study will use individuals presenting at Clinical Psychology out-patient departments and identified by Clinical Psychologists as having a sexual abuse history. A control group of women who have not been sexually abused will also be obtained from referrals to Clinical Psychology out-patient departments.
Introduction:

The majority of studies looking at the relationship between a history of sexual abuse and long-term physical symptoms have focused on chronic pelvic pain. However these studies, have in the main, been conducted in the U.S. and there does not appear to be any corresponding British studies. Preliminary searching of the literature has revealed gaps in the knowledge about the relationship of childhood sexual abuse and dysmenorrhea.

According to Klein & Litt (1981) dysmenorrhea affects between 25-75% of women. The symptoms of dysmenorrhea and the pervasiveness of these in individuals, does not appear to alter, in spite of the availability and use of pain relievers available for menstrual symptoms. Dalton (1964; 1969) suggested two different forms of primary dysmenorrhea. Spasmodic dysmenorrhea presents as acute, labour-like spasms of pain on the first day of menses and rarely extends for more than 48 hours thereafter. The second is Congestive pain which appears to be a variation of the pre-menstrual syndrome. It consists of dull, aching pains which are distributed in a more diffuse fashion over the body. The symptoms appear several days before and are relieved by the onset of menses. Chesney & Tasto (1975) corroborated Dalton’s distinction and derived the Menstrual Symptoms Questionnaire (MSQ). It should be noted that research concerned with the validity of the MSQ, has consistently repudiated the validity of the dichotomy between spasmodic and congestive dysmenorrhea, therefore the study will examine the validity of this split by replicating Chesney & Tasto’s (1975) procedure before application to the sexually abused group.
For the purpose of this study, the instructions of the Menstrual Symptom Questionnaire (MSQ) were modified in accordance with Stephenson, Denney and Aberger's (1983) suggestion that subjects should be asked for a report of the most recent period rather than of their typical period. This may reduce the effects of distortion over time, as well as the effects of social factors and stereotypes. Studies of dysmenorrhea have revealed that women over the age of 25 years and those who have experienced pregnancy have typically been considered to be at a reduced risk for menstrual pain, however it is felt that this is too restrictive for this study and therefore the inclusion criteria will be for non-menopausal women.

Ruble and Brooks-Gunn (1979) suggest that menstrual attitudes may induce a socially-conditioned stressful reaction to menstruation, and thus aggravate symptoms, as well as influence symptom appraisal. It is hypothesised that this may true for those who have been sexually abused in their childhood before healthy, positive menstrual attitudes can develop. It is predicted that women who have been sexually abused in childhood may resent the feminine characteristic of menstruation because it reminds them of past abuse or have distorted beliefs of guilt and shame about their body and that these factors will intensify dysmenorrhea. Another hypothesis is that dysmenorrhea may be more intense for those who have been sexually abused due to an increased sensitivity to vaginal pain. To assess these issues the Menstrual Symptoms Questionnaire (MSQ) and the Menstrual Attitude Questionnaire (MAQ) will be given.
Psychogenic factors have been considered to be a substantial component in many types of menstrual disorders. Coppen and Kessel (1963) found that pre-menstrual symptoms were related to neuroticism but that menstrual pain was not. However Stephenson et al (1983) found that neuroticism was in fact directly related to scores on menstrual pain. Therefore it was decided to measure personality traits, particularly neuroticism, and establish if this has an impact on the menstrual pain and attitudes of women who have been sexually abused compared with women who have not been abused. Rimsza (1988) observed high somatisation scores and preoccupation with physical symptoms in women with histories of sexual abuse. Reiter et al (1991), who devised the Somatisation Questionnaire (SQ), found an association between scores on this measure and a history of sexual trauma. Therefore it is planned to use this to measure the relationship between sexual abuse and somatisation.

At present there is no consensus as to what constitutes sexual abuse. A distinction between severe and less severe abuse is difficult and there is no evidence that the degree of trauma bears a precise relationship to the subsequent reaction. In addition the context of childhood sexual abuse may influence its effects. The extent of psychological trauma reported can vary with the relationship to the abuser, with the nature, duration, cultural context, and emotional experience of the abuse and with associated violence. Due to these factors information surrounding the abuse will be collated and will be analysed descriptively.
Aims and Hypotheses:

The main experimental hypothesis is that women who have been sexually abused in their childhood will have significantly different experiences of dysmenorrhea when compared with a control group.

Further areas of interest include:

1. Is there an identifiable split between the dysmenorrhea symptoms, i.e. Spasmodic and Congestive. If so does the sexually abused population have a different type of menstrual pain than non-abused women.
2. Do women who have been sexually abused experience more severe menstrual symptoms than women who have not been sexually abused.
3. Does the experimental group have more negative attitudes about menstruation than the control group.
4. Do negative attitudes about menstruation have a direct impact on the intensity of dysmenorrhea, particularly for the sexually abused group?
5. Do personality traits in women who have been sexually abused, particularly neuroticism, have an impact on dysmenorrhea and are there differences evident between the experimental and the control group.
6. Are women who have been sexually abused more likely to somatise than women who have not been sexually abused.
Plan of Investigation

Subjects:

The study aims to use individuals who have been referred to Clinical Psychology outpatient services and who have been identified, either initially or through the course of treatment, as having been sexually abused in their childhood. In addition, numbers may be supplemented by clients referred to psychotherapy or behavioural sexual abuse groups. Clinicians who are working with the clients and who will have a thorough knowledge of their abuse history will be asked to screen them to see if they meet the inclusion criteria, which will consist of:-

1. Females who were sexually abused below the age of 14.
2. Females who are non-menopausal.

Individuals who have conditions which typically result in dysmenorrhea or amenorrhea such as those with eating disorders will be excluded from the study. A control group of women who have not been sexually abused are to be obtained from Clinical Psychology out-patient departments. Numbers are not yet known but it is hoped to have at least 25 subjects in both groups.

Measures:

5. Sexual Abuse History Questionnaire (SAH).
6. Demographic Data Sheet.
Design and Procedure:

Clinical Psychologists will request the participation of current clients who are known to have been sexually abused and who meet the inclusion criteria. Information will be collected pertaining to age, pregnancies and use of oral contraceptives. Information will be required surrounding the abuse history, i.e. age at which abuse started, the nature of the sexual abuse, frequency of the abuse, duration of the abuse and the relationship to the abuser. Participants will be given the EPQ-R; MSQ; MAQ; and the SQ by the clinician, asked to complete them and return them at the next appointment. These will be anonymous to protect the individual's identity, once completed they will be collected from the clinician. This method will avoid questioning by an unfamiliar person about the sexual abuse history.

The control group is hoped to be obtained from Clinical Psychology out-patient referrals. This group will consist of non-menopausal females, who have no history of sexual or physical abuse. Participants will, as in the experimental group, be excluded if they have a condition which typically results in dysmenorrhea or amenorrhea, such as an eating disorder. These two groups will form a between subjects design, and the above measures will be analysed between but also within the groups.

Settings and Equipment:

All the afore mentioned questionnaires will be administered in the clinical setting.

Data Analysis and Collation:

Once relevant childhood sexual abuse cases have been identified by the clinician involved, and agreement to participate in the study given, the questionnaires regarding dysmenorrhea
and psychological assessment will be administered, completed and returned to the clinician. These will then be collected by the researcher. Data for the control group will be gathered in the same way. The data will be analysed using SPSS, the Statistical Package for the Social Scientists.

**Practical Applications:**

The association between sexual abuse and chronic pelvic pain has led some investigators to assert a psychodynamic, aetiologic connection between sexual abuse and pain in the genital area. They state that the guilt, repressed anger and emotional conflict initiated by sexual abuse can later manifest specifically as chronic pelvic pain. Another psychoanalytic explanation of psychogenic pain is that it is activated by the women's underlying conflicts about her sexuality. This study will help to investigate whether such an association exists with dysmenorrhea, which like chronic pelvic pain may be related to sexual abuse through the relationship with the genitalia. This research therefore hopes to provide more information and education about the long-term effects of childhood abuse, which at the present time appears to be non-existent in the area of menstrual pain.

**Time Scales:**

Unconfirmed as yet, but it is hoped that data collection could commence in May 1996.

**Ethical Approval:**

Will be required and has yet to be obtained.

See Appendix 2.1 for amendments to proposal.
References


Chapter Three

MAJOR RESEARCH PROJECT PAPER

THE IMPACT OF CHILD SEXUAL ABUSE ON MENSTRUAL SYMPTOMS AND ATTITUDES.

Target Journal: The British Journal of Medical Psychology (See Appendix 3.1)

Address for Correspondence:
Marcella Cranney BA (Hons)
Dept. of Psychological Medicine
Gartnavel Royal Hospital
Glasgow.
Abstract

This paper explores the relationship between a history of child sexual abuse and menstrual symptoms and attitudes. This is based on chronic pelvic pain research which has indicated an aetiological connection with a history of child sexual abuse. This theorises that pelvic pain is sometimes generated by conflicts about femininity and sexuality, and it was hypothesised that a similar association may exist between sexual abuse and the menstrual process. Although it was found that women who have been sexually abused view menstruation more negatively than non-abused women, there was no evidence to suggest that their experience of menstrual pain is different to or more intense than non-abused women. In addition the results indicate that sexual abuse is linked with neuroticism and somatisation.

Introduction

Over the last 15 years there has been an increasing awareness of the high prevalence of childhood sexual abuse and its relationship with physical symptomatology in adult women. Arnold et al (1990) found that adults who had been sexually abused in childhood were vulnerable to physical symptoms in the specialities of gynaecology, obstetrics, gastroenterology, urology, rheumatology, haematology, orthopaedics, neurology, and neuropsychiatry. However it is in the gynaecological field that a history of childhood sexual abuse has been found to be consistently over-represented (Reiter and Gambone, 1990; Walker, Katon and Hanson et al, 1992; Walker et al, 1988; Walker, Katon, Neraas et al, 1992; Walling et al, 1993). The genital locus of the symptoms which are found in gynaecological presentations creates an obvious physical link with sexual abuse.
The association between childhood sexual abuse and chronic pelvic pain has received the most empirical support. For example, Toomey et al (1993), confirmed a high incidence of sexual abuse in these cases, i.e. 19 out of 36 patients who had presented with chronic pelvic pain also had a history of childhood sexual abuse and Drossman et al (1990), found that abused patients were significantly more likely than non-abused patients to suffer chronic pelvic pain. Gidro-Frank et al (1960) postulate that psychogenic chronic pelvic pain is a symptom of underlying conflicts about femininity and anxiety about sex. These difficulties are common features of the psychological aftermath of childhood sexual abuse and perhaps partially explains the over-representation of sexually abused women with this complaint.

Another gynaecological disorder shown to be associated with sexual victimisation is premenstrual syndrome. Paddison et al (1990) conducted a study which revealed that of 174 women presenting symptoms of premenstrual syndrome, 40% had a history of child sexual abuse and rape. Miccio-Fonseca et al's (1990) study of 968 women revealed that women who had been traumatised sexually reported greater premenstrual discomfort than women who had not been sexually abused. These findings suggest that sexual abuse has an aetiological connection with premenstrual syndrome.

Given this well documented association between sexual abuse and gynaecological complaints, in which the common component appears to be focus on pain around the sexual organs, it was hypothesised that a similar association may exist between sexual abuse and the menstrual process. As has already been mentioned a link has been established
with premenstrual syndrome, however this study was interested in the impact of a history of child sexual abuse on the more pervasive presentation of dysmenorrhea, which according to Klein and Litt (1981) affects from between 25-75% of women. Dysmenorrhea might be more intense for those who have been sexually abused for the same reasons as chronic pelvic pain, but in addition due to the past sexual abuse they might have an increased sensitivity to, and lower pain threshold for genital pain in the form of menstrual pain.

It is predicted that sexually abused women may perceive menstrual symptoms as more severe but they may also report a different type of pain compared to non-abused women. Dalton (1964; 1969) suggested two different forms of primary dysmenorrhea. Spasmodic pain presents as acute, labour-like spasms of pain on the first day of menses. The second is Congestive pain which appears to be a variation of the pre-menstrual syndrome. It consists of dull, aching pains which are distributed in a more diffuse fashion over the body. The symptoms appear several days before and are relieved by the onset of menses. Chesney and Tasto (1975) attempted to distinguish between these two types of dysmenorrhea with the Menstrual Symptom Questionnaire (MSQ). This dichotomy between spasmodic and congestive dysmenorrhea is very controversial, therefore before applying this rationale the present study examined the validity of the sub-scales. The completion instructions were modified slightly in accordance with Stephenson et al’s (1983) study. This involved asking for a report of the most recent period rather than of a typical period, as doing so may reduce the effects of time distortion, as well as the effects of social factors and stereotypes.
It is hypothesised that the development of healthy, positive attitudes would have been restricted in women who have been sexually abused in their childhood, and therefore that they will have more negative menstrual attitudes than women who have not been sexually abused. In addition the feminine characteristic of menstruation may be a reminder of sexuality and therefore serve as an unpleasant reminder of past abuse. Distorted beliefs of guilt and shame about the body and its functions may also create negative attitudes about menstruation. Ruble and Brooks-Gunn (1979) believed that menstrual attitudes may induce a socially-conditioned stressful reaction to menstruation, which aggravates symptoms, as well as influencing symptom appraisal. Therefore given that women who have been sexually abused have more negative attitudes than women who have not been abused, a possible implication could be that this intensifies menstrual symptoms.

Psychogenic factors have been considered to be a substantial component in many types of menstrual disorders. Coppen and Kessel (1963) found that pre-menstrual symptoms were related to Neuroticism but that Menstrual pain was not. However Stephenson et al (1983) found that neuroticism was in fact directly related to scores on menstrual pain. Therefore it was decided to measure the personality traits, particularly neuroticism, and establish if this has an impact on the menstrual pain and attitudes of women who have been sexually abused compared with women who have not been abused. Rimsza (1988) observed high somatisation scores and preoccupation with physical symptoms in adult
women with histories of sexual abuse. Reiter et al (1991), who devised the Somatisation Scale (SQ) also found an association between somatisation and a history of sexual trauma. Therefore this was used to investigate the relationship between sexual abuse and somatisation.

Studies of dysmenorrhea have revealed that women over the age of 25 years, those who have experienced pregnancy (Friederich, 1983) and those that use oral contraceptives (Ylikorkala and Dawood, 1978) have typically been considered to be at a reduced risk for menstrual pain. However this was considered as too restrictive for this study due to the limitations it would place on numbers but more importantly due to the belief that women who have been sexually abused would not conform to this pattern. Therefore the criteria was widened to include non-menopausal women.

The main aim of the present study was to explore the relationship between childhood sexual abuse and menstruation through investigation of the intensity of menstrual symptoms and the association of menstrual attitudes. The subsidiary questions were: do sexually abused women have a different type of menstrual pain than women who have not been sexually abused and do they experience more severe symptoms; do sexually abused women have more negative attitudes about menstruation than women who have not been sexually abused; do attitudes about menstruation have an impact on the intensity of dysmenorrhea, particularly for the sexually abused group; do the personality traits,
particularly neuroticism, in women who have been sexually abused compare with a clinical
population who have not been abused and differ significantly from a non-clinical control
group who have not experienced sexual abuse; does neuroticism in a sexually abused
population have an impact on menstrual symptoms and attitudes; and is the sexually abused
group appear more likely to somatise than the control group women.

Method

Sample

The experimental group consisted of 22 women who met the sexual abuse history criterion
and who were attending clinical psychology out-patient departments. Of this group n=18
had been abused penetratively and for n=17 the abuse was incestuous. Within group
analysis using these measures to investigate the impact of the nature of abuse was not
conducted, as the results would have been invalid due to the small sample size. In order to
control for a history of childhood sexual abuse but also for psychological difficulties two
control groups were utilised. To control for childhood sexual abuse, but using a sample
with a similar psychological presentation, a clinical control group consisting of 18 women
was obtained from individuals currently attending psychology departments who had no
known history of sexual abuse. To control for childhood sexual abuse, but also controlling
for psychological presentation, a second control group of 37 under-graduate university
students who had not disclosed a history of sexual abuse was used. The inclusion criteria
for the experimental group was, women who had been sexually abused before the age of 14
years. Those with a medical or psychiatric disorder which typically results in dysmenorrhea
or amenorrhea such as eating disorders or addictive behaviours were excluded from all three groups. Clinicians conducted the screening for the sexually abused group and the clinical control group, however the student sample screened themselves. All the participants were non-menopausal women aged 18 years plus. S’s ranged from age 19 to 41 years, the mean age was 27.6 years (s.d. 6.9).

Procedure

All information for the experimental and the clinical control groups was obtained through clinical psychologists consulting in various West of Scotland psychology out-patient departments. Clinicians were asked to approach suitable clients who met the criteria for the sexually abused and the clinical control groups. If the individual agreed to participate they were given an Information/Consent sheet providing details about the study. Participants completed 4 questionnaires and a demographic data sheet. Additional data surrounding the sexually abused group was requested. To prevent unnecessary intrusion, the psychologist, with the participant’s consent, provided this information using the Sexual Abuse History questionnaire (SAH), which is described below. To protect anonymity the questionnaires were coded, this also enabled the matching of corresponding information when it was returned separately by the participant and the psychologist. Questionnaires were returned to the researcher in stamped addressed envelopes. The non-clinical control group was given the questionnaires by the researcher and they were collected from a deposit box one week later.
Measures

Participants were asked to rate 26 symptom statements on a 6-point scale from 0 ('no experience of this kind') to 5 ('very severe'), in relation to their most recent menstrual cycle. 13 of these symptoms corresponded to Congestive symptoms, while the other 13 corresponded to Spasmodic symptoms. (See Appendix 3.2).

Participants were asked to indicate on a 7-point scale how much they agreed or disagreed with 33 statements constructed to represent five dimensions of menstrual attitudes: menstruation as a psychologically and physically debilitating event (Debilitating Event); as a positive/natural event (Positive Event); as a bothersome event (Bothersome Event); as an event whose onset can be predicted and anticipated (Predictable); and denial of any effect of menstruation (Denial). This has been shown to be a valid and reliable measure. (See Appendix 3.3).

3. Somatisation Questionnaire (SQ). Reiter & Gambone (1990). This scale consists of 26 common somatic and emotional symptoms which are unrelated to abdominal pain. A net somatisation score was determined for each patient on the basis of the total number of items endorsed. (See Appendix 3.4).


5. Sexual Abuse History (SAH). (See Appendix 3.5).

6. Demographic Data Sheet. (See Appendix 3.6).
Results

Demographics

Table 1- Demographic Frequencies

<table>
<thead>
<tr>
<th></th>
<th>Group 1 (n=22)</th>
<th>Group 2 (n=18)</th>
<th>Group 3 (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Diagnosis</td>
<td>n=3, %13.6</td>
<td>n=2, %11.1</td>
<td>n=6, %16.2</td>
</tr>
<tr>
<td>Psychiatric Diagnosis</td>
<td>n=21, %95.5</td>
<td>n=18, %100</td>
<td>n=2, %5.4</td>
</tr>
<tr>
<td>Contraceptive use</td>
<td>n=5, %22.7</td>
<td>n=7, %38.9</td>
<td>n=13, %35.1</td>
</tr>
<tr>
<td>History of pregnancy</td>
<td>n=17, %77.3</td>
<td>n=13, %72.2</td>
<td>n=9, %24.3</td>
</tr>
<tr>
<td>Any children</td>
<td>n=14, %63.6</td>
<td>n=9, %50</td>
<td>n=7, %18.9</td>
</tr>
</tbody>
</table>

A 2 x 3 chi-square test revealed, as predicted, that the non-clinical control group had less psychiatric history than the sexually abused group (5.4 vs. 95.5%, $X^2=47.03$, d.f=2, $p<0.001$) or the clinical control group (5.4 vs. 100%, $X^2=46.82$, d.f=2, $p<0.001$). A 2 x 2 chi-square revealed that as predicted there was no difference in psychiatric history between the sexually abused group and the clinical control group (95.5 vs. 100%, $X^2=0.839$, d.f=1, n.s.). Further analysis of demographic data will be discussed later.

Menstrual Symptoms

It was predicted that sexually abused women would experience a different type of menstrual pain than women who have not been sexually abused and that they would experience more severe menstrual symptoms.

A principle components solution followed by an orthogonal (Varimax) rotation of all factors with eigenvalues greater than one was conducted, thereby replicating Chesney and Tasto's (1975) analysis. A two-factor solution was attempted, in order for an item to be...
considered salient on a factor, the item needed to obtain a factor loading of at least 0.35 and have a value at least 0.10 greater than its loading on any other factor. The first factor loaded on items related to Congestive pain and accounted for 24.4% of the variance. The second factor accounted for 11% of the variance and loaded on items related to Spasmodic pain. Figure 1 contains the factor loadings for the MSQ. These loadings strongly resembled Chesney and Tasto’s (1975) dichotomy and therefore it was considered valid to use the MSQ Congestive and Spasmodic sub-scales for analysis.

Figure 1. Factor loadings of the MSQ

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 (Congestive)</th>
<th>Factor 2 (Spasmodic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Irritable days before (C)</td>
<td>0.77*</td>
<td>0.03</td>
</tr>
<tr>
<td>2. Cramps begin first day (S)</td>
<td>-0.11</td>
<td>0.74*</td>
</tr>
<tr>
<td>3. Depressed days before (C)</td>
<td>0.79*</td>
<td>-0.08</td>
</tr>
<tr>
<td>4. Abdominal pain one day before (S)</td>
<td>0.10</td>
<td>0.50*</td>
</tr>
<tr>
<td>5. Exhausted or lethargic before (S)</td>
<td>0.80*</td>
<td>0.08</td>
</tr>
<tr>
<td>6. Know only by looking at the calendar (S)</td>
<td>-0.13</td>
<td>-0.09</td>
</tr>
<tr>
<td>7. Prescription drugs for pain during (S)</td>
<td>0.16</td>
<td>0.54*</td>
</tr>
<tr>
<td>8. Weak and dizzy during (S)</td>
<td>0.38</td>
<td>0.39</td>
</tr>
<tr>
<td>9. Tense and nervous during (C)</td>
<td>0.71*</td>
<td>0.13</td>
</tr>
<tr>
<td>10. Diarrhea during (S)</td>
<td>0.29</td>
<td>0.45*</td>
</tr>
<tr>
<td>11. Backaches before (C)</td>
<td>0.54*</td>
<td>0.30</td>
</tr>
<tr>
<td>12. Aspirin for pain during (S)</td>
<td>0.14</td>
<td>0.40*</td>
</tr>
<tr>
<td>13. Breast tend before (C)</td>
<td>0.53*</td>
<td>0.07</td>
</tr>
<tr>
<td>14. Lower back and abdomen tender day 1 (S)</td>
<td>0.27</td>
<td>0.62*</td>
</tr>
<tr>
<td>15. Feel like curling up day 1 (S)</td>
<td>0.29</td>
<td>0.65*</td>
</tr>
<tr>
<td>16. Gain weight before (C)</td>
<td>0.54*</td>
<td>0.21</td>
</tr>
<tr>
<td>17. Constipated during (C)</td>
<td>0.35*</td>
<td>-0.02</td>
</tr>
<tr>
<td>18. Reappearing pains day 1 (S)</td>
<td>0.04</td>
<td>0.54*</td>
</tr>
<tr>
<td>19. Dull aching during (C)</td>
<td>0.36*</td>
<td>0.26</td>
</tr>
<tr>
<td>20. Abdominal discomfort before (C)</td>
<td>0.63*</td>
<td>0.08</td>
</tr>
<tr>
<td>21. Backaches with period (S)</td>
<td>-0.39</td>
<td>0.56*</td>
</tr>
<tr>
<td>22. Abdomen feels bloated before (C)</td>
<td>0.53*</td>
<td>0.19</td>
</tr>
<tr>
<td>23. Nauseous during (C)</td>
<td>0.16</td>
<td>0.11</td>
</tr>
<tr>
<td>24. Headaches before (S)</td>
<td>0.49*</td>
<td>0.13</td>
</tr>
<tr>
<td>25. Spasmodic marker (S)</td>
<td>-0.05</td>
<td>0.72*</td>
</tr>
<tr>
<td>26. Congestive marker (C)</td>
<td>0.67*</td>
<td>0.29</td>
</tr>
</tbody>
</table>

S= Spasmodic symptom, C= Congestive symptom.
* Considered to be salient on factor

Within subjects t-tests, two-tailed, were then conducted for each of the three groups to discover if there was a significant difference between their scores on these two measures. No differences were found except within the clinical control group who had higher scores.
on Congestive symptoms than Spasmodic (t=3.63, df=17, p< 0.05). Anovas of whether the three groups scored differently on each of the two measures were not significant (F=2.68, d.f=2, n.s; and F=2.74, d.f=2, n.s, for Congestive and Spasmodic respectively) Likewise an Anova to establish if the three groups differed on their total MSQ score was non-significant (F=2.57, d.f=2, n.s). (See Table 2 for mean, median and s.d results)

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
<th></th>
<th>Group 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean s.d. Median</td>
<td>Mean s.d. Median</td>
<td>Mean s.d. Median</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MSQ</td>
<td>53.0 18.5 53.5</td>
<td>43.5 13.5 44.0</td>
<td>42.1 20.3 41.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congestive</td>
<td>29.5 12.9 29.0</td>
<td>27.3 11.8 26.5</td>
<td>22.4 11.4 20.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spasmodic</td>
<td>23.5 10.6 24.0</td>
<td>16.3 6.0 15.5</td>
<td>19.7 10.7 18.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Menstrual Attitudes

It was predicted that sexually abused women would have more negative attitudes about menstruation than women who had not been sexually abused.

Analysis was conducted on the five different attitude dimensions of the MAQ to establish whether there were significant differences between the three groups on these measures. (See Table 3 for mean, median and s.d. results).

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
<th></th>
<th>Group 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean s.d. Median</td>
<td>Mean s.d. Median</td>
<td>Mean s.d. Median</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deb. Evnt</td>
<td>12.4 10.8 15.0</td>
<td>2.7 8.1 2.0</td>
<td>4.3 7.7 3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pos. Evnt</td>
<td>15.9 6.0 16.0</td>
<td>25.9 4.8 27.0</td>
<td>21.0 5.7 21.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both. Evnt</td>
<td>17.6 7.9 20.5</td>
<td>4.5 5.3 3.0</td>
<td>13.5 6.8 15.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predict.</td>
<td>20.6 6.5 21.0</td>
<td>14.5 4.3 14.5</td>
<td>16.2 5.6 17.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial</td>
<td>9.5 7.4 11.5</td>
<td>10.4 4.5 11.5</td>
<td>9.1 6.2 8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Anova analysis which was performed on the three groups revealed a significant difference on the positive event dimension ($F=15.55$, $d.f=2$, $p<0.001$). Tukey's post hoc analysis revealed that the sexually abused group had significantly lower scores than both the control groups at the 0.05 level of significance. Likewise the clinical control group had significantly lower scores than the non-clinical control group at the 0.05 level. Kruskal-Wallis anova's were conducted for the other attitude dimensions, as the data was non-parametric, and significant differences between the three groups were found for the dimensions of debilitating event, bothersome event and predictable event ($H=11.79$, $d.f=2$, $p<0.005$; $H=25.99$, $d.f=2$, $p<0.001$; and $H=14.34$, $d.f=2$, $p<0.001$, respectively). Mann-Whitney tests were then used on these measures to ascertain which groups differed. It was found that the sexually abused group had significantly higher scores on the Debilitating event dimension than the other two groups ($U=94$, $p<0.005$ and $U=213.5$, $p<0.005$, clinical and non-clinical groups respectively). On the Bothersome event attitude it was found that the sexually abused group again had significantly higher scores than both the control groups ($U=35.5$, $p<0.001$ and $U=249.5$, $p<0.05$, clinical and non-clinical groups respectively). A difference was also evident on this dimension between the control groups, with the non-clinical control group scoring significantly higher ($U=111$, $p<0.001$). The sexually abused group was found to have significantly higher scores than both the control groups on the predictability of onset measure ($U=70$, $p<0.001$ and $U=216$, $p<0.005$, clinical and non-clinical control groups respectively).
Relationship between Menstrual Attitudes and Menstrual Symptoms

It was predicted that negative attitudes about menstruation would have an impact on the intensity of dysmenorrhea, particularly for the sexually abused group.

Spearman and Pearson’s correlations were conducted between the 5 attitude dimensions of the MAQ with the total MSQ score for the three groups. As can be seen from table 4 there was only one significant relationship between the total MSQ score and the 5 attitude measures for the sexually abused group, and this occurred with the debilitating event attitude ($r= 0.468, p< 0.01$). Within the clinical control group there was no significant relationships found. However a relationship was found within the non-clinical control group between the total MSQ score and the attitude of menstruation as a predictable event ($r= 0.589, p<0.001$).

Table 4-Correlation Matrix between total MSQ score and 5 attitude dimensions of MAQ.

<table>
<thead>
<tr>
<th>MAQ Attitude</th>
<th>Total MSQ Group 1</th>
<th>Total MSQ Group 2</th>
<th>Total MSQ Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deb. Evnt</td>
<td>0.468*</td>
<td>-0.249</td>
<td>0.189</td>
</tr>
<tr>
<td>2. Pos. Evnt</td>
<td>0.047</td>
<td>0.232</td>
<td>0.077</td>
</tr>
<tr>
<td>3. Both. Evnt</td>
<td>0.388</td>
<td>-0.400</td>
<td>0.055</td>
</tr>
<tr>
<td>4. Predict.</td>
<td>0.204</td>
<td>-0.010</td>
<td>0.589***</td>
</tr>
<tr>
<td>5. Denial</td>
<td>-0.101</td>
<td>0.144</td>
<td>-0.237</td>
</tr>
</tbody>
</table>

*p< 0.05, **p<0.005, ***p< 0.001. (One-tailed tests)

Personality Factors

It was predicted that the personality traits of the sexually abused group would be comparable to the clinical control group but significantly different from the non-clinical control group, with particular relevance to neuroticism.
Table 5- Mean, median and s.d.

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
<th></th>
<th>Group 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>s.d.</td>
<td>Median</td>
<td>Mean</td>
<td>s.d.</td>
<td>Median</td>
</tr>
<tr>
<td>Tot. EPQ</td>
<td>20.0</td>
<td>3.9</td>
<td>20.0</td>
<td>19.9</td>
<td>4.3</td>
<td>20.0</td>
</tr>
<tr>
<td>Neurot.</td>
<td>10.4</td>
<td>1.6</td>
<td>11.0</td>
<td>8.1</td>
<td>2.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Extrov.</td>
<td>3.1</td>
<td>2.8</td>
<td>2.5</td>
<td>6.1</td>
<td>3.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Psychot.</td>
<td>1.9</td>
<td>1.6</td>
<td>2.0</td>
<td>1.5</td>
<td>1.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Lie Scale</td>
<td>4.5</td>
<td>2.8</td>
<td>4.5</td>
<td>4.2</td>
<td>2.5</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Kruskal Wallis anovas were conducted on the total EPQ-R score and on the four personality measures, as the data was non-parametric. The only significant differences between the three groups were found for Neuroticism and Extroversion (H=19.04, d.f=2, p<0.001 and H=21.38, d.f=2, p<0.001, respectively). Mann-Whitney tests were then used to ascertain which groups differed. On the Neuroticism scale women who had been sexually abused were found to have significantly higher scores than both the control groups (U= 84, p< 0.01 and U= 150.5, p< 0.001, clinical and non-clinical control groups respectively). No difference was found between the control groups. On the Extroversion scale the sexually abused group had significantly lower scores than both the control groups (U= 95, p< 0.005 and U= 123, p< 0.001, clinical and non-clinical control groups respectively). No difference in extroversion scores was found between the control groups.

Effect of neuroticism in the sexually abused population

It was predicted that the personality trait of neuroticism in women who have been sexually abused would have a significant impact on menstrual symptoms and attitudes.

Spearman correlations between neuroticism and the other measures were conducted for the sexually abused group, however as is shown in table 6, only one significant relationship
was identified, i.e. between neuroticism and the total somatisation score. Neuroticism did not correlate with any of these measures for the control groups.

<table>
<thead>
<tr>
<th>EPQ-R</th>
<th>Tot MSQ</th>
<th>Tot SQ</th>
<th>Deb.Evnt</th>
<th>Pos.Evnt</th>
<th>Both. Evnt</th>
<th>Predict</th>
<th>Denial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurot</td>
<td>0.278</td>
<td>0.489*</td>
<td>0.081</td>
<td>0.128</td>
<td>0.176</td>
<td>0.243</td>
<td>-0.289</td>
</tr>
</tbody>
</table>

*p<0.05. (One-tailed tests)

**Somatisation**

One of the experimental questions posed by the study was: would the sexually abused women have significantly higher somatisation scores than the control group women. See Table 7 for the mean, median and s.d results.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>s.d.</td>
<td>Median</td>
</tr>
<tr>
<td>Tot SQ</td>
<td>10.0</td>
<td>5.3</td>
</tr>
</tbody>
</table>

A Kruskal Wallis anova which was conducted on the total somatisation score found a significant difference between the three groups (H= 30.59, d.f=2, p< 0.001). Mann-Whitney tests were then applied. The sexually abused group was found to have significantly higher scores than both control groups (U= 81.5, p< 0.005 and U= 75.5, p< 0.001, clinical and non-clinical control groups respectively). The clinical control group was also found to have significantly higher scores than the non-clinical control group (U= 193.5, p< 0.05).
Demographic differences

2 x 3 chi-square tests revealed that pregnancy and children were related to group($X^2 = 19.85, \text{d.f}=76, p< 0.001$; and $X^2 = 12.80, \text{d.f}=76, p< 0.005$, for pregnancy and children respectively). Specifically the non-clinical control group had less pregnancies than the clinical control group (24.3 vs. 72.2%, $X^2 =11.57, \text{d.f}=54, p< 0.001$) or the sexually abused group (24.3 vs. 77.3%, $X^2 =15.69, \text{d.f}=58, p< 0.001$). The non-clinical control group also had less children than the clinical control group (18.9 vs 50%, $X^2 =5.67, \text{d.f}=54, p< 0.05$) or the sexually abused group (18.9 vs. 63.6%, $X^2 =12.03, \text{d.f}=58, p<0.001$). A relationship was also found between psychiatric diagnosis and group ($X^2 =65.57, \text{d.f}=76, p< 0.001$). Specifically the non-clinical control group had less psychiatric history than the sexually abused group (5.4 vs. 95.5%, $X^2 =47.03,\text{d.f}=58, p< 0.001$) or the clinical control group (5.4 vs. 100%, $X^2 =46.82, \text{d.f}=54, p< 0.001$). No significant relationship were found for contraceptive use or medical diagnosis.

Discussion

Consistent with the results of Chesney and Tasto’s (1975) study, a dichotomy in dysmenorrheic symptoms was found for the entire sample, i.e. a split between Congestive and Spasmodic pain. However the only such split between Spasmodic and Congestive symptoms occurred within the clinical control group, who had significantly higher scores on Congestive pain. No difference was apparent within either the sexually abused group or the non-clinical control group. However tests show that the three groups did not differ on either Congestive or Spasmodic symptoms and therefore it was found that the three groups had no identifiable differences in the menstrual symptoms which they experience.
The total score on the menstrual symptom questionnaire was used as an indication of the severity of symptoms. It had been predicted that women who had been sexually abused would experience more severe menstrual symptoms than non-abused women. However this was not confirmed as there were no significant differences in severity between the three groups.

The hypothesis that sexually abused women perceive menstruation more negatively than both of the control groups was confirmed by the study. Menstruation was viewed as a less positive event; more debilitating; more bothersome; and more predictable. Positive attitudes may have failed to develop in the women who had been sexually abused due to the abuse which they suffered. Disgust or loathing of the body, which is a common sequelae of sexual abuse, may have created the substitution of these negative beliefs about menstruation. Furthermore menstruation is an affirmation of the reproductive cycle and of sexuality which may serve as a reminder of past abuse and therefore generate adverse feelings.

The clinical control group viewed menstruation as a less positive event than the non-clinical group. However the non-clinical group found menstruation to be more bothersome than the clinical control group. This latter finding may be due to the fact that the non-clinical control group consisted of a student sample and therefore were a younger population with perhaps less experience of tolerance towards physical inconvenience.
Although the sexually abused women had more negative attitudes about menstruation, the prediction that these would have an impact on the severity of menstrual symptoms was not supported. This therefore disputes Ruble and Brooks-Gunn's (1979) assertion that menstrual attitudes can aggravate menstrual symptoms. The only attitude dimension to correlate with the menstrual symptom score was the perception of menstruation as a debilitating event. However this association is hardly a revelation and is one which could have been deduced through logic. The only other relationship with the menstrual symptom score occurred within the non-clinical control group and existed with the perception of menstruation as a predictable event. Once again this may have occurred due to the demographic differences which existed within the student sample.

The sexually abused women had significantly higher neuroticism scores than both the control groups. This was perhaps due to the traumas which were inflicted during their childhood. It had been predicted that the sexually abused women would have been comparable to the clinical control group on neuroticism scores but would be significantly different from the non-clinical controls. Surprisingly however there was no difference found between the two control groups. This indicates therefore that the student sample is comparable on neuroticism scores to women who have clinical presentations for psychological treatment. The sexually abused group had significantly lower extroversion scores than the two control groups.
These findings reveal that women who have been sexually abused have significantly different personality attributes than women who have not been abused but have clinical psychopathology. This therefore suggests a strong aetiological link between sexual abuse and neuroticism. This study does not support Stephenson et al’s (1983) assertion that women who experience dysmenorrhea are significantly neurotic. On the contrary the results suggest that while neuroticism may have an effect on somatisation symptoms it does not account for these women’s’ negative attitudes towards menstruation or menstrual symptoms.

The women who had been sexually abused had significantly higher somatisation scores than both the control groups. This supports Reiter et al’s (1991) finding of an association between a history of childhood sexual abuse and somatisation. This provides tentative evidence of an association between sexual abuse and non-specific somatic presentations.

Various other factors may have affected the results. The student sample were found to have less pregnancies and children and were younger than the sexually abused group and the clinical control group therefore it may have been predicted that they would experience more menstrual pain, in accordance with Friederich’s (1983) study. However there was no significant difference found between the groups. These demographic differences may account for the non-clinical control group having significantly lower somatisation scores than the sexually abused group and the clinical control group, as many of the symptoms on the questionnaire can manifest during pregnancy. A more accurate finding is felt to be the
comparison with the clinical control group who despite being comparable to the sexually abused group on these measures had significantly lower somatisation scores. This would therefore support the link between sexual abuse and somatisation. Oral contraceptives are also believed to influence menstrual pain, however the three groups did not differ in their use of the pill and therefore this can be discounted.

In conclusion this study has provided more information on the long-term effects of childhood sexual abuse. Future research could focus on the nature of the abuse suffered to discover if the relationship of the abuser, the duration of the abuse, the type of the abuse, i.e. penetrative versus non-penetrative age had a significant impact on the menstrual pain or attitudes. It would also be interesting to examine if the age of the abuse was significant, that is, if it commenced prior to the onset of menses. To conclude this study found no evidence that women who have been sexually abused experience menstrual pain differently or more intensely than non-abused women, but there was strong evidence that they view menstruation more negatively than non-abused women. It is felt that the biological function of menstruation and the view that these women have of this, should be routinely incorporated into cognitive treatment as a means of accessing and addressing how these women feel about their sexuality.
References


Chapter Four

SINGLE CASE RESEARCH (I)

PSYCHOLOGICAL ASSESSMENT OF SUITABILITY FOR LEG LENGTHENING.

Target Journal: Journal of Child Psychology and Psychiatry (See Appendix 4.1)
Abstract

This paper discusses the psychological assessment of a 12 year old achondroplastic patient for suitability for leg lengthening. Achondroplasia has many psychological sequelae and therefore consideration was given to the individual’s basic personality factors, the realism of the expectations of surgery and the motivation for going ahead with such a procedure. This assessment was further complicated by a failed attempt at leg lengthening and therefore it was important to ascertain why this had happened and assess the possibility of it re-occurring.

Introduction

Achondroplasia is the most common of the human chondrodysplasias, it may be inherited as an autosomal dominant trait, but between 80 and 90% of affected children are new mutations. Typical features include a protruding high forehead and flattened nasal bridge, dislocation of the radial head, and trident hands. However the most striking feature is the relative shortening of the limbs. At skeletal maturity individuals with achondroplasia may be under 120cm (3 feet, 11 inches) in height. There are varying accounts of incidence, Camera & Mastroiacova (1988) state that the incidence could be as high as 1 per 22,500 live births, while Bier (1923) gave a more conservative estimate of 1 per 200,000 live births. However even today the diagnosis is often missed at birth, due to the rarity of the condition. Cohen et al (1985) state that 75% of achondroplasia cases are missed at birth and only 60% have been diagnosed at one year old. Clinical suspicion normally occurs first.
and then this is verified by radiological diagnosis. Occasionally the infant presents with hydrocephalus, hypotonia, cervical vertebral instability, or feeding problems. In the majority of cases, however, the child is physically fit and of normal intelligence.

Codvilla (1905) published the first account of leg lengthening. This technique was subsequently developed by DeBastiani et al (1987); Ilizarov (1990); and Vilarrubias et al (1990). These operations are mainly performed on children who suffer from achondroplasia, however it is often used on other conditions which create short stature. These children of reduced stature may have up to four bones lengthened sometimes gaining up to 30cm in height. The programme in achondroplastic children can last more than two years and involves a strict post-operative physiotherapy regime. The most popular leg lengthening technique is performed with a mono-lateral (Orthofix) frame. Two screws are inserted into each end of the bone to be lengthened, these pins are then attached to the lengthening unit. Pin site care is started early and distraction of the bone usually commences seven days post-operatively. The child is taught how to distract the bone by turning a key on the lengthening unit usually four times a day. This gains 1mm of added length per day. It is continued until the required increase is achieved. The device is then locked while the new bone thickens and gradually forms a new cortex. In some cases walking may continue post-operatively but many patients require the use of a wheelchair, particularly during the lengthening phase. This procedure can generate a lot of pain and as has been described requires a lot of after care both from medical staff and from the individual concerned. In addition the Orthofix frame can be cumbersome and affect mobility regardless of whether a wheelchair is required or not.
Saleh and Burton (1991) found that an association with age exists for the presentation for leg lengthening surgery. The first peak in presentation for leg lengthening occurs at 1 to 2 years of age, and may be attributable to parental shock and a desire to immediately rectify the disability. The second peak occurs between 6 and 8 years of age. The approach of adolescence, with all its associated problems, seems to prompt the next peak. There are advantages in completing surgery before the age of 12 and the transition to secondary school. This is because secondary education establishments are often less often able to cope with the special needs and because peer group pressure tends to increase with age. However 14 to 16 year olds who are more mature and able to make informed decisions may cope better with the treatment.

Achondroplasia, has many psychological sequelae and these have been well documented in the literature. Many authors, for example, Money (1967) see a potential for the development of emotional difficulties in individuals of dwarfed status. This follows from the observation that merely the small size attracts unusual attention and that there is a tendency for the dwarf to be treated as if he was younger. Stabler (1986) described overprotection by parents, teasing by peers and poor academic achievement. Richman et al (1986) listed that children with short stature have low self-esteem, high degree of social isolation, withdrawal, immaturity and disturbance of body image. Drash (1969) has documented that adolescence is an especially difficult period. Lavini et al (1990) described the reasons that achondroplastic patients want lengthening as:- to be friends with normal
sized people; to be able to do ordinary things; to be comfortable; to find a good job; and to drive a car. Therefore there was often a dual reasoning behind the desire to have the operation, to overcome a physical shortcoming at the same time as to improve social life.

For these reasons, the patient must be viewed in an overall context to identify both the local and general effects of an operation that has such far-reaching psychological and physical consequences. The most important psychological features in the assessment interview were:- the basic personality, needs, and motivation. This incorporated self-esteem and body image and also coping style.

**Case Report**

X a 12 year and 9 month old girl with achondroplasia was referred to the Clinical Psychology Department at R.H.S.C. by her Consultant Orthopaedic Surgeon for assessment of suitability for leg lengthening. This procedure had been undertaken a year previously, however the procedure was abandoned after four weeks due to X's poor compliance and withdrawal. Leg lengthening was now being reconsidered due to X's strong desire to go ahead and the Consultant requested psychological evaluation of her coping abilities before making his decision.

**Family Background**

The family consists of Mr and Mrs X, both aged 45 years old, and three elder siblings aged 27, 26 and 24 years of age. Mrs X appears to have a close loving relationship with her daughter, however Mr X is an alcoholic who regularly vanishes for weeks on drinking
binges and is therefore not a stable influence in X’s life. At present Mr and Mrs X have
separated. Although there is a large age difference between X and her next sibling, Mrs X
reported that X was a planned pregnancy. X’s sisters and brother have all moved from the
family home but are still in regular contact and very supportive.

Developmental History

X’s birth was a normal delivery and the achondroplasia was diagnosed at 6 weeks old.
There were no developmental difficulties and Mrs X reported that X met her
developmental milestones relatively early, for example, walked at 10 months old. The
family had been informed that the leg lengthening was a possibility when they first
enquired, which was when X was 5 years old. When X was 10 years old she was referred
to a Consultant Endocrinologist who offered growth hormone treatment, however X
preferred to wait for leg lengthening the following year, as the benefits were thought to be
better.

Psychiatric History

There has been no previous psychological or psychiatric history and no familial
psychopathology. There has been no history of phobic or anxious reactions to interventions
such as medical procedures or dental work.

Social Skills

X was described by her mother as very out-going and she seems to have a wide circle of
friends. She has good interpersonal skills and her mother reports that she is mature and
sensitive to other peoples needs. She enjoys and participates in physical activity, for example, badminton and football. She has not reached puberty and has not started to show interest in the opposite sex. She was only able to recall one incident of teasing which occurred when she attended primary school. She did state that people frequently stare at her, which she tries to ignore although it annoys her. She does well academically.

**Self-esteem/Body Image**

X appeared to have an accurate self-image and was able to value herself in ways other than her physical appearance. She was able to recognise positive personality qualities and although dissatisfied with her short stature did like certain things about her appearance, for example her long hair.

**Observation**

X was very pleasant and engaged well. She communicated openly and expressed a strong desire for leg lengthening which seemed to be based on a comprehensive understanding of the procedure.

**Previous Leg Lengthening**

Following the operation last year, X states that she had difficulty raising her leg, which at the time appeared to have been caused by psychosomatic difficulties. However X admitted that she may have played on her inability to lift her leg. She became very withdrawn and was emotionally labile at that time. Mrs X states that she was very surprised by this behaviour as it seemed out of character for X.
It would seem that X is a sensitive girl who worries what others think of her. While in the ward she felt that comparisons were being drawn between herself and another girl who was making better progress, and this made her feel demoralised. X also reports a clash of personalities with one of the physiotherapists. This might have been due to a transference process due to the painful and strenuous nature of the physiotherapy.

As already mentioned X’s father is an alcoholic, whose unpredictable behaviour often creates difficulties. During X’s hospital admission for the leg lengthening procedure he disappeared. X is fully aware of her father’s drinking habits but Mrs X felt that her daughter would be upset by her father’s choice not to support her, and therefore decided to hide this fact. The result appears to have been that X became suspicious that something was wrong due to her mother’s attitude. She states that her mother acted differently towards her, she was often abrupt and did not show much patience, and this caused her to worry.

Expectations

Both X and her mother appear to have a realistic appraisal of the leg lengthening procedure. X states that she would like to gain 8 inches in height, which is a realistic goal. She is currently 3 feet 10 inches tall and therefore could potentially be 4 feet 6 inches. Her ideal would be to be the same height as her mother, who is 4 feet 11 inches, she has been told this might be possible allowing for natural growth. She lists the advantages of being taller as, not being treated differently because of her height, i.e. she thinks she would not be
stared at as often; and would be able to do things which taller people do and take for granted, such as being able to reach shelves. X was able to demonstrate a good understanding of the procedure, the physiotherapy, and the rehabilitation which is required. X’s feeling about the failed leg lengthening attempt was that it has provided her more information and has enabled her to give fuller informed consent. Enquiry about motivation also included the possibility that X may feel pressurised to have leg lengthening, not necessarily from family or friends but from society as a whole, which tends to discriminate against people of short stature. However X denied any such pressure and stated that she was doing it for herself.

**Measures of Assessment**

**STAIC State/Trait Questionnaires (Spielberger et al, 1970)**
X did not meet caseness level for anxiety state level, however her score was suggestive of anxiety trait levels. Therefore this indicates that X has inherent anxiety factors in her personality.

**Depression Self-Rating Scale for children (Birleson, 1981)**
X did not meet caseness level for depression

**Parenting Stress Index (Abidin, 1986)**
Figure 1. indicates Mrs X’s responses to the Parenting Stress Index. The profile reveals that all scores fall below the range classified as caseness levels. In addition to the scores in the graph Mrs X’s score on Defensiveness Responses did not meet caseness levels either.
Figure 1.

Tot.S= Total Stress score; P.D= Parental Distress; P-C.D= Parent-Child Dysfunctional Interaction; D.C= Difficult Child.

Coping Resources Inventory (Moos, 1993)

X was asked to complete the C.R.I to describe her method of coping during the previous leg lengthening procedure. Figure 2. depicts her profile. This reveals that X did not directly seek guidance and support and that she tended to react to her difficulties by passively accepting them. However she exhibited well above average logical appraisal skills, whereby she made cognitive attempts to understand and prepare mentally for the operation and its consequences.

Figure 2.

LA= Logical Analysis, "Well above average";
PR= Positive Reappraisal, "Average";
SG= Seeking Guidance and Support, "Well below average";
PS= Problem Solving Ability, "Average";
CA= Cognitive Avoidance, "Well below average";
AR= Acceptance/Resignation, “Somewhat below average”;
SR= Seeking Alternative Rewards, “Somewhat below average”;
ED= Emotional Discharge,
Formulation

In conclusion X was felt to be committed to surgery and seemed to have a good understanding of the leg lengthening procedure and its implications. Her motivation seemed appropriate and although dissatisfied with her height did not value herself solely on these terms. Her self-esteem was typical for an adolescent in that she was slightly insecure about herself but was able to state positive qualities and things she liked about her appearance.

It would seem that the last leg lengthening attempt was affected by several factors, the most important being the unstable family circumstances at that time. However Mrs X is at present taking control and trying to stabilise the situation. Unfortunately it would seem that this will come through divorce, but X’s view about this is that it would greatly improve the home environment, and provided she is able to maintain contact with her father everyone will be more content. Although divorce would naturally cause transitional distress for all those affected, Mrs X states that she will try to minimise this as much as possible.

At the time of the last operation X displayed poor coping resources, however these weaknesses have now been identified and recognised. X is aware that this was a maladaptive way to cope and believes that she would be able to implement more constructive methods in the future. However it is felt that X would benefit from psychological input throughout the leg lengthening procedure. This may also help with anxiety management, as tests revealed that X possesses some anxiety traits.
X does appear to be sensitive and her coping style in the past has been to withdraw. However it is felt that X would be unlikely to react in the same manner again. Mrs X had been unaware that withholding information from X about her father had such a significant impact and understands the need for communication, both for her own benefit as much as her daughter's. X appears to have unconditional support not only from her mother and siblings but also from friends, who she knows will visit her in hospital and assist her at school. It is anticipated that with the aid of psychological intervention X would be able to cope and adjust to surgery and its implications and therefore it was recommended that the Consultant should consider her once more for treatment.
References


Chapter Five

SINGLE CASE RESEARCH (II)

A CLINICAL ACCOUNT OF ASPERGER'S SYNDROME

Target Journal: Journal of the American Academy of Child & Adolescent Psychiatry
(See Appendix 5.1).
Abstract

Asperger's syndrome displays the triad of features characteristic of a Pervasive Developmental Disorder. These are, an impaired social interaction, impaired verbal and nonverbal communication and a restricted range of imaginative activities. However it is only very recently that Asperger's syndrome has been recognised as a distinct Pervasive Developmental Disorder subtype in both ICD-10 (World Health Organisation, 1992) and DSM-IV (American Psychiatric Association, 1994). Asperger's syndrome is often misdiagnosed due to the relative infancy of its status as a discrete diagnosis and because the disorder is less pervasive than Autistic Disorder. This paper through discussion of the clinical presentation and psychometric profile describes a possible case of Asperger's syndrome.

Key Words: Asperger's syndrome; Pervasive developmental disorder; clinical presentation.

Introduction

The Pervasive Developmental Disorder (PDD) diagnosis is given to a group of children who present with a triad of impairments of reciprocal social interaction, verbal and nonverbal communication, and restricted range of imaginative activities. Autism is the best known PDD, which Kanner (1943) first described as "early infantile autism". Many authors, for example Wing (1981) have proposed that Asperger's syndrome (AS) is part of the "autistic continuum".
Asperger (1944), a Viennese paediatrician, described a group of children who he labelled as having “autistic psychopathy”. They displayed a number of unusual clinical features namely, social isolation, pedantic speech, one-sided conversations with others, and eccentric, unusual interests that occupy a large part of their time. These children show the triad of essential features of a PDD, and AS has recently been included as a distinct PDD subtype in both ICD-10 (World Health Organisation, 1992) and DSM-IV (American Psychiatric Association, 1994). Gillberg and Gillberg (1989) suggested prevalence rates of between 10 and 26 per 10,000 for Asperger’s syndrome in children with normal intelligence and there is some evidence that the rate among those with a mild learning disability is substantially lower. Asperger (1944) stated that this disorder was much more common in boys than in girls and his original view was that children had a good social prognosis, however it would seem that this diagnosis is now associated with considerable social handicap which extends into adult life.

The essential feature of AS is the qualitative impairment in social relationships; i.e., these children are not only socially isolated but also show an abnormal range of social interaction that cannot be explained by other factors such as shyness, short attention span, aggressive behaviour, or lack of experience. These impairments can take many forms and include not showing any interest in other children; being a passive participant in other children’s play; or interacting with children only in respect to one’s own obsessive interests. They can also be very socially intrusive or awkward and ask inappropriate questions, come too close to
others, or remain aloof. However the key point is not that AS children are socially isolated, but that they cannot modify their social behaviour to the demands of the environment. They are always out of context.

Another important feature is impairment in verbal and nonverbal communication. Children with AS, while being verbal, often have profound difficulties in the pragmatics of social communication. Language is not used for social chat but rather as a means to a particular concrete end, and they usually have extreme difficulty in initiating and sustaining a conversation. Their speech is often characterised by a lack of inflection or by unusual placement of inflection in a sentence. Their conversation is often tangential and circumstantial.

Gillberg (1989) states that the most characteristic feature of AS is the restricted range of interests, which often take an unusual or bizarre form. Sometimes these interests can overlap into the normal hobbies of children, however with AS children the difference is that this is the "only" activity in which the child participates.

Several studies have compared children with autism and AS on aspects of clinical presentation. Children with AS seem to be clearly delineated from the majority of autistic children, who usually have a severe learning disability, lack communicative language, and have a poor prognosis. Szatmari et al (1989) in an attempt to discover whether AS differs from high functioning autism matched the two groups by developmental level and then
compared their clinical presentation. This study suggests that children with AS differ from autistic children on measures of social responsiveness, communication, imaginative play, and behaviour.

AS children were found to be more socially responsive to their parents and show more social interaction with peers than do autistic children. Social impairment only appears to manifest when AS children interact with normal children. This was reflected in a later age of onset for AS, between 2 and 3 years of age, as compared to autism, in which the usual age of onset is between 1 and 2 years. There were also clear differences in the development of language. Echolalia, pronoun reversal, idiosyncratic use of speech, and jargon speech were all more commonly reported in autistic children, while AS children showed repetitive speech or perseverated on certain subjects. Another major difference was in imaginative play. The autistic children rarely developed this ability whereas the AS children did develop symbolic play, albeit somewhat later than normal children. Differences also existed in bizarre behaviours and responses to the environment. Preoccupation with parts of objects, insistence on sameness, stereotypies, and altered sensitivity to stimuli were all found more commonly in autistic children than in AS children.

Therefore the AS child is responsive and develops a warm relationship with parents but has great difficulty with peers, he may have delayed speech onset, but once speech begins there are no signs of the deviant language development seen in autism. Symbolic play develops but is usually repetitive and stereotypic. Szatmari (1992) found that children with autism
have higher rates of speech delay and deviant language development than children with AS. Gillberg (1989) also reported that there are fewer unusual social activities in AS but there is more often a history of bizarre interests and preoccupation and higher rates of anxiety symptoms and motoric clumsiness. The following clinical presentation of a 12 year old boy appears to typify the AS diagnosis.

**Case Report**

X, a 12 year old boy was referred by his G.P due to lack of concentration and a tendency to day-dream at school. Academically his school work is satisfactory but he takes an unacceptably long-time to produce this. There have been long standing behavioural problems at school, however since moving to Secondary school the teachers seem more able to contain X’s behaviour. X’s mother does not think this is due to an improvement in X’s behaviour, as much as a reduction in the teachers frustration, due to classes being of shorter duration.

X’s parents feel he is underachieving academically. They state he takes along time to get started on work, works very slowly and has to work methodically. They have noticed that his concentration is poor and that he has a tendency to day-dream. His school report for his first year has shown that he has been obtaining average marks in most subjects. His two above average marks in Music and German could be accounted for by, a history of playing the clarinet and by Mrs X’s occupation as a foreign language teacher. Overall these marks would suggest that he has the potential to sit Credit/General qualifications.
Socialisation

X does not interact well with his peer group, he does not belong to any groups or organisations and does not have any close friends. He can be very withdrawn at times and would rather be alone than in company. He gets teased a lot by his peer group and is being bullied in school. He often acts too young for his age group and is very demanding, often continually asking repetitive questions. His parents report him becoming all absorbed in activities and that he can tend to become obsessed with certain topics. His most recent interest is World Football, from which he knows all the players and all the match statistics. Related to this he has been drawing and learning the flags of each participating country, when asked about this he gave the exact dimensions of the flags which he has been replicating. He does not participate in any physical activities due to poor co-ordination.

History of Problem

Behavioural problems were identified in the first few years at Primary school, however X has an early school year birthday, and so problems were attributed at that stage to his chronological immaturity in relation to the majority of his classmates. By Primary 3 these problems had still not resolved and were becoming more difficult to contain. At the end of Primary 4, X was referred to a Consultant Paediatrician. At this time his behaviour was erratic, and he was emotionally labile, arrogant and aggressive. He was having uncontrollable temper tantrums and was becoming antisocial. Although psychology intervention was considered at this time, dietary restriction and the effect of having a new teacher seemed to have a positive impact and psychological assessment has not been deemed appropriate until the present time.
Developmental History

X was a pre-term baby by three weeks, but there were no complications surrounding this. At birth he weighed six pounds and 2 ounces. X had no problems with feeding or sleeping. He toilet trained quickly at the age of 18 months and was walking by age of 12 months. Development of speech was delayed, and when he did start to speak at the age of 2 years and 2 months this was in complete audible sentences. X has had no childhood illnesses and no significant injuries or accidents.

Psychiatric History

Educational psychology services were involved with X during the transition from Primary to Secondary school, due to his identification as an educational underachiever. Intervention was purely supportive and time limited, no psychometric testing was done at this time. With the exception of this there has been no prior psychological involvement. There is no familial psychopathology.

Impressions/Observations

X is a verbally fluent child, whose manner of expressing himself can seem precocious and arrogant. His speech was at times very rapid and he occasionally stuttered. In conversation, he was unable to identify and react to non-verbal cues, the result being that he could appear quite cheeky and insolent, e.g. mimicking the tester's speech. X does not appear to have reached puberty yet.
Throughout testing X concentrated exceptionally well. He demonstrated persistence and patience, had a positive attitude and applied himself very well to the tasks in hand. During tests which taxed performance skills, he verbalised his thought processes while attempting to complete tasks, i.e., he talked to himself or repeated the question. Overall he was motivated and seemed to enjoy the challenge of the tasks, particularly when they got progressively harder. X is left-handed.

Cognitive Profile

Measures of Assessment

Wechsler Intelligence Scale for Children-Third Edition UK (WISC-III UK)

Neale Analysis of Reading Ability Revised-British Edition

Rey-Osterrieth Test (Rey’s Figure Test)

British Ability Scales (BAS) selected sub-tests

Results (Tabled in full in Appendix 5.2)

On the WISC-III, X’s Verbal IQ (V-IQ) of 128 places him in the upper end of the “High” range, and his Performance IQ (P-IQ) of 84 places him in the “Low Average” range. His V-IQ exceeds his P-IQ by 44 points, which constitutes a significant difference at the 0.01 level. Although it is common for children to differ in their verbal and non-verbal abilities this V-P IQ discrepancy is unambiguously large, and would occur in only 0.2% of the US normal standardisation sample.
X’s performance on the Verbal subtests displayed an ability to encode information for processing, good use of sequential processing, integration of symbolic content and facility with numbers. However his suppressed scores on Performance subtests highlight difficulties with visual organisation and with difficulty distinguishing essential from nonessential detail. His profile is indicative of problems working under time pressure, evaluation difficulties and impaired visual perception of meaningful stimuli, i.e. manipulation of people or things rather than symbols or designs. Testing revealed that X has problems with simultaneous processing and that he attempts to compensate for his visual-spatial difficulties by using logical-sequential processing, i.e. verbalising his thought processes. Overall however the V and P-IQ’s seem to be a good summary of X’s abilities in these areas, see Figure 1 and 2 for Verbal and Performance subtest scores. Visual and Verbal IQ’s as estimated by the BAS Short-form were consistent with the WISC-III findings. The Visual IQ falls within the “Average” range, whereas the Verbal IQ falls within the “Superior” range and once again there is significant difference between these scores, at the 0.01 level.

Figure 1 - Verbal IQ 128
WISC-III verbal subtest scores (scaled). I, information; S, similarities; A, arithmetic; V, vocabulary; C, comprehension; (DS), digit span.
Examination of the WISC-III's 4 Factor Indexes, reveals interesting information which supports the V-P IQ discrepancy. The Verbal Comprehension (VC) Index falls at the 93rd percentile, i.e. 93% of a representative sample of his age-group would be expected to obtain a similar score or below. This indicates that X operates with facility within the auditory-vocal channel and can express his ideas in words with precision. On the other hand the Perceptual Organisation (PO) Index, which measures the simultaneous processing of information, falls at the 13th percentile. This 39 point VC-PO difference merits statistical significance, as a 12 point difference is significant at the 0.05 level. The Freedom from Distractibility (FD) Index falls at the 99.6th percentile, which suggests that X's concentration is of a very good standard and does not account for low scores and his Processing Speed (PS) Index places him in the 53rd percentile(See Figure 3).
Figure 3: WISC-III IQ/Indices.
V, verbal; P, performance; VC, verbal comprehension; PO, perceptual organisation; FD, freedom from distractibility; PS, processing speed.

X's literacy skills as measured by the Neale Reading Analysis and 3 BAS subtests were comparable with his age-group in terms of spelling, reading rate and accuracy. However in terms of his reading comprehension skills his equivalent age range is 8.03-11.01. This task requires the child to read a passage aloud and then answer questions about the story he has read. X's obvious difficulty with this task suggests difficulty with simultaneous processing and an inability to distinguish essential from nonessential detail, which corresponds with the poor PO Index on the WISC-III.

Memory functioning as measured by the BAS subtests of Immediate and Delayed Visual Recall both fall in the 99th percentiles and therefore indicates particular strengths in immediate and short-term memory. This task relies heavily on verbal encoding, which the WISC-III also highlighted as an area of strength. Visual reproduction from memory falls in the 56th percentile for the BAS subtest of Recall of Designs and the 62nd percentile for
Rey’s Delayed recall. Most interesting however is X’s immediate replication of the Rey’s Figure Test, which falls in the 37th percentile and indicates a weakness in visual perception, therefore corresponding with the WISC-III results.

**Discussion**

Bowman (1988) cognitively assessed four boys and their father who he felt were presenting at various points on the autistic/Asperger spectrum. They were found to be of normal intelligence but all had an unusually wide scatter of subtest scores, which was most prominent on the Performance scale. The youngest child was diagnosed as suffering from AS, while two of his siblings met the criteria for autism. Bowman felt that this supported Rutter’s (1985) view that most cases of AS constitute a milder variant of autism. Lockyer and Rutter (1970); Wolff and Barlow (1979) have used this type of unusual performance subtest pattern to distinguish autistics both of normal intelligence and with learning disabilities from controls.

Although X’s Performance scores showed a similar profile, see Figure 2, an 11 point difference between the lowest and highest subtests, the diagnosis of AS has so far been based on behaviour rather than on neuropsychological tests. As yet there does not appear to be any specific cognitive indicators which would conclusively show evidence for a diagnosis of AS. Overall X’s presentation is suggestive of problems with spatial-simultaneous processing and difficulty manipulating concrete and meaningful stimuli. Although his perceptual difficulties are consistent with possible neurological dysfunction
this was discounted as there as no evidence of a deterioration in his functioning. His abilities seem to have stayed consistent during his school years and there is no historical evidence which would account for neurological damage. Asperger (1944) initially believed that intelligence in children with this disorder was above average, describing these children as “eccentric professors”. There has been little evidence to substantiate the phenomenon of above average intelligence, although the diagnosis of AS is usually reserved for children with a normal IQ.

In contrast to autistic children AS children usually have lucid speech before 4 years of age. However Karbeshian et al (1990) presented an AS case who experienced a rather abrupt onset of speech, not talking at all and then suddenly talking in phrases. Kasmini and Zasmani (1995) presented two cases of AS, they found that one of these children had a similar language delay as the case presented by Kerbeshian et al (1990), i.e. speech developed late but when he did begin talking at he age of 4 years he burst into normal well formed words. However the other AS child discussed spoke even before he could walk. They concluded therefore that speech and language issues are variable within AS but what need to be present are the oddities in language, semantic, pragmatic and comprehension difficulties. X’s language development was reported to have been delayed but when he began to speak at the age of 2 years and 2 months he spoke in perfectly constructed sentences.

AS children’s speech is viewed as abnormal in respect to its lengthy and repetitive content and the restricted prosodic elements rather than any speech delay. Literacy testing showed
X to be functioning at a comparable level to his peers in terms of spelling, reading rate and accuracy. However his comprehension was poor and this might have been attributable to difficulties with interpreting verbal communication. X’s presentation concurs with the language idiosyncrasies of AS, as he was considered to be verbose and his parents had described him as often talking about the same subject for hours and repeatedly asking the same, sometimes nonsensical question.

Consistent with a diagnosis of AS, X exhibited an impairment in social interaction. He had failed to develop peer relationships appropriate to his developmental level, he was ostracised from his peers and stated that he bullied because he was “different” from his classmates. He seemed unable to regulate social interaction and his nonverbal communication was exceptionally poor, i.e. he made inappropriate use of eye contact, facial expression and body posture. Gillberg (1989) described restricted interests as the most characteristic feature of AS. X manifested this by an intense preoccupation with one area of interest namely, the World Football Cup, which was at the exclusion of any other activity. Overall therefore it would appear that X’s presentation agrees well with the description of AS.
References


Chapter Six

SINGLE CASE RESEARCH (III)

THE EFFICACY OF AN ANGER MANAGEMENT PROGRAMME FOR A MAN WITH MILD LEARNING DISABILITIES

Target Journal: The British Journal of Learning Disabilities (See Appendix 6.1).
This paper assesses the efficacy of an anger management programme for a man with mild learning disabilities, based on Novaco's (1983) cognitive-behavioural treatment approach. This modified treatment programme, which incorporates self-monitoring, cognitive restructuring and behavioural coping skills, was found to be successful in preventing inappropriate anger arousal and in regulating anger outbursts. Changes were also evident in underlying cognitive distortions.

**Introduction**

Many people with mild learning disabilities have poor interpersonal skills, which often arise due to a difficulty in expressing and controlling their emotions. One such difficulty is anger control problems. This is common among people with learning disabilities, and can affect community placements, or sometimes even result in an exclusion from placement facilities (Blunden and Allen, 1987). In the last 15 years significant advances have been made in anger management interventions, but despite this formalised treatment of anger and aggression in the learning disabled population has tended to be neglected (Black & Novaco, 1993).

Novaco's (1983) cognitive-behavioural treatment approach to anger management is the most widely accepted treatment of choice for aggression problems. Benson et al (1986) experimentally evaluated this treatment approach with learning disabled adults. Using four conditions - relaxation training, self-instruction, problem-solving, and a combined treatment - they found significant reductions on anger and aggression measures.
Black and Novaco (1993) also modified this treatment approach to suit clients with learning disabilities. They extended the anger control treatment, improving upon several of the procedural limitations of the Benson et al. (1986) study, especially their neglect of self-monitoring, cognitive restructuring, and the behavioural coping skills components of the Novaco procedure. This modified procedure was found to have considerable success with a man with mild learning disabilities.

Based on Novaco’s (1983) cognitive-behavioural treatment, this case study aims to show the efficacy of an anger management approach for a man with a mild learning disability.

**Case Study**

X, a 31 year old man was referred to the Psychology Department of the Community Learning Disabilities Team (C.L.D.T), by the Senior Health Officer. X was known to the team and had been psychometrically assessed three years prior to this referral, when he was found to be functioning at the “Borderline” level according to the WAIS-R. He was already receiving support from a C.L.D.T community nurse and had been reviewed due to an increasing inability to cope with feelings of anger and anxiety.

**History**

X, who had a borderline learning disability, had long-standing problems of anxiety and anger control. He had difficulty accepting his limitations and tended to have unrealistic ambitions and aspirations. Aggression and irritability, perhaps due to frustration, were often a result of his unfulfilled aspirations. This anger tended to be directed at himself or
in verbal aggression towards others, however X had recently become physically aggressive, throwing objects and hitting family members.

X’s difficulties were long-standing and seemed to be deeply rooted in a troubled childhood, in which he was consistently victimised by his peers due to his vulnerability. When he was 10 years old he was shot in the eye with a pellet gun, only narrowly escaping losing his eye, and when he was 12 years old he had half of his index finger chopped off by an axe. He was terrorised in his teens by a gang of youths, who on one occasion stripped his clothes off and on another hung him upside down from a tree. These traumatic experiences had a detrimental effect on his confidence and self-esteem, and seem to have been significant in generating anger in situations which he perceived as threatening or which compromised his autonomy.

X had previously received treatment for anxiety and clinical depression. Enquiries regarding familial psychopathology revealed that both his mother and sister had suffered from episodes of depression in the past. X was living at home with his 70 year old father and his younger sister. His mother had died unexpectedly from cancer 3 years prior to the referral and there appeared to be bereavement issues surrounding this. X felt angry at his mother for abandoning him.

X was unemployed. He had recently attended a music and electronics course at a Technical College but could not cope with the work demands and had to leave. He found this experience very stressful, and frequently lost his temper with his class mates who
were constantly ridiculing him. At the beginning of psychological involvement with X he was awaiting a placement at an Adult Training Centre. He was reluctant to commence this as he felt that he functioned at a much higher level than other trainees at the Centre.

**Assessment and Measures**

A detailed assessment of the presenting problems was obtained by means of full clinical evaluation and observation. Discussion with the referring agent and the Community Nurse, who was already involved in this case, provided further information. It was agreed that treatment should focus on X's main problems, namely control of anger and anxiety. The impact of a modified version of Novaco's cognitive-behavioural anger management programme was assessed using the following measures.

**Anger**

Anger diaries were kept from session 2 through to session 12. This was a self-monitoring exercise in which the client was asked to keep a record of situations which resulted in anger. The number of times this occurred and the consequences were a useful indicator of change throughout treatment. X was capable of completing these and became quite skilled at doing so.

The Anger Inventory for Mentally Retarded Adults (Benson, 1983), was administered at the beginning and end of intervention. It consists of 35 questions describing situations that are potentially anger arousing. This was used to assess which situations provoked X and how angry these situations made him feel.
Anxiety
The Adapted Zung Anxiety Scale (Lindsay & Michie, 1988), for use with people with a learning disability, was administered at the beginning and end of treatment to measure changes in anxiety.

Treatment
It was contracted that psychological intervention would be time limited (15 sessions). The main aim of treatment was to enable X to gain more control over his anger, and decrease his anxiety.

The cognitive-behavioural therapy treatment manual for anger problems (Novaco, 1983) was modified to fit the needs of this learning disabled client. The general aims of treatment were: 1. to identify situations which led to inappropriate or dysfunctional anger; 2. to modify responses; 3. to identify and challenge distorted cognitions; and 4. to enhance behavioural coping skills for dealing with anger provoking events.

The complexity of the treatment approach, however, required modification. The cognitive-preparation phase was divided into two separate parts; a self-monitoring phase and an information phase. The self-monitoring stage consisted of the rating and recording of the events surrounding anger episodes. Anger diaries were initially simple visual analogue scales, however, as X became more comfortable and confident with this medium, ‘antecedent/behaviour/consequences’ diaries were used. These records were reviewed at each session to generate discussion, monitor progress and to plan future goals.
The information phase consisted of 4 sessions to ensure that X understood the rationale of treatment and its key concepts. Basic education on the function of anger was given, in order to normalise his emotions. X was surprised to learn that anger is a normal healthy emotion which if used correctly can actually be constructive. It was imperative to convey that while assertiveness can often be appropriate, aggression is always unacceptable. A simplified version of the Novaco (1979) anger model was discussed, linking thoughts, feelings and actions. X initially struggled with the distinction between his feelings and his actions, for example, he believed that if he felt angry he had to act angrily. The escalation and identification of anger was discussed. During this time there were three incidents of verbal aggression to others and these were used to emphasise the need for stress coping skills anger control.

The skill-acquisition phase was also divided into two separate sections; ‘arousal reduction’ and ‘coping strategy’ sub-phases. The arousal reduction phase consisted of 4 sessions and incorporated progressive relaxation training. Somatic cues were used as warning signals. X became able to recognise the physical symptoms of stress and anger and used abbreviated relaxation techniques to prevent these feelings from intensifying. A relaxation tape aided this process, as did rehearsed self-talk such as, “Keep calm”, “Relax”. These techniques appeared to give X considerable control over his aggression. Behavioural strategies to combat the escalation of anger or anxiety were suggested - such as going for a long walk when he felt himself becoming angry.
The coping strategy sub-phase consisted of 4 sessions in which X’s cognitive distortions were examined. Assessment had revealed that X had difficulty accepting his learning disability. He often denied, both to himself and others, that he had limitations and it was this denial which frequently created frustration and anger problems. Denial had led to unrealistic and unattainable ambitions, which led to failure and therefore reinforcement of maladaptive beliefs of inferiority. X had a tendency to think in concrete, dichotomous terms, e.g. his definition of success was the possession of a car, house and wife. Since he did not have any of these things he assumed “he was a failure”. Cognitive restructuring sessions focused on evaluating his belief that he could only be successful and worthy in his own eyes and that of others, if he possessed a car, a house and a wife. Incorporated in this was an acceptance of his limitations and the ability to implement adaptive coping skills and problem solving behaviour rather than becoming frustrated and losing his temper. In addition treatment aimed to resolve residual issues surrounding the death of his mother, whom he perceived as abandoning him. In this phase communication skills and appropriate assertive behaviour were also rehearsed through role plays.

**Treatment Outcome Results**

Number of diary incidents over treatment evoking anger

![Figure 1](image)
Over the course of treatment X's anger diaries reveal that there was a progressive decrease in inappropriate responses to anger arousal. (See Figure 1).

Perception of Situations which would provoke anger

![Bar chart showing the decrease in anger provoking situations from 1st to 15th session.](chart1.png)

Figure 2.

By the end of treatment, the number of situations which would make X angry, as measured by the Anger Inventory, had also decreased (See Figure 2).

Scores on Zung Anxiety Scale

![Bar chart showing the decrease in anxiety scores from 2nd to 15th session.](chart2.png)

Figure 3.

The Adapted Zung Anxiety Scale (Lindsay & Michie, 1988) suitable for people with a learning disability, was administered at session 2 and 15. Anxiety symptoms, as shown by Figure 3, had decreased markedly by the end of treatment.
By the 15th session X had begun to accept his limitations and had begun to think more realistically about his capabilities. Perhaps an indication of this was his agreement, towards the end of treatment, to attend an Adult Training Centre. During treatment X made good progress in managing his temper and frustration in the face of anger provoking situations.

A diary excerpt from Session 11 illustrates this:

'Antecedent': “At disco, asked a girl to dance, laughed and said no”.

'Behaviour': “Took deep breath, walked away, sat down and made body floppy”.

'Consequences': “Angry feelings went away, kept calm, later asked someone else to dance”.

**Discussion**

Diaries revealed that when necessary X was now able to implement more adaptive coping skills and more appropriate problem solving behaviour. Towards the end of treatment, the decrease in the number of anger provoking situations which X encountered, suggests that situations were less threatening to him. He was also less anxious and irritable by the end of treatment.

Self-monitoring which is often an essential element of cognitive-behavioural interventions was found to be an important aspect of treatment in this case. Self-monitoring assumes the ability to comprehend and learn, and while X possessed the capabilities to comply with this element of treatment, clients with more limited cognitive abilities may be unable to
work in this manner. Therefore, this approach should be individualised depending on the client’s level of functioning and in some cases may be considered inappropriate.

It should be noted that X required intensive input regarding the modification of cognitive distortions. It was particularly difficult for him to understand that it was his perception of situations which created his anger. However, simplistic explanations, concrete examples of situations and role reversal proved beneficial. It is felt that someone with a more profound learning disability would find this more problematic and perhaps impossible due to potential problems with comprehension and abstraction.

Overall the aims of treatment were achieved, and this paper provides evidence that an anger management programme with someone with a mild learning disability can be effective and useful. However, before such a programme is undertaken, it is imperative to assess the client’s level of cognitive ability in order to appropriately adapt and modify the treatment approach. This will aid the client’s understanding of therapy and hopefully have a beneficial effect on treatment compliance and subsequent progress.
References

Benson, B. (1983)
The Anger Inventory for Mentally Retarded Adults.
Unpublished Manuscript.

In B. Benson. (ed)
Teaching Anger Management to Persons with Mental Retardation.

Effects of anger management training with mentally retarded adults in group treatment.


Blackburn, I. M. & Davidson, K. M. (1990)
Cognitive therapy for Depression and Anxiety. A practitioners guide. Edinburgh -
Blackwell Scientific Publications.


Hawton, K. et al. (1993)

Lindsay, W. R. & Baty, F. J. (1986a)
Abbreviated progressive relaxation: its use with adults who are mentally handicapped.
Mental Handicap, 14, 123-5.

Lindsay, W.R. & Baty, F. J. (1986b)
Behavioural Relaxation Training- Exploration with Adults who are Mentally Handicapped.
Mental Handicap, 14, 160-162.
Lindsay, W. R. & Michie, A. M. (1988)
Adaptation of the Zung self-rating anxiety scale for people with a mental handicap
Journal of Mental Deficiency Research, 32, 485-490.

In Kendall, P. C. & Hollon, S. D. (eds)

Stress inoculation therapy for anger control: A manual for therapists.
University of California. Irvine.
Chapter Seven

SMALL SCALE RESEARCH

CLIENT SATISFACTION WITH GROUP PSYCHOTHERAPY

Target Journal: Clinical Psychology Forum (See Appendix 7.1)
Introduction

The following audit examines client satisfaction with a 16 week group psychodynamic therapy programme. In recent years audit has become an integral component in the work of a clinician. Quality Assurance in the NHS has been defined as "meeting customer requirements at the lowest cost" (Ovretveit, 1990). There are four methods of quality assurance with applicability to clinical psychology services (Cape, 1991): guidelines and standards, peer review, clinical audit and consumer surveys. Cape (1991) states that due to the emergence of consumerism within the public services, consumer surveys have became the choice method of audit. However there are considerable theoretical difficulties in interpreting such measures, in particular consumer satisfaction cannot be directly equated with quality of care. Stallard and Chadwick (1991) note that studies have reported satisfaction of 70 and 90% with health care, but that typical return rates were only 50 to 60%. Therefore exert caution in interpreting any data on patient satisfaction with healthcare procedures, since a bias may exist towards patients rating any such care positively. However although perhaps limited in objectivity, consumer satisfaction should nevertheless be an important part of any department's quality assurance programme and can be a gauge to assess areas of service improvement. Audit research on patient satisfaction in the past has mainly concentrated on in-patient consumers. Jones and Hodge (1991) looked at 14 surveys of patient satisfaction and found that most were surveys of in-patients, or of patients discharged from institutions. Only 1 of these was a study of users' views of out-patient facilities. More recently satisfaction studies have been carried out on the recipients of mental health services (McIver, 1991; Bond et al, 1992). These studies
however focused on in-patient or long-term psychiatric care rather than out-patient therapeutic services. As most departments of clinical psychology are heavily involved in providing therapy on an out-patient basis; there is a need for more quality assurance research to be carried out on this population.

The purpose of the study was to investigate satisfaction levels of those involved with the psychodynamic group therapy service provided by Lomond Healthcare NHS Trust at the Clyde Unit Day Hospital. This is an intensive programme that consists of 2 x 2 hourly sessions, on a weekly basis for 16 weeks. The programme has been in operation since 1987, when development of the service occurred due to the community care approach of the mental health team in Dunbartonshire. The team accepts referrals from G.P’s, Psychiatrists, Psychologists, Psychiatric Social Workers and Community Psychiatric Nurses and are then screened for suitability for the group by a short informal panel interview. The group staff operate as a multi-disciplinary team and includes a Nursing Sister, a Staff Nurse, an Occupational Therapist, a Registrar and a Clinical Psychologist. Selection criteria include those with motivation to explore their past and willingness to make changes as well as their capacity for personal insight and perceived ability to work with difficult issues in a group. Selection of participants is not on a “problem orientated” basis and they tend to suffer from a range of complex emotional difficulties. This is a rather unusual and innovative service and as such consideration of clients’ perception and satisfaction is important. The study hoped to discover both what the clients found most useful and where
there was need for improvement, especially in relation to those who did not adhere to the programme. One aim was to generate possible reasons why certain clients default from the group.

Method

Design

The sample population chosen was the 44 clients selected for three concurrent Psychotherapy Group Programmes at the Clyde Unit, Day Hospital. Of these 44 clients 22 actually completed the programme. Each client received a semi-structured questionnaire asking for their opinion of the service. The survey consisted of a postal questionnaire and clients received a stamped addressed envelope for its return. A covering letter was included which ensured that information given would remain confidential. Respondents were asked to give brief information regarding the nature of their problems and also to include their name on the form. In an attempt to boost the response rate a follow-up letter was sent to those who did not return the questionnaire with the suggestion that their name could be omitted. Twenty-four clients returned their questionnaires; however one of these was discarded since the client had failed to commence the programme and therefore could only offer limited information. Of the remaining 23, 13 (54%) were women and 10 (46%) were men, respondents' ages ranged between 25 and 55 years. 15 (63%) had seen the programme through to completion, while 8 (33%) defaulted before the end. Of the 23 respondents the most common group of psychological disturbance was one of mood most
commonly depression that effected 15 (65%), and anxiety disorders affecting 5 (21.7%). 1 client had a complicated bereavement reaction, 2 were referred to the group due to the psychological effects of child sexual abuse and an additional 3 also had this experience in their history. The questionnaire design was brief (see Appendix 7.2), in order to maximise the response rate and for the same reason structured questions were used, although qualitative information was also requested. Questions were asked about the clients' perception of the logistics of the service, for example the duration, frequency and the size of the group, as well as the need for further input at the end of the programme. Questions also related to the clients experience within the group, for example comfort in being a group member, satisfaction that information remained confidential and contentment that enough time was allocated for personal discussion. The clients' perception of benefit was also of interest, for example how helpful the programme was, the fulfilment of expectations, improvement in coping skills and the maintenance of benefit if any.

Results

For those who completed the programme the mean number of sessions attended was 15, for those who did not complete the programme the mean number of sessions attended was 6. In relation to the length of the group sessions, that is 2 x 2 hours, 15 (65%) felt that it was “about right”; 2 (9%) “too long” and 6 (26%) “too short”. In relation to the number of group sessions, that is 16, 16 (70%) felt it was “about right” and 7 (30%) “too few”. With regard to the frequency of the group, that is once a week, 20 (87%) felt it was “about right” and 3 (13%) “not frequent enough”. 15 (65%) felt the size of group, averaging at 15
to begin with, was "about right" and 8 (35%) "too large". In discussion of their problems
14 (61%) felt that they had enough time "most of the time"; 8 (35%) "some of the time" and 1 (4%) "rarely". See Charts 1, 2 and 3 below for clients' perception of helpfulness, fulfilment of expectations and perception of benefits.

17 (74%) felt that their coping skills, in relation to pre and post group, had improved. 21 (91%) felt that group discussion remained confidential, the 2 (9%) respondents who did not feel this, felt this due to a perceived breach of confidentiality by other group members, and neither of these clients completed the programme. 10 (43%) stated that they felt "very comfortable in a group"; 6 (26%) said that it "did not bother them"; 3 (13%) felt "uncomfortable" and 4 (17%) "hated being in a group and felt very uncomfortable". 10 (43%) said that they would definitely be interested in a similar group; 5 (22%) said that
they probably would; 5 (22%) said probably not and 3 (13%) said definitely not. Table 1 shows clients' views on the most useful aspects of the programme, while Table 2 displays the explanations given by the 8 respondents who did not adhere to the programme.

Table 1.

<table>
<thead>
<tr>
<th>Most useful aspects of programme</th>
<th>Clients' % scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and space to think about problems</td>
<td>31</td>
</tr>
<tr>
<td>Staff's professional attention and advice</td>
<td>26</td>
</tr>
<tr>
<td>Talking about problems in a group</td>
<td>22</td>
</tr>
<tr>
<td>Feedback from other group members</td>
<td>39</td>
</tr>
<tr>
<td>Understanding and support of staff and group members</td>
<td>57</td>
</tr>
</tbody>
</table>

Table 2.

<table>
<thead>
<tr>
<th>Reasons for non-adherence</th>
<th>Clients' % scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment not helping</td>
<td>38</td>
</tr>
<tr>
<td>Unable to interact in large group</td>
<td>37</td>
</tr>
<tr>
<td>Problem getting worse</td>
<td>25</td>
</tr>
<tr>
<td>Physical health problems</td>
<td>25</td>
</tr>
<tr>
<td>Other time commitments</td>
<td>1</td>
</tr>
</tbody>
</table>

Interest in additional help for those who had completed the course is as follows:— 2 (13%) wanted a follow-up appointment; 7 (47%) wanted the opportunity to contact the Day Hospital if necessary and 4 (27%) wanted referral to another service. Of the 15 respondents who finished the course 7 (47%) wrote comments on the questionnaire and 5 (71%) of these were concerning helpful aspects of treatment. One client noted that he had expected “more objective educational input.” Those who did not complete the programme consisted of 6 (65%) clients suffering from depression, 1 (12.5%) with an anxiety disorder and 1 (12.5%) suffering psychological distress due to child sexual abuse. Of those who did
complete the programme 9 (60%) had a primary diagnosis of depression, 4 (26.6%) had a diagnosis of an anxiety disorder, 1 (6.7%) had complicated bereavement reaction and 1 (6.7%) was suffering from the psychological effects of child sexual abuse.

Discussion

24 (54%) questionnaires were returned which is about average for studies reported in the literature, for example Stallard and Chadwick(1991) quote an average response rate of 50-60%. However one was invalid which left a total of 23 returns (52%). Results cannot be assumed to be fully representative of all those involved in the group, since respondents represented only 68% of all who completed the programme, and only 36% of all those who defaulted from the group. However the results of the questionnaire remain encouraging in quantitative terms, and useful in qualitative terms.

The service was generally rated highly by the respondents; however research findings indicate that high levels of satisfaction may be found in consumer surveys. This may possibly be suggestive of a “halo” effect, and therefore these results must be treated with caution. Satisfaction levels with the logistics of the group were high; it is of interest that while 65% thought that the size of group was “about right”, 35% commented that the group was too large in the early stages. It should be noted that both those who adhered to and those who defaulted from the group had this opinion. The drop out rate for the groups was 50%, and it may be that some clients were influenced by the original size of the group and defaulted for this reason, indeed 37% of those who defaulted, stated it was because
they were unable to interact in a large group. Therefore the optimum number for the clients both in terms of compliance and satisfaction may be less than the present intake which averages at 15. One solution may be to initially work with two smaller groups which can then be combined if numbers decrease.

Adherence might be improved by refining the selection procedure so that more suitable candidates are chosen, this could take the form of a structured standard interview and use of questionnaires. Another result of interest was that only 17% of clients' had their expectations of the group fully fulfilled. The structure and aims of the group are routinely verbalised at interview, however it may be that at this stage clients are unable to retain such information and therefore provision of literature might create more realistic expectations.

Once clients default from the group they can often be lost to the system. 25% of defaulters stated that they wanted referral to another service and 25% stated that they would have liked a follow-up appointment. Therefore it is recommended that some contingency measures are taken to ensure that these clients have some follow-up. Those that completed the programme also stated that they would have liked further input, 47% would have liked the opportunity to contact the Day Hospital if necessary; 27% would have liked referral to another service and 13% would have liked a follow-up appointment. Certain clients who appear to have continuing difficulties are invited to attend a graduate group, but this offer is made at the staff's discretion. A routine follow-up appointment one month after the end
of the group may serve to allay the client's fears about abandonment. This would also provide an opportunity for re-assessment of the clients' functioning and referral for further input if necessary.

A few comments received were considered useful in guiding future clinical practice, for example one respondent commented that the age range of group members was too wide and that the younger members in his group appeared to default. In the groups there did appear to be large age gaps, and perhaps consideration of this and trying to match group members in relation to age may improve compliance. Another client commented that selection of group members should be improved as it was obvious from the beginning who would finish and who would not.

The current project focused on client satisfaction and it is recognised that direct clinical work is only one element in the work of the group. Assessing consumer satisfaction should also, therefore, include other consumers, in particular asking whether the group is meeting the needs of referring agents, and this may be an area for future research. Finally, caution must be taken in interpreting these findings due to the diverse nature of the cases and the small sample size, which is especially relevant for non-adherents.
References


OVRETVEIT, J. (1990) What is quality in health services? *Health Services Manager, June*
