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**Title of Thesis:**

**A Controlled One Year Study of A Cognitive Behavioural Group  
Therapy Programme in the Treatment of Obsessive Compulsive  
Disorder**

**Submitted By:  
Annette Hughes**

**Qualification for Which Thesis Is Submitted:  
Doctor of Psychology in Counselling Psychology**

**City University, London  
Department Of Psychology**

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**TABLE OF CONTENTS**

	<b>Page No</b>
Acknowledgements	7
Declaration	8
<b>Section A      Preface</b>	<b>9</b>
<b>Section B      A Controlled One Year Study of A Cognitive Behavioural</b>	<b>14</b>
<b>   Group Therapy Programme in the Treatment Of</b>	
<b>   Obsessive Compulsive Disorder</b>	
<b>Abstract</b>	<b>14</b>
<b>Chapter One Introduction</b>	<b>16</b>
1.1 Definition of Obsessive Compulsive Disorder	17
1.2 The Development of Behavioural Strategies in the Treatment of OCD	18
1.3 The Integration of Cognitive and Behavioural Strategies	20
1.4 Currently Recognised Evidence Based Effective Treatment of OCD	22
1.5 OCD Prevalence in the Population	24
1.6 A General Historical Perspective of Group Therapy	25
1.7 Group Therapy in the Treatment of OCD	25
1.8 Focus and Theoretical background of the proposed study	32
1.9 Experimental Hypothesis	38
<b>Chapter Two – Method</b>	<b>39</b>
2.1 Research Objectives	40
2.2 Design	41
2.2.1 Subjects	42
2.2.2 Sample Size	45
2.3 Procedure	46
2.3.1 Initial Screening	46
2.3.2 Running the programmes	47
2.3.3 Blind Rating	52
2.3.4 Psychometric Tests	53
2.3.5 Data Analysis	64
2.3.6 Health Economics	65
2.4 Ethics Approval of Research	66

2.5 Identified Possible Effects on Research	66
2.6 Research Timetable	67
<b>Chapter Three – Results</b>	<b>68</b>
3.1 Data Analysis	69
3.2 Primary Outcome Measure	69
3.3 Secondary Outcome Measures	73
3.4 Therapy Evaluation Questionnaires	75
<b>Chapter Four – Discussion</b>	<b>76</b>
4.1 Interpretation of results	77
4.1.1 Primary Outcome Measure	77
4.1.2 Secondary Outcome Measures	78
4.1.3 Possible Effects of Variables on Y-BOCS outcome scores	79
4.1.4 Effects of Anti-Obsessional Medication	80
4.1.5 Patients Report on Therapy	80
4.2 Possible Reasons Why the Results of the Study did not Support the Experimental Hypothesis	81
4.2.1 Insufficient Numbers of OCD Sufferers Willing to Participate in the Study and drop out rate of patients in both conditions	82
4.2.2 Patients Simultaneously Consulting other Mental Health Professionals	85
4.2.3 Subjects Refusing to Give Permission for Data to be Used in This Study	85
4.2.4 Patients Commencing a Course of Medication During the Study	85
4.2.5 Same Therapist delivering both therapies – Experimenter Effects	86
4.2.6 The Design is Satisfactory, Although There Might be a Case for Adding an Extra Arm of Individual CBT and No Evaluation Cost of Treatment was Included in the Study	86
4.2.7 From an Ethical Perspective What Happened to Patients Who Participated in RT Control Condition and Treatment Failures in the CBT Active Treatment Condition?	87
4.2.8 Is it Ethical to Deliver an Ineffective Treatment (relaxation) to the Control Group	88
4.3 Group versus Individual Therapy	89
4.3.1 The Advantages and Disadvantages of Treatment in Groups – an Experiential View.	89
4.3.2 Evidence in Support of Further Development of Group Interventions in OCD	91
4.4 General Observations	92
<b>Chapter Five – Conclusion</b>	<b>95</b>
5.1 Summary	96

5.1.1 Potential Future Studies of OCD Treatment	97
5.1.2 Value of This Research to the NHS	98

**Appendices:**

A	Patient Information Sheet	100
B	Patient Consent Form	101
C	An Overview of CBT Programme	102
D	An Overview of RT Programme	104
E	Structure of Two Hour Sessions in Both Conditions	106
F	CBT Group Programme	107
G	CBT Handouts	119
H	RT Group Programme	130
I	RT Handouts	142
J	OCD Group Research Study Rating Pack	148
K	OCD Initial Assessment Standardised Interview Form	153
L	Patients Report on Therapy	156
M	Patients Preparation for Group Therapy	157
N	Homework Diary	159
O	Daily Record Sheet of Obsessions and Compulsions	160

<b>References</b>	<b>161</b>
-------------------	------------

<b>Chapter Six – Section C</b>	<b>174</b>
--------------------------------	------------

Autobiographical Memory in the Maintenance of Severe Depression:

A Single Case Study

1	Theory and Practice Link	175
2	Setting/Context	178
3	Biographical Details	178
4	Reasons for Referral	180
5	Initial Assessment Session	181
5.1	Alice’s Description of the Problem	181
5.2	Key Background Events	181
5.3	Therapist’s Overall View of Client’s Difficulties	182
6	Session 2	186



7	Session 3	188
8	Session 4	191
9	Session 5	193
10	Session 6	194
11	Session 7	196
12	Session 8	197
13	Evaluation of Therapy	198

	<b>References</b>	<b>200</b>
--	-------------------	------------

	<b>Chapter Seven – Section D</b>	<b>203</b>
--	----------------------------------	------------

**Stress in the NHS Workforce: A Literature Review**

1	Introduction	204
2	What is Stress?	205
3	Occupational Stress	210
4	Research Studies into Stress in the National Health Service	212
5	Analyses of the results of the long term research programme	218
6	Work characteristics associated with stress	220
7	Efficacy of interventions used to reduce stress levels	223
8	Summary and Conclusions	231

	<b>References</b>	<b>234</b>
--	-------------------	------------

<b>LIST OF TABLES AND ILLUSTRATIONS</b>		<b>Page No:</b>
<hr/>		
Figure 1	Integrated Schematic Model of OCD	33
Figure 2	Vertical Arrow Technique	37
Table 1	Y-BOCS Scores	70
Figure 3	Y-BOCS score as a function of Rating Interval	71
Table 2	ANCOVA Findings, Mean Scores and Standard Deviations	71
Figure 4	The Relationship between Duration of OCD and Responses to CBT and RT	73
Figure 5	Mean CGI(s) Scores for CBT and RT Groups As a Function of Rating Interval	74



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## DECLARATION

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## **SECTION A**

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### **Preface**

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**1.1** In this introduction the author will link her professional experience with the theoretical and applied ideas contained in the following sections of this thesis: sections B, C and D will be summarised outlining aims and objectives for each.

**1.2** Section B represents the author's specialist clinical interest area, namely Obsessive Compulsive Disorder (OCD). This interest in OCD was triggered four years ago whilst working in an Adult Mental Health Service of an NHS Trust. At that time the author designed and developed a one year uncontrolled study in group treatment of OCD: the theoretical principles on which the treatment was based included traditional methods of behaviour therapy in the treatment of OCD i.e. exposure and response prevention, in addition to cognitive restructuring, relaxation techniques and self directed homework tasks. The results of the uncontrolled study generated promising data on the efficacy of group Cognitive Behavioural Therapy and the author presented the findings at the European Congress of the European Association for Behavioural and Cognitive Therapies (1997).

The author then went on to join a specialist OCD Service, as a Research Fellow, based at the Department of Psychiatry, QEII Hospital, Welwyn Garden City, Herts. Dr Fineberg,



Consultant Psychiatrist is Head of the Service: referrals are received on a national basis. Since the beginning of 1998 the author has worked collaboratively, taking the lead on the development of a one year controlled study in the group treatment of OCD and was awarded NHS Executive Funding to carry out the study. It took one year to design the study, to apply to a Regional Ethics Committee and to the NHS Executive for external funding; the latter was a slow process but finally funding was awarded.

The rationale for undertaking the study was to develop treatment that would address issues such as reducing waiting list times, whilst bringing about long lasting change and the prevention of relapse for OCD sufferers. The question was whether Group CBT would be effective in this way. Section B, therefore, represents two years work, year I in preparation and year II in carrying out the study, which compared a programme of group CBT with one of group relaxation in the treatment of Obsessive Compulsive Disorder. In this way, the aim was to assess any additional benefits of group CBT over and above those of group interaction per se.

The author has continued to work as a Research Fellow in the Department of Psychiatry based at the QEII and is currently developing a study of possible links with the onset of OCD and pregnancy: a collaborative study between Gynaecology and Psychiatry. As a result of work in this field, the author was invited to lead a workshop at the Obsessive Action Conference in 1999; and then in April of this year she was also invited, as a Speaker, to attend the 6<sup>th</sup> World Congress on “Innovations in Psychiatry 2000”: this took the form of a review of all research, carried out to date, in group treatment of OCD.

**1.3** Moving on now to Section C, this links the author's theoretical interests in Cognitive Behavioural Therapy within a Practice setting of an NHS Adult Mental Health Psychology Service. In May 1997 the author developed an Occupational Health Psychology Service for NHS Trust Staff. The Case Study presented describes how Cognitive Behavioural Therapy was used in the treatment of severe depression, based on findings of research linking autobiographical memory to the maintenance of depression. The author hypothesised, using the Cognitive Behavioural paradigm, that the Client had developed an over generalised bias in autobiographical memory and that this inhibited the Client's ability to reinterpret information processed in current daily life. It was interesting to test this hypothesis with this particular Client, given that she had previously engaged in many different types of psychotherapy over a ten year period but described no effective long-term change in mood. The overall aim of therapy was to explore with the Client, her autobiographical memory, identifying dysfunctional schemata and assumptions that had developed since childhood, which might have been impacting on how she interpreted and emotionally experienced current events in her adult life.

**1.4** Section D is linked to Section C, in that it continues the theme of NHS staff well being. The author developed her interest in staff support during the period of setting up the Staff Psychology Service. This then led to her developing training courses, specifically designed to assist staff in carrying out their job specific work tasks. In particular the author developed a one year "Foundation in Mental Health Diploma", for unqualified frontline mental health workers, which is in the process of being awarded



accreditation, by the Open College Network, as a 'kite marked' Access Course to professional Nurse/Social Worker training. This course now runs on a Joint Mental Health Agency basis for unqualified staff in South Essex.

Therefore, NHS staff support and development is one of the author's professional practice interest areas, which is why 'Stress in the NHS Workforce' was chosen as the topic for this literature review: the aim was to provide an overview of what is meant by the term 'stress', how it is understood to affect people in a working environment and in particular, the outcome of research into stress in the NHS workforce. The review concludes with evidence based recommendations for change in order to reduce levels of distress experienced by NHS staff; which might in turn, improve the quality of service delivery and reduce sickness absence and associated costs, in addition to going some way, in addressing important issues of recruitment and retention of staff.

1.5 The author has now moved on from the Staff Psychology Service, whilst remaining within the Psychology Service; in this respect she was commissioned by the Director of Mental Health to draw together work, previously carried out over a two year period by a Joint Mental Health sub group (including representatives of the Health Authority, Health Trusts, 3 Social Service Agencies, Voluntary Sector Agencies) of the Local Implementation Team. The outcome was a five year strategy document for Joint Mental Health Workforce Planning, Education, Training and Development across all Mental Health agencies in South Essex. Having completed this piece of work, the author has now taken the role of Project Manager to assist in the overall implementation of this five year



plan. This is a senior management role, reporting to the Director of Mental Health and participating as a member of the South Essex Mental Health Joint Workforce Planning, Education and Training Group. This particular work has provided many challenges, whilst also providing another piece of the jig-saw, in terms of ongoing learning and understanding of how the NHS functions as an organisation; and where it fits in, working alongside other organisations in, providing mental health services for the local population. It has been a privilege to be involved in this innovative project and as a symbol of 'cementing' joint working relationships, the author has organised a South Essex Joint Mental Health Conference '*A Shared Vision*,' to take place during World Mental Health week in October 2000.

**1.6** To sum up, the author currently carries out diverse and varied professional roles which include, clinical practice and research within an NHS Trust setting, multi-agency mental health staff education, training and development, based within an NHS Trust and Private Practice referrals.

**1.7** The professional practice outlined above, together with this Theses reflect the culmination of seven years professional academic study and training, in the field of Psychology.

## **SECTION B**

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### **A Randomised Controlled One Year Study of a Cognitive Behavioural Group Therapy Programme in The Treatment of Obsessive Compulsive Disorder (OCD)**

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#### **Abstract**

Cognitive Behavioural Therapy (CBT) is widely acknowledged to be an efficacious intervention in Obsessive Compulsive Disorder (OCD), although resources, in terms of therapists to carry out CBT on an individual basis, are scarce, and can incur long waiting lists. A timely question therefore, was whether CBT could be effective in a group setting. An uncontrolled pilot study had generated promising data on the efficacy of group CBT in OCD and this controlled study aimed to assess any additional benefits of group CBT over and above those of group interaction per se.

OCD patients were randomised to either (i) a group Cognitive Behavioural Therapy (CBT) programme or (ii) a group relaxation therapy (RT) programme. Individual relaxation therapy is well known to be a neutral treatment for OCD and this control condition, therefore, provided baseline data on the expected response rate in a group setting without active psychotherapy. 26 Patients were screened initially to comply with inclusion/exclusion criteria and randomised to each treatment arm. Treatment under both conditions comprised of 12 weekly two hour group sessions; in addition patients were seen individually once before treatment began (i.e. for screening) and post treatment (i.e. after 12 weeks for debriefing and feedback). Patients entering the study were assessed throughout by raters blinded to the patient's treatment. The principal outcome measure was the total score on the Yale- Brown Obsessive Compulsive Scale (Y-BOCS), and this was measured prior to treatment at baseline and then at fortnightly intervals. It was expected that group CBT patients would demonstrate significantly greater reduction in pre-treatment scores.

The data was examined using a repeated measures analysis of variance: the repeated measures factor was 'time' with 2 levels and the between subjects factor was 'therapy group', also with two levels (CBT & RT). To adjust for differing baseline scores, a covariate 'baseline' was also entered into the analysis. The main effect of time was found to be reliable ( $F(1,18) = 12.84, p < 0.01$ ). The effect of group ( $F(1,17) = 0.4, ns$ ) and the group by time interaction ( $F(1,17) = 0.03, ns$ ) were not statistically reliable. On the other hand there was a significant negative correlation between Duration of OCD and change in Y-BOCS scores in the CBT group ( $R = 0.72, p = 0.006$ ), whilst in the RT group there was a positive correlation ( $R = 0.74, P = 0.096$ ), approaching significance. This shows that the magnitude of change in Y-BOCS scores was greater in those patients who had shorter

duration of OCD in the CBT group; whilst in the RT group the patients with the longer Duration of OCD showed greater magnitude of change in Y-BOCS scores. Although the RT group results in this respect should be treated with some caution given the small number of completers (6) as compared to CBT completers (14). However this has raised an interesting factor and would be worth following up in future studies.

Also, a secondary outcome measure, the Clinical Global Impression (CGI) scores (A 7 point scale measuring severity of illness) showed a reliable group by time interaction ( $F(1,16), = 10.5, p= 0.005$ ) in that there was a greater decrease over time in CGI scores, in the CBT group than the RT group.

## **CHAPTER ONE**



## **1 Introduction**

### **1.1 Definition of OCD**

Obsessive Compulsive Disorder (OCD) has been described as the ‘hidden disease’ (Bebbington 1998). This is particularly apt given that sufferers tend to feel ashamed of their OCD symptoms and are generally reluctant to seek professional advice/assistance, until their lives have become so disrupted by OCD that they are no longer able to function at home or at work.

An accurate definition of OCD is encapsulated in the Research Diagnostic Criteria of DSM-IV (American Psychiatric Association, 1994). A patient presenting with either obsessions, compulsions or both will be diagnosed as having OCD and the obsessional symptoms are defined within the definition of the disorder. The obsessions must be recurrent or persistent in addition to being intrusive and inappropriate and cause marked anxiety and distress. The intrusiveness must be greater than that experienced with ordinary worry. The patient must attempt to ignore or suppress the obsession or neutralise it with some other thought or action. The obsessional thoughts or impulses must be a product of the patient’s own mind, which excludes the criteria for thought insertion and schizophrenia.

DSM-IV goes on to define compulsions as repetitive behaviours or mental acts which the patient feels driven to perform in response to an obsession, or according to rules which must be rigidly applied. These behaviours or mental acts must be aimed at preventing or

reducing distress, or preventing some feared event or situation; however, they must be clearly excessive or have no realistic connection with what they are designed to neutralise or prevent. The patient must be able to recognise that the obsessions or compulsions are excessive or unreasonable. According to DSM-IV criteria, the obsessions and compulsions must cause marked distress, be time consuming (i.e. take more than one hour per day), or significantly interfere with the patient's normal functioning.

DSM-IV criteria for exclusion are that the content of the obsessions and compulsions must not be wholly restricted to the presence of another Axis 1 disorder: thus if a patient with affective disorder experiences an obsessive component, which is clearly depressive and which is completely constrained within the duration of the affective disorder, this would not be regarded as independent OCD.

## 1.2 The development of Behavioural Strategies in the Treatment of OCD

Historically treatment for OCD was virtually non-existent until the 1960's, when Meyer (1966) introduced behavioural treatment in a study of two cases of chronic obsessional neurosis, which proved to respond successfully to such treatment: the basis of such treatment was related to the work of Metzner (1963), in animal models of compulsive behaviour in which it was concluded that ritualistic behaviours were a type of learned behaviours. Meyer acknowledged that cognitions were involved in maintaining OCD when he referred to the need to address expectations of harm in obsessions during treatment.



Building upon the earlier work of Meyer (1966), Rachman, Hodgson & Marks (1971) and Rachman, Marks & Hodgson (1973), developed behavioural techniques which became known as 'exposure and response prevention'. In a study of obsessionals with contamination concerns, carried out by Hodgson & Rachman (1972), it was demonstrated that when the patients contaminated themselves, then washing, as predicted, triggered anxiety reduction rather than increasing it.

Then in 1976 Rachman, De Silva & Roper, studied twelve obsessional checkers: when exposed to a situation designed to provoke the urge to check, immediate checking was again associated with immediate anxiety reduction. However, it was also noted that in individuals who were asked not to check, a similar degree of anxiety reduction resulted. This phenomenon established the scientific basis of 'exposure and response' prevention.

Further, in 1976, Roper & Rachman concluded that it was essential that the patient should carry out a large percentage of self-directed and self-monitored tasks, external to therapy sessions: the rationale behind this was that the patient would be likely to transfer responsibility to the therapist, thereby getting reassurance by the presence of the therapist. This conclusion emphasises the importance of recent developments in the cognitive understanding of obsessional problems.

Salkovskis (1989) has criticised a purely behavioural therapy approach in the treatment of OCD, used until the 1980's: the main criticisms appear to be non – compliance with and non – acceptance of treatment, claiming that the success rates are less than 50%. Since

that time Salkovskis (1988a) introduced cognitive methods of treatment: the rationale being that obsessional thoughts are exaggerations of normal cognitive functions.

Earlier, Emmelkamp, Visser and Hoekstra (1988) concluded from their studies that cognitive therapy was as effective as behavioural approaches to treatment. And Bloch *et al* (1995) argued that whilst it has been shown that behaviour therapy produces a 60 – 70% improvement rate in the treatment of OCD, many patients drop out of treatment programmes resulting in approximately only 50% of clients being helped in this way. Bloch *et al* concluded that there is a need for treatment which is more effective.

Blackburn and Twaddle (1996) combined the approaches of Salkovskis (1985) with those of Guidiano and Liotti (1983) to produce a 12 session treatment programme of OCD on an individual basis: in an individual case study such treatment was shown to be effective, with Twaddle and Blackburn concluding “The case has illustrated how a rationalist and a constructivist view point can be integrated to form a package of cognitive therapy that is bigger than the sum of its parts.” (p174).

### 1.3 The Integration of Cognitive and Behavioural Strategies

During the 1980s a series of studies developed an integration of cognitive and behavioural strategies (Salkovskis & Warwick, 1985, 1988, Salkovskis, 1989, Salkovskis & Westbrook, 1987, 1989, Salkovskis & Kirk, 1997, Salkovskis, Richards & Morrison, 1998)

Salkovskis & Warwick (1985) used a single non-controlled study to illustrate how cognitive therapy might be used to assist in the treatment of a depressed OCD sufferer. The patient was a female doctor suffering from fears of contamination: her fear of cancer led to compulsive hand washing and subsequent depression. Initially she responded well to a four week behavioural in-patient treatment programme. However, when she returned home she relapsed following what was described as a 'psychotic episode'. She then failed to respond to medication or behavioural treatment and was now convinced that she would catch cancer. It was then decided to introduce Cognitive Therapy using techniques as developed by Beck (1979) to challenge automatic negative thoughts. Salkovskis & Warwick reported an immediate reduction in belief ratings of the intrusive thought (98% down to 40%). They also reported a rapid improvement in mood and the patient became willing to participate in behaviour therapy again: this combined treatment plan resulted in a complete recovery which had been maintained at six months post therapy.

Salkovskis claims that the style in which cognitive therapy is conducted is best characterised as a process of 'guided discovery', which almost inevitably leads the patient to reach an understanding of the changes which they need to make in order to overcome their problems.

Cognitive Behavioural Therapy (CBT), techniques can be seen to fall into two categories, i.e. discussion techniques and behavioural techniques. On completion of the behavioural experiment the focus returns to discussion. Therapeutic rationale is based on assumptions



that, prior to treatment, the patient is distressed because they have threatening beliefs about the nature of their obsessional experiences e.g. I have contaminated things so they may be dangerous.

The aims of therapy are:

- a) To help the patient conclude that obsessional thoughts, however distressing they are, are irrelevant to further action. They should not be the target of control strategies and the patient is helped to see how such strategies are actually counter-productive, having the effect of increasing pre-occupation, the urge to neutralise and distress.
- b) To modify the way the person interprets the occurrence and/or content of their intrusive thoughts, as part of a general process of reaching an alternative, less threatening view of their problem

#### 1.4 Currently Recognised Evidenced Based Effective Treatment of OCD

Two forms of treatment have been shown to be effective : pharmacotherapy with anti-obsessional drugs (SSRIs and Clomipramine) and individual cognitive behavioural therapy. Drug treatment is generally available and can be monitored by a general practitioner. Medication has proved useful in alleviating not only OCD symptoms (50-79%) but also secondary depression and anxiety symptoms (Baldwin *et al*, 1991). However, anti-obsessional medication is associated with a variety of troublesome side effects (e.g. sexual dysfunction in up to 30% of cases)and must be continued long term if relapse is to be avoided (Ravizza *et al.*, 1996).

The NIMH has carried out brain imaging studies (Jenike *et al*, 1996) which provided evidence that in OCD there is abnormal neurochemical activity and it has been shown in recent clinical trials that drugs that affect the neurotransmitter serotonin can decrease the symptoms of OCD. The first of such drugs known as serotonin reuptake inhibitors (SRIs) was the tricyclic antidepressant clomipramine (Anafranil). Other drugs known as selective serotonin reuptake inhibitors (SSRIs) include fluoxetine (Prozac), fluvoxamine (Luvox) and paroxetine (Paxil). According to the NIMH whilst such medications have proven helpful in the reduction of OCD symptoms, relapse will usually follow on the withdrawal of medication.

Behaviour interventions have achieved success rates of 60-85% (Rachman & Hodgson, 1980) Both Behavioural and Cognitive Behavioural Therapy is less readily available and usually requires referral to a Specialist Service, which can create long waiting lists. Bloch *et al*, (1995) claimed that whilst it has been shown that behaviour therapy produces a 60 – 70 percent improvement rate in the treatment of OCD, many patients drop out of treatment programmes resulting in approximately only 50 percent of clients being helped in this way. Pato *et al*, (1988) also drew attention to a similar response to treatment with clomipramine, which was shown to produce high relapse rates upon withdrawal. Bloch *et al* concluded therefore, that there is a need for treatment which is more effective.

### 1.5 OCD Prevalence in the Population

OCD is a common disorder with a lifetime prevalence of 2-3% (Karno *et al.*, 1998). More prevalent than schizophrenia, it is the second most common serious mental illness after depression and constitutes a major public health issue. There have been no economic analyses of the cost of OCD in the UK but

Hollander (1997) reports that, in the US, 7.2 billion dollars are spent annually on treatment for the disorder (of which, 2.2 million is spent on ineffective treatment) and 40 billion dollars is lost annually in sick pay. Consumer surveys in the US have identified large numbers of OCD sufferers receiving ineffective 'alternative' therapies. Moreover, epidemiological studies show a surprisingly high rate of depression and suicidal behaviour amongst OCD patients. Despite both the seriousness of the illness and the resulting cost to society, only a small proportion of sufferers receive adequate treatment (Marks, 1986).

Therefore, The principal objective of the author's proposed study was to ascertain whether there was a good basis for providing Cognitive Behavioural Therapy (CBT), as described by Salkovskis (1989), in a *group* setting, thereby reducing both therapist time and OCD patient waiting lists.



## 1.6 A General Historical Perspective of Group Therapy

The first recorded use of group therapy was in 1905, when Joseph Pratt brought together his patients with tuberculosis; the patients took it in turns to present themselves to fellow sufferers. Participation in the group aroused hope and corrected misinformation and the experience was valued by group members.

(Hadden, 1955). Despite its particular advantages as a therapeutic modality, group therapy has never equalled the attention given by professionals to individual therapy.

## 1.7 Group Therapy in the Treatment of OCD

Searches for published and in-progress research on group CBT in OCD (using terms: Obsessive, Compulsive, OCD, Cognitive, Behavioural, Psychotherapy, Therapy, Group-therapy) have been conducted using MEDLINE, PSYCLIT, CINAHL and EMBASE as well as a range of internet resources on Evidenced Based Mental Health. The evidence base relating to efficacy of group CBT is sparse and lacking in properly controlled trials, thereby emphasising the timeliness of the proposed study. The principal contributions to the literature are as follows:

In the 1970s and 1980s, when the effectiveness of individual behavioural and cognitive behavioural treatment of OCD was demonstrated, there were no controlled studies of the efficacy of *group* behavioural or *group* cognitive behavioural treatment of OCD.

However, the following uncontrolled studies were carried out:

In 1979 Hand & Tichatzky reported on seventeen patients who participated in a three phase outpatient programme. 1) OCD symptoms, 2) social interaction problems and 3)

general problem solving skills were treatment aims. The promotion of group cohesion was considered to be an important variable in this treatment.

Phase one consisted of twelve weeks when therapists held two to three group sessions, twice per week, conducted 'in vivo' exposure sessions in the patients home and met with spouses apart from the group.

In phase two, for a period of six weeks patients began taking responsibility for the group treatment, whilst group therapists gradually withdrew.

Then in phase three, over a period of twelve weeks patients continued with goal-oriented self help group sessions. Therapist time involved in this study ranged from 122 to 147 hours: outcome data indicated some decrease in OCD symptoms as well as decrease in anxiety. Whilst there was evidence of improvement in OCD symptoms and anxiety such improvements were not uniform across all three groups. Furthermore, given the uncontrolled nature of the study, it is not possible to conclude that these changes would not have occurred under any other form of group or individual treatment.

Then in 1985 Marks, Hodgson & Rachman offered an adjunctive group for patients who had completed initial individual treatment of OCD. Patients and families met with a therapist every 4-6 weeks to discuss the impact of the patient's symptoms on the family and to plan coping strategies; this sometimes included the rehearsal of behavioural

exercises in the group with the support of other members. It was concluded that families found the group helpful, however no outcome data was gathered.

Following on from this, Epsie in 1986 reported success with a ten week group treatment for five OCD patients, who had previously benefited from individual behavioural treatment and then relapsed. Patients attended weekly ninety minute sessions to reactivate skills previously learned during individual treatment. Each session focused on a particular topic and session notes were provided. Homework logs were kept and group members attended sixty minute follow-up sessions at six weeks and three months. At completion of the programme there was a significant decrease in ratings of obsessions and compulsions. These gains were maintained at one year follow-up. However, once again results cannot be generalised due to lack of control group.

Then in 1991, a standardised behavioural group treatment programme for OCD was developed by Krone, Himle and Nesse. In this study thirty six patients completed a seven week programme meeting for two hours on a weekly basis. The treatment included:

1. Education about OCD
2. Instruction in a cognitive & behavioural approach to self treatment of OCD
3. Guided behavioural treatment.

Of the thirty six patients, nineteen were on medication during the group and seventeen were medication free. Both patients on medication and medication free did not differ significantly in Y-BOCS



(Goodman *et al.*, 1989) scores at the start of the group; patients on medication had significantly higher BDI scores (18.8 vs 11.7,  $F=6.38$ ,  $p<0.017$ ).

The results of this study showed a significant change in OCD scores (using Y-BOCS) both for the medication and no-medication patients: this suggested that further studies were needed taking into account variables such as standardised follow up period and medication. Krone *et al.*, concluded that the findings were unlikely to result from placebo effects, in light of the minimal changes in OCD symptoms in a large group of patients, treated with placebo in a study carried out by De Veagh-Geiss, Landau & Katz (1989). However, although Krone *et al* recorded significant improvements in both groups, again owing to inadequate control measures, it is not possible to conclude anything about the efficacy of group CBT. Similarly, Enright (1991) ran a group therapy programme and noted significant improvements between baseline and end point OCD, depression and anxiety scores. The same improvements were still evident at follow up six months later. However, once again, the study was uncontrolled.

In the only partially controlled study to date Fals-Stewart (1993), carried out a comparison study of behavioural group therapy and individual behaviour therapy in the treatment of OCD. Pre/post treatment measures were taken using the Yale Brown Obsessive Compulsive Scale (YBOCS), the Beck Depression (BDI) and Anxiety (BAI) Inventories. It was shown that both individual and group interventions were equally effective in reducing severity of OCD symptoms, depression and anxiety. Furthermore, patients in both treatment groups had maintained gains at the six month follow up. It was concluded that carrying out behavioural therapy in a group setting did not diminish its

efficacy. However, given that this study did not control for group effects per se, it remains possible that group interactions contributed an additive short-term reduction in outcome measures. Further, the results of this study are somewhat limiting because patients with major depression were excluded, (i.e. Beck Depression Scores in excess of twenty two). Other studies in respect of the efficacy of OCD Group Therapy remain uncontrolled.

More recently, Van Oppen *et al* (1997) carried out an uncontrolled trial of two types of OCD group behavioural treatment programmes: the rationale behind this study was to identify cost effective treatments which would save on the therapist's time in addition to producing low relapse rates. Most of the studies reviewed, employ behavioural therapy (including exposure and response prevention) on an individual basis as the standard treatment for OCD: however, in a study carried out by Foa *et al* (1984) it was shown that between twenty to twenty five percent of OCD patients refuse individual behaviour therapy, whilst twenty to thirty percent either fail to comply or complete the treatment programme. Therefore, according to

Van Oppen *et al* many patients continue to experience chronic distressing and disabling symptoms. Hence the need to develop alternative OCD treatment programmes.

Van Oppen *et al* compared group behavioural therapy (GBT) with multifamily behavioural therapy (MFBT): the GBT consisted of seventeen patients (ten female and seven male), divided into three co-therapist led groups for a period of ten two hour sessions. Treatment included *in vivo* exposure, education in the form of self help



assignments, and homework tasks. Treatment was followed by six monthly follow up sessions in which the group reviewed progress and assisted each other in problem solving any identified causes for possible relapse.

The Multi-family Group Behavioural Treatment (MFBT), included the same treatment as in GBT, plus added discussions on family involvement and reaction to OCD symptoms: psych-educational support was also provided to family members and patients in the form of a pamphlet entitled *Learning to Live with OCD* (Van Oppen, Pato, & Rasmussen, 1993): family members took an active part in group participation. At six month post-treatment follow-up, families reviewed progress and supported each other in maintaining gains. Patients in GBT and MFBT groups were given two ninety minute individual sessions in order to collect information on OCD symptoms previous treatment, general background history including family and social.

This study showed that overall between seventy to eighty percent of patients made gains of at least five points on the Yale Brown Obsessive Compulsive Scale (YBOCS) (Goodman, Price, Rasmussen, & Mazure, 1989) at post treatment and follow up. There was no significant improvement in depression scores but it should be noted that this study included only mild to moderate pre treatment levels of depression. Consequently, this factor limits generalisation of results to clinical populations with OCD and severe depression. However, it was interesting to note that although there were no recorded differences measured on the Family Assessment Device (FAD) (Miller, Epstein, Bishop & Keitner, 1985) between GBT and MFBT pre treatment, on post treatment whilst there



was no improvement in FAD scores for GBT it was shown that in MFBT five of the seven FAD scores changed significantly at post treatment; although such changes were shown to have no relation to outcome scores on Y-BOCS. Comparisons of effect sizes, taken from YBOCS data demonstrated that the group treatments produced benefits in terms of improvement of OCD symptoms.

Van Oppen *et al* claimed that not only had the group treatment provided such benefits but it had also proven to be cost effective: in MFBT therapists spent approximately 4.4 hours per patient: in GBT therapists spent 4.7 hours per patient: they claimed that individual treatment would have involved therapists for between ten and eighteen hours. Representing an overall saving of somewhere in the region of between five to thirteen hours; thereby reducing the cost of delivering such treatments in a mental health setting.

Given that Van Oppen *et al* admit that their findings are limiting due to lack of randomization of patients to groups, (no standardised diagnostic interview and patients may have received other treatment in the interim period between post treatment and follow up), their study indicates some very encouraging benefits in carrying out further studies in treatment efficacy and cost effectiveness of similar group treatment programmes for OCD. Their data showed that between seventy to eighty per cent of patients made gains of at least five points on the Yale Brown Obsessive Compulsive Scale (YBOCS) (Goodman *et al.*, 1989 – NB The Y-BOCS is the pivotal measure of OCD symptoms). at post treatment and at follow-up. These results cannot be generalised due to a number of methodological problems including non – randomization and missing

data. However, such results are encouraging and support the need for further research to be carried out in this field.

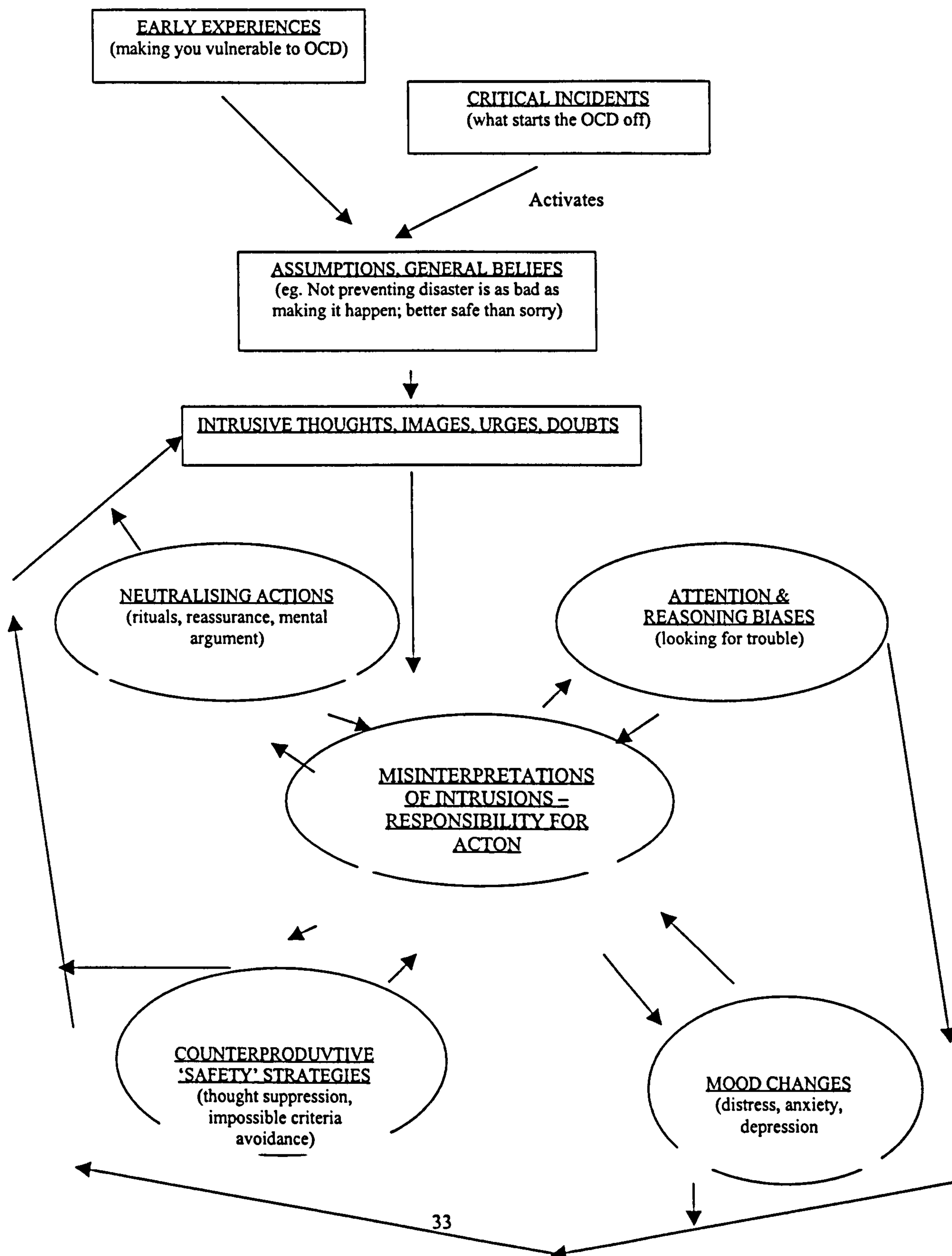
Based on the results of such studies a one year uncontrolled pilot study of group CBT in OCD was carried out by the author (Hughes *et al.*, 1997). Ten patients participated in the group therapy and demonstrated an average reduction of approximately 13 points on the Y-BOCS, constituting a mean improvement of 46% (repeated measures ANOVA,  $p < 0.005$ ). Once, again the absence of a control group strictly limits the clinical informativeness of the study but it is, nevertheless encouraging.

It is clear that high quality empirical investigations into the efficacy of group CBT are lacking, despite the potential benefits in resource optimisation to the NHS. Therefore, the author has developed a further controlled study of group CBT in the treatment of OCD, which has formed part of a collaborative research programme between the QEII Hospital, East Herts NHS Trust and City University. The first investigator (the author) took the role of the therapist in both the experimental condition and the control condition and was responsible for the developing and carrying out group treatment programmes.

### 1.8 Focus and theoretical background of the proposed study

Based on the above, this study will evaluate the efficacy of a group treatment programme for OCD: the treatment programme, over twelve weekly two hour sessions, was based on CBT approaches as developed by Salkovskis (1989).

**Fig. 1. Integrated schematic model describing the cognitive hypothesis of the origins and maintenance of obsessional problems. (Salkovskis, Forrester & Richards., 1998.)**





Salkovskis states that attempting to dispute the truth of obsessional thoughts is of no therapeutic value: instead he suggests that by adopting an integrative approach , combining cognitive theory with behavioural techniques, this helps the patient to develop a different perspective on their problems. This is done by assisting the patient to construct and test an alternative and less threatening explanation of their problem; thereby replacing the original one which has only served to maintain obsessional and avoidant behaviour.

In order for the patient to engage in therapy there needs to be a good therapeutic relationship, which is based on the therapist demonstrating his/her understanding of the patient, and that the therapist wishes to, actively engage with the patient, to bring about a change in how the patient thinks and acts. Part of this process includes normalisation of the patients perception of themselves i.e., assisting them to understand that they are not 'mad or weird' and that although they wish to overcome their problems so desperately, they just do not know how to. It can then be explained that this is where the therapist's role comes in helping them to develop effective methods of overcoming their problems.

In the early part of therapy the patient is helped to identify two contrasting views of their problem: this is done by identifying their thoughts whilst delaying their compulsive behaviour in an exposure and response prevention exercise. This then provides the negative evaluations which are maintaining their obsessionality, which the therapist can then challenge and help to replace the negative assumptions with the less threatening alternative.

Goal setting, is also carried out early in treatment: this is done by setting short term, medium term and long term goals as to what they might reasonably be expected to achieve by a specific date. Whilst the two main aims of therapy are also introduced, which are that a) however distressing the thoughts may be they do not require further

action and should not be controlled, demonstrating to the patient, how, by attempting to control their thoughts, they maintain their obsessionality and compulsive behaviour, and b) that therapy will assist in modifying the patient's view/ interpretation of their intrusive thoughts by developing a less threatening alternative view.

The patient is assisted to carry out a 'costs and benefits' analysis of their obsessional behaviour, taking into consideration their lives as a whole. This is a way to motivate the patient to engage in therapy and to begin carrying out behavioural tests. Salkovskis emphasises that when the patient seeks reassurance from the therapist that something awful will not happen if they cease to carry out their compulsive behaviour, it is important for the therapist to 'refocus' this by responding that the therapist cannot guarantee that nothing awful will happen but he/she can guarantee that the patient will continue to suffer from obsessional problems for the rest of their lives if they continue to carry out compulsive behaviour rituals.

The other strategy that Salkovskis suggests is 'Theory A/ Theory B' technique: this consists of getting the patient to consider two different theories of their problem. Theory A might be that the patient is responsible to keep their family safe and that by checking repeatedly all the doors, windows, cooker, taps, electric sockets etc., they are preventing a disaster occurring which might lead to death of one of their family members. Theory B might be that the patient is someone who understandably worries about their family remaining safe but because they are sensitive to worries they have reacted to these concerns by checking excessively, which has only made the obsessional worry increase and led to further distress and further checking, thus disrupting their lives. If the patient resists theory B, Salkovskis suggests that the therapist might ask, 'how much effort does it take to continue to keep your obsessive thoughts under control? How helpful has this been?' The patient will usually conclude that their way of controlling obsessive thoughts has not been effective in the long term and has only provided temporary relief. This then gives the therapist an opportunity to suggest that therapy could focus on seeking alternative ways of coping with the problem and is the patient willing to be committed in trying to bring this about?



Such cognitive techniques are intended to move the patient to a new perspective of their problem and to conclude that they wish to change their obsessional behaviour. At this point in therapy a programme of 'exposure and response prevention' can be introduced; which aims to a) prevent the continuation of compulsive behaviour, which serves to maintain obsessional thoughts. b) helps to demonstrate to the patient that by decreasing their compulsive behaviour, then their anxiety/worry decreases. c) acts as confirmation that in reducing compulsive behaviour this does not bring about the feared situation. d) to assist in the patient gaining control over their life, by viewing compulsive behaviour as a problem and not as a way of preventing something awful happening.

In the first instance the exposure and response prevention tasks are planned specifically with the therapist's help but as therapy progresses, the patient plans their own tasks in order to promote patient independence. If the patient resists moving towards independence and continues to seek assistance/reassurance from the therapist in respect of planning exposure and response prevention tasks, then Salkovskis suggests using the following technique to counteract this: the therapist states that if they want reassurance then the therapist can sit down with them and focus on reassurance for the next hour; but in return the patient must promise that such reassurance will last for the rest of the therapy programme. The result is that the patient realises that this will not be effective as they are only too aware that seeking reassurance gives only temporary relief to their problem. In this way the patient is helped to see that seeking reassurance does not give any long term effective relief and is therefore not a helpful strategy, but instead again only serves to mediate their anxieties.

In addition to exposure and response prevention tasks, therapy continues with other cognitive techniques for disputing responsibility beliefs and the threat of something awful happening. Such techniques include the Dysfunctional Thought Record (Beck 1979, modified by Salkovskis et al., 1998).



**Fig 2. Using the vertical arrow to access assumptions. Salkovskis & Westbrook (1987)**

**I can't control the bad thoughts**

What's so bad about not being able to control them?

**It's not normal to have uncontrollable thoughts**

Supposing it's normal; what would that mean?

**I've got to get them under control otherwise I lose control of my mind and do something awful**

Supposing you did lose control; what would be bad about that?

**I couldn't live with the idea that I harmed someone when I could have avoided it**

If you had harmed someone and could have prevented it; what would be bad about that?

**I'd have to kill myself**

The assumptions at each level would then be challenged, using traditional cognitive therapy challenges: in this way beliefs about the patients responsibility for others is challenged and modified.

In a case of obsessional rumination with covert compulsivity Salkovskis & Westbrook (1989) state that it is important to maintain a diary of fearful thoughts and responses to them: in this way exposure and response prevention tasks can be modified to exposure of the fearful thoughts and responses; the responses, once elicited can then be challenged

and modified. In addition Salkovskis & Westbrook recommend the use of loop tapes in such cases, thereby assisting in a programme of exposure and response prevention.

The proposed controlled study of a cognitive behaviour therapy programme has been adapted to a group setting, whilst being based on theoretical approaches to individual CBT as developed by Salkovskis et al during the 1990s.

This randomised controlled study will compare group CBT with group relaxation therapy (RT)

(N.B. although relaxation therapy is viewed positively by many OCD patients, the weight of evidence suggests that it is a neutral treatment for this disorder). The group relaxation condition will provide a suitable control measure for group effects per se, thereby facilitating an accurate assessment of the true efficacy of group CBT, which has been lacking in all previous studies to date. It is expected that group CBT patients will demonstrate a significantly greater post treatment reduction of pre-treatment Y-BOCS scores.

### 1.9 Experimental Hypothesis

The experimental hypothesis states that the CBT group therapy programme would effect a significant decrease in patients post test Y-BOCS scores.

The Null Hypothesis (Ho) states that a the CBT group therapy programme would not effect any significant decrease in patients post test Y-BOCS scores; any change recorded would be due to chance fluctuations in patients scores.

## **CHAPTER TWO**



## **2. Method**

### **2.1 Research Objectives**

The study evaluated the potential efficacy of group based Cognitive Behavioural Therapy (CBT) in the treatment of Obsessive Compulsive Disorder (OCD). It is already well established that CBT is an efficacious intervention in OCD on an individual patient basis. Uncontrolled pilot work has demonstrated the potential effectiveness of group CBT. However, without a control group receiving a neutral treatment under group conditions, it is not possible to determine whether the observed efficacy derives from group CBT or from group effects per se. In this study we will seek to establish the efficacy of group CBT by comparing a group of OCD patients undergoing group CBT with a control group undergoing group relaxation therapy.

In addition to the main experimental hypothesis, this investigation will examine any possible effects of the following variables on Y-BOCS outcome scores as follows:

a)Duration of OCD; b) Type of OCD e.g. checking, contamination; c)Medication.

The principle objective of this study is to ascertain whether there is a basis for providing Cognitive Behavioural Therapy (CBT), as described by Slakovskis(1989) in a group setting; thereby reducing OCD patient waiting lists, whilst making maximum use of therapist time.

## **2.2 Design**

A single – blind, placebo – controlled treatment study of the efficacy of cognitive behavioural therapy (CBT) in a group setting.

This study will consist of an experimental condition – Cognitive Behaviour Group Therapy (CBT) (please refer to *Appendix C* for ‘Overview’).

A control condition – Relaxation Group Therapy (RT). (please refer to *Appendix D*).

A waiting list control was considered, however this would not have controlled for group effects per se. Therefore, in order to assess the true efficacy of CBT as a treatment for OCD in a group setting, the issue of group effects variables (e.g. raising self esteem through identity as a member of a group; increasing motivation to change through support of other group members) needed to be addressed. In this respect a group effects control was considered to be appropriate and in view of the fact that earlier studies (Rachman *et al* 1979; Marks *et al* 1980; Marks 1987) had shown relaxation to be an ineffective treatment for OCD, a relaxation group was considered to be an appropriate control condition for this study. A self help group was also considered but this would not have taken into account such variables as, structure of group process and the impact of the therapist as part of that process.

The independent variable was the type of therapy received and the dependent variable the subjects Yale Brown Obsessive-Compulsive Scale (Y-BOCS) (Goodman *et al.*, 1989) psychometric test scores.

### *Experimental Hypothesis:*

The CBT group therapy programme would effect a significant decrease between patients pre & post

Y-BOCS OCD psychometric test scores.

The Null Hypothesis (Ho) states that the CBT group therapy programme would not effect any significant decrease in patients post test Y-BOCS scores; any change recorded would be due to chance fluctuations in patients scores.

#### 2.2.1 Subjects:

This was a randomised controlled pilot study of group CBT in OCD. Given that approximately 50% of screened patients might pass the trial eligibility criteria and might be willing participants for RT (Marks, 1986) it was anticipated that we would need to screen approximately 50 OCD patients in order to meet the proposed recruitment numbers (13 per group to allow for a 25% drop out rate). A recent audit of the OCD Clinic at the Department of Psychiatry, QEII Hospital, East Hertfordshire, demonstrated that there were a sufficient number of outpatients on the waiting lists to fulfil all recruitment criteria. Furthermore, well-established links with other OCD clinics would facilitate recruitment of patients from additional sources. Patients were screened by the therapist (the author), according to inclusion/exclusion criteria detailed below:

#### *Criteria for inclusion:*

Participants will meet DSM-IV OCD criteria.

DSM –IV provides diagnostic criteria for obsessional – compulsive disorder as follows:

1. Obsessions and/ or compulsions are present.



2. It is recognised that the obsessions and compulsions are excessive or unreasonable.
3. The obsessions and compulsions cause marked distress, or are time consuming (take up more than one hour a day), or significantly interfere with the individual's normal routine, job or social life.
4. If another Axis 1 disorder is present, the content of the obsessions or compulsions is not restricted to it – e.g. guilty ruminations in the case of depression, or preoccupation with food in the case of an eating disorder.
- 5 The disturbance is not due to the direct physiological effects of drugs or a physical medical condition.

**Matched groups:**

All participants will have a Y-BOCS cut off score of 16 (indicating moderate to severe OCD) and will not be severely depressed (MADRS < 24). They will not be on any specific anti-obsessional medication.

***Criteria for exclusion:***

- Any patients exhibiting symptoms of co-morbidity in relation to mental illness (e.g. – Tourettes syndrome, Schizophrenia, Psychosis or severe depression) will be excluded.
- Any patients who are on active medication for OCD will not be allowed to enter the study.
- Any patients who, in the clinicians opinion, will not be able to comply with treatment will be excluded.

Twenty-six patients were recruited to the study and randomised to one of the two treatment conditions. Patients were not told whether they were participating in the purported active or neutral condition but were told the type of therapy (CBT Vs RT) that their group would receive. It was anticipated that out of the twenty six patients, thirteen would be allocated to each group in order to offset the typical 25% drop-out rate in OCD patient studies (e.g. Greist *et al.*, 1995), thereby ensuring ten completers. The drop-out rate in the control group was thought unlikely to exceed that in the active treatment group since, as already mentioned, relaxation therapy is not aversive to OCD patients compared with, for example, anti-exposure therapy which has been used as a purportedly neutral control treatment in some previous studies). It must be stressed that the majority of patients entering the study were on NHS waiting lists for individual treatment and participation in the study was offered, where deemed appropriate, as an interim therapeutic intervention which in no way affected patient's rights to remain on waiting lists for individual treatment. This was clearly explained to all patients prior to entering the study and was also stressed on the Patient Information Sheet (appendix A). Whilst some might argue that entering patients into a purportedly neutral treatment arm (i.e. relaxation therapy) is unethical, we would defend our choice of control condition on the following grounds. Firstly, it was essential that any control treatment in this study was group-based since this would allow us to isolate the main effect of group CBT from any interaction between group CBT and group effects per se. Secondly, previous conclusions about the non-efficacy of relaxation therapy draw evidence from individual treatment episodes rather than group relaxation studies. It was quite possible that group relaxation

therapy might have been of benefit to OCD patients and the study was viewed as the first important step towards testing this secondary hypothesis.

### 2.2.2 Sample Size:

This was viewed as a controlled pilot study, and therefore the numbers of patients were limited accordingly. This was an attempt to establish reasonable proof of principle before seeking funding for a full-scale multi-centred trial of group CBT in OCD. Nonetheless, with a repeated measures analysis of Y-BOCS scores over testing intervals, the expected number of completers would still provide reasonable statistical power: based on earlier work (Hughes *et al.*, 1998), mean improvement between baseline and week 12

Y-BOCS score was expected to be in the region of 45% for patients in the group CBT condition. We then assumed a maximum control group response rate of 20% improvement (given that there might be some additional benefit of group interaction *per se*), then a conservative estimate of the between groups effect size was in the order of 25%. In the uncontrolled study by Hughes *et al.*, (1997), mean baseline Y-BOCS score was approximately 28 points with standard deviation approximately 6 points. Assuming that both treatment groups in the study would have the same baseline characteristics, and using our 25% estimate of between group effect size, we would expect the mean CBT group endpoint Y-BOCS score to be 15.4 points and the mean relaxation therapy group endpoint Y-BOCS score to be 22.4 points. Therefore, assuming a number of 10 patients per group the estimate of standard error was 2.68 points. Under these predictions, and with an alpha level of 5%, ten completers in each group would give statistical power of about 75% (using the normal approximation to the binomial method for sample size



calculation described by Bland, 1987). Although this would not be adequate for a full-scale clinical trial this is, nevertheless, a very high level of power for a pilot study seeking to establish proof of principle (given that most full-scale clinical trials for antidepressants are only powered to 80%).

All group members will be seen individually, once before and once at post treatment for assessment and results feedback respectively.

## 2.3 Procedure

### 2.3.1 Initial Screening

The group therapist carried out initial individual screening interviews, of 90 minutes duration, assessing via inclusion/exclusion criteria and providing the patient with information about the group programme; at this point the patient was given the Patient Information Sheet and the Patient Consent Form (*appendices A & B*); thus fulfilling criteria for informed consent to be given by the patient. The interviews were standardised (*appendix K*), starting with an initial information gathering exercise – i.e. previous medical history, onset of OCD symptoms and development, social and family history.

Psychological tests were administered by the clinician followed by identification of OCD symptoms. The clinician then questioned patient's motivation to change, as this was seen as important criteria for inclusion in group therapy. The clinician assessed whether patients displayed symptoms as identified in DSM-IV (American Psychiatric Association, 1994) diagnostic criteria.

Once agreed that the patient was suitable for the group study they were then placed on a group waiting list and when an appropriate number of patients (preferably 13 +) were on the waiting list the next group ran. The type of group programme alternated, starting with the tossing of a coin when the first waiting list patients had been recruited, to identify which group condition we would start with: in this case it was CBT. In both conditions the first session began with introductions and ground rules for the group, which addressed the following points:

1. Confidentiality aspect of group work.
2. Participants anxieties.
3. Participant's roles - free to participate as much or as little as they wish (reduction of performance anxiety).
4. Commitment to attend regularly.
5. Advise clients not to meet socially until the Group has finished and to avoid one to one meetings where maintenance of OCD through reassurance is likely to occur.
6. Get clients to introduce each other in pairs
7. Provide handouts – 'An overview of the twelve weekly sessions' (*appendices C or D*)
8. Negotiate goals for the group.

### 2.3.2. Running the Programmes

Exposure and response prevention (Salkovskis, 1989) formed an integral part of the group CBT condition.

Each week, participants set homework exposure and response prevention tasks relating to their individual OCD behaviours and developed cognitive coping strategies, as a group, to assist them in carrying out these tasks: after six sessions the group members were encouraged to set homework tasks on an individual basis and to resist seeking reassurance from other group members and/or the therapist. This is based on the theoretical model of OCD developed by Salkovskis (1998).

The homework tasks were negotiated in the group with members setting an individual hierarchical list of OCD behaviours in order of severity i.e. 1 - being most severe and descending in order of severity. The first homework task was to record a diary of obsessive thoughts that triggered compulsive behaviour. In the second session such obsessive thoughts were identified and group members practised interpreting them in a less threatening perspective, whilst at the same time trying not to control obsessive thoughts. Group members then negotiated an agreed time delay for carrying out exposure and response prevention homework tasks. In this way group members agreed to carry out a specific exposure and response prevention homework task – negotiating how long they felt they might be able to delay carrying out compulsive behaviours and how many times per week they would be prepared to attempt this. Group members were then requested to carry out weekly homework tasks i.e. to accept the obsessive thought by staying with that thought and not trying to control it, but instead to put into practice a less threatening perspective of the obsessive thought; whilst at the same time delaying carrying out compulsive anxiety reducing behaviours for the agreed amount of time. During the first six sessions the therapist took a key role in assisting identification of obsessive thoughts and development of less threatening perspectives, however group members were



encouraged to suggest less threatening perspectives for each others obsessive thoughts. From session six group members were then encouraged to develop homework tasks for themselves; at first with assistance from another group member (e.g. in pairs) and then moving toward setting homework tasks independently and not seeking reassurance about this from other group members. The aim here was to develop independent homework setting to assist in promoting increased self confidence.

In the relaxation control group the structure of the group session was identical to that of CBT group condition, whereby patients carry out homework tasks relating to the development of relaxation techniques. (*Appendix E – Structure of sessions in both conditions*). The relaxation condition has been designed in a way, which renders it maximally interesting for the participants without overstepping the control boundaries (for example, taking care not to include anxiety management techniques which relate to CBT). Each treatment group received exactly the same number of handouts starting with Patient Preparation for Therapy Sheet (*appendix M*), which is sent to patients two weeks prior to the start of group sessions; followed by an overview of the 12 week programme (*appendices C & D*), given out at the first session; followed by weekly agendas and additional information sheets (*appendices F, G, H & I*). At each weekly therapy session all group members received an agenda, although there was room for negotiating changes which reflected group concerns. The same therapist (the author) ran both the CBT group sessions and the relaxation group sessions (RT), thereby eliminating the potential confound of individual differences in therapist style. In pharmacotherapeutic trials it is common to blind the prescribing clinician to the nature of treatment (i.e. active drug or placebo). However, in studies where treatment involves the personal input of the clinician

this is clearly not viable. Under such circumstances it would be optimal to blind the clinician /therapist to the study rationale in an attempt to minimise any sources of potential experimenter bias. However, in all practicality this would not have been possible since a qualified therapist would know that relaxation therapy is not generally considered to be an active treatment choice for OCD. Given that placebo-response rates in OCD patients can be moderate (improvements as large as 20% have been reported under neutral treatment conditions) and that the potential benefits of group interaction *per se* were yet to be established for OCD patients, we contend that the study was not prone to experimenter induced artefact. Furthermore, all outcome measures were recorded by a 'blind rater' who was not at liberty to discuss treatment with either the therapist or patients. This rater was fully blinded to the rationale of the proposed study and was not told the true nature of treatment groups until all therapy and rating sessions had been completed.

In the early part of CBT group therapy, the patients were encouraged to talk about how OCD impacted on their lives in an attempt to normalise their perceptions of OCD, by hearing how others experienced similar difficulties and learning about OCD itself, through mini lectures (*appendices E & F*). In the session 2 CBT members set short (6 sessions), medium (12 sessions) and long (3-month follow up session) term goals (What they might reasonably be expected to achieve by a specific date - Salkovskis, 1998). This was followed in subsequent sessions by carrying out exposure and response prevention homework tasks, with preparation '*in vivo*' rehearsals in the group setting in pairs. In addition, there was the introduction of Dysfunctional Thought diaries (Beck, 1979 &



Salkovskis, 1998) recording thoughts and consequential emotional and behavioural responses, with ratings of how strongly they believed/felt/ needed to action these: the diaries then provided valuable information about the patients perspective of their problems in their own environment; and in this way, in the sessions, it was possible to try to challenge (using the downward arrow technique) the patient's perspective of the problem and to learn alternative ways of viewing their problems, which may be less threatening and so help them carry out homework tasks.

Initially the therapist led the challenging ,in providing an alternative less threatening perspective for patients; but by the fourth session group members usually began, and were encouraged, to challenge each other, so that they began to create alternative perspectives for each other; this assisted the shift away from their rigid way of thinking about their problems. For the first six sessions the clinician assisted individual members to set homework tasks: from that time onward individual members were expected to set their homework tasks independently, in the same way the RT group members were expected to apply their own favourite relaxation technique at home as a home work task. This was done to encourage increasing independence on an individual level, whilst still enjoying the support of the group.

In session eight patients were asked to complete a cost/benefits of OCD exercise as a group activity, preferably in pairs. This was a way to identify possible maintaining factors (benefits) and to start working on challenging and changing these prior to end of group. Also, in session eight group members progress was reviewed (review of short-term goals achieved), and goals were reset if previous ones had not been achieved.



In session eleven group members identified possible reasons for relapse. Group members assisted each other in trying to find possible solutions to identified relapse factors. Problem solving techniques were practiced to encourage use of this technique in the future. Also, dates were set for individual feedback sessions, to take place during the two weeks following end of group sessions: these individual sessions were one hour in duration and enabled the clinician to provide feedback, , to discuss the patients progress and to address any concerns they may have had for the future.

In session twelve all psychological tests, completed in session one, were repeated.

Group members set individual weekly goals for the following six weeks: at that time each patient would restate further six weekly goals which would coincide with the date for the three month follow up.

The follow up sessions, for the duration of two hours at three months, would take place in the same room, where previous sessions had taken place. The purpose of the follow up sessions was to monitor group progress and for group members to provide support and encouragement to each other.

### 2.3.3 Blind Rating

Starting at baseline and then every other session, each patient was assessed by an independent rater, who was a specialist registrar in the Department of Psychiatry, with appropriate training in relevant scale administration, and with previous experience of assessing OCD patients. The rater assessed all patients entering the study at fortnightly intervals until study endpoint. Patients were not allowed to discuss their treatment regime with the rater. Patients scores were recorded on the Rating Pack (*appendix J*) at

fortnightly intervals to allow a repeated measures analysis of score change over time. The use of a variety of scales at baseline and endpoint were used to facilitate a multimodal perspective on how treatment might lead to qualitatively different benefits in day to day living.

Participants in both conditions received an evaluation of therapy form (*appendix L*), at the end of the 12 week programme. This questionnaire specifically asked patients a) what they expected to gain from the therapy prior to commencing and b) what they had gained at the end of therapy. There were also questions aimed at evaluating the therapist. All participants (including those who were not on current NHS waiting lists – e.g. those referred by GPs) were re-assessed at an individual follow up session after the study was completed. This was carried out by the group therapist and at this time, suggestions for appropriate future treatment were made with correspondence giving an end of therapy report to the original referrers. All study participants were invited to attend a three months follow-up session to enable group members to feedback any concerns, progress, relapse etc.

#### 2.3.4 Psychometric Tests:

##### Primary Outcome Measure: Yale – Brown Obsessive Compulsive Scale

(*Goodman.W.K., Price. L. H., Rasmussen S.A, & Mazute C.,1989*).

Many different instruments have been developed to measure the severity of wide ranging symptoms of Obsessive Compulsive Disorder (OCD), for research purposes.





The Y-BOCS assigns lower scores to greater resistance as an indicator of health. Scores from each of the subscales are added together to give a total Y-BOCS score. The results of tests of internal consistency, inter-rater reliability, and test-retest reliability in clinical and nonclinical samples have been excellent (Frost *et al.*, 1994; Goodman *et al.*, 1989a; Kim *et al.*, 1990, 1992). However, Woody *et al.*, (1994) suggested that the findings on test-retest reliability required replication due to the fact that these had only been reported in one of the previous studies (Kim *et al.*, 1990, 1992) and the same rater had been used and the retest interval was only one week. Woody argued that with such a short interval the rater may have recollected the earlier ratings and thus give an inflated reliability value. In considering which scales to use as comparison, Goodman (1989) found that Y-BOCS showed good convergence with two of the three other measures used in respect of OCD; they are the NIMH-OC scale and the Clinical Global Impression score. (Both of these measures are observer rated scales): but not with the self report Maudsley Obsessional Compulsive Inventory (MOCI, Hodgson & Rachman, 1977). The Maudsley scale showed poor correlations with other OCD measures used in the study: however, the sample size was small ( $n$  10 and 13).

In the study carried out by Kim *et al* (1990) the results showed that Y-BOCS did not correlate well with the Leyton Obsessional Inventory (LOI), however, Emmelkamp (1988) and colleagues have expressed concerns in respect of validity of the LOI for assessment of OCD. Frost *et al* (1994) found that there were significant correlations between Y-BOCS and three other OC scales, which were, the MOCI, the revised Compulsive Activity Checklist, and the Obsessive Thoughts Questionnaire. Goodman *et al* (1989b) showed divergent validity for the Y-BOCS, based on a study which included

one inpatient sample ( $n=16$ ) and two out patient samples ( $n=65$ ); this was found to be due to strong positive correlations to the Hamilton rating scales for anxiety and for depression. This could have been influenced by the small number of inpatients who had the broadest range of depression and anxiety; the Y-BOCS showed a stronger relationship with the Hamilton scales than with OCD measures. Whilst it might be expected that because OCD is an anxiety based disorder that it would naturally be associated with anxiety and subsequent depression that many OCD sufferers experience, it would have been expected to show a correlation to other OCD measures.

With this in mind Woody *et al* (1994) carried out a further study which included fifty four outpatients, with a primary diagnosis of OCD. Patients excluded from the study were as follows:

Current or past evidence of psychosis

Current alcohol or substance dependence, or organicity

Patients with less than one hour per day taken up with overt rituals

Participants in the study were:

65% female    92% Caucasian            4% African –American            4% from other ethnic backgrounds.

The mean age was    33.2 years (SD=9.8)

Patients were diagnosed by experienced doctors and Structured Clinical Interviews (Spitzer *et al.*, 1990a) were conducted by doctoral level counselling or clinical psychologists. All interviewers observed a training videotape and were supervised during

early interviews by expert clinicians. At interview patients were assessed on the Y-BOCS Symptom Checklist in order to identify their specific obsessions and compulsions, followed by the 19 item Y-BOCS interview: SCID and Y-BOCS interviews were audiotaped and 22 SCID and 30 Y-BOCS tapes were coded by a second blind rater to study cross site reliability.

In addition a self-report questionnaire was used, The Maudsely Obsessional Inventory (MOCI; Hodgson & Rachman, 1977), a 30 item true- false questionnaire used in treatment outcome research. Emmelkamp (1988b), had found that that this test discriminates OCD patients well from those who have anxiety disorders and anorexia but not so for those who suffer with depression. Also Behavioural Avoidance Tests (BATS) were carried out: this test identifies *in vivo* the level of anxiety for each patient when faced with the feared contact eg.. Leaving the room without checking that they have left something. The scores are rated as follows:

0 = no avoidance                      1 = partial avoidance/rituals    2 = unable to do the task

The scores were then averaged out across tasks.

Obsessions and compulsions were identified by the therapist at pretreatment interview; this involved patients rating their fears/avoidance of up to three personally relevant situations and then recorded the frequency/and/or duration of up to two rituals on a scale ranging from:

0 = no symptoms                      to                      8 = severe symptoms

These scales are used in research with OCD and Freund (1986), reported good inter-rater and test-retest reliability for two of three target rating scales.



At assessment interview all patients were rated on Y-BOCS and the first two therapy sessions were given over to therapy planning and rating BAT: each patient then began sixteen sessions of exposure and response prevention followed by four follow up monitoring sessions, which took place over a four month period.

Internal consistency: Item total correlations and Cronbach's alphas were calculated and the

Y-BOCS total score (Items 1-10) was acceptable (0.69)

Inter rater reliability: reliability was calculated with intraclass correlation co-efficients.

Reliability was excellent for Y-BOCS total and the two subscales.

Test – retest reliability: Evidence was examined using intraclass correlations; the scores for Y-BOCS Total and the sub scales proved less reliable but still acceptable for research purposes, especially given the change in raters and length of time between test-retest (10 –103 days ( $M = 48.5$ ). Repeated measures  $t$  tests showed that Y-BOCS Total ( $t=0.75, p=0.46$ ), Obsessions ( $t=0.88, p = 0.39$ ), and Compulsions ( $t = 0.36, p =0.72$ ) did not systematically increase over time.

Construct validity: Y-BOCS Total was not significantly influenced by the participant's age, sex, or socioeconomic status (all  $P_s > 0.27$ ). Sex and SES also had no significant effect on subscale scores. Convergent validity was examined by calculating correlations of Y-BOCS subscale and Total scores with other standard measures of OCD, taken at interview, the MOCI, Target Symptom Ratings and Behavioural Avoidance Test: at pretest the Y-BOCS Obsessions scale was moderately correlated with the MOCI Total score and with BAT anxiety but not with Target Ratings of fear/avoidance. Divergent

validity was calculated using Pearson correlation coefficients in relation to measures of depression and anxiety

( $p < 0.05$ ): at first sight this indicated that Y-BOCS did not distinguish between depression and OCD pathology: in order to explore this a sample of patients with Major depression or Dysthymia were removed from the original sample and contrasted with clients without co-morbid depression: Y-BOCS scores did not differ [ $t(49) = -1.47$ ,  $P < 0.15$ ]. These results indicate that co-morbid depression has little impact on Y-BOCS scores. Overall correlations to anxiety and depression are not as strong as those to other OCD rating scales: MOCI ( $P < 0.005$ ); Target Ratings for rituals ( $P < 0.0005$ ); BAT ( $P < 0.0005$ ).

In a more recent study carried out by Nakagawa *et al* (1996) showed that Y-BOCS correlated highly with other OCD measures, Compulsion Checklist – (self assessment) 37 item, each about a different compulsion rated on a four point (0-3) scale concerning duration, repetition and avoidance (total score 0-111) (Marks *et al.*, 1977); Clinical Global Impression (CGI) Assessor only): one –9 point scale; Target Ratings (as described in previous study). Results showed that among the OCD variables CGI correlated highly with Target obsessions ( $r = 0.55$ ,  $P < 0.001$ ) and Target rituals correlated highly with Target obsessions

( $r = 0.67$ ,  $P < 0.001$ ). It is interesting that after eight weeks Y-BOCS correlated highly with all variables:

CC ( $P < 0.001$ ); CGI ( $P < 0.01$ ); Target Rituals ( $P < 0.001$ ); Target Obsessions ( $P < 0.01$ ).

CC the main comparison scale only correlated significantly with Y-BOCS.

Nakagawa concluded that Y-BOCS and the Compulsion Checklist are both good measures of OCD, with Y-BOCS being marginally superior; in addition for clinical trials and everyday care of OCD the 10-item

Y-BOCS would assist in providing standard outcome across trials, clinics and countries.

Furthermore, it was suggested that computerised versions of Y-BOCS can facilitate a gathering together of treatment outcome in OCD studies for research purposes.

### Secondary Outcome Measures:

Montgomery and Asberg Depression Rating Scale

*(MADRS) (Montgomery & Asberg 1979).*

An Observer rated 10 item scale: each item is rated for severity rising from 0 (no symptoms) to 6 (Severe symptoms).

This instrument was designed to be particularly sensitive to treatment effects: ratings of 54 English and 52 Swedish patients on a 65 item comprehensive psychopathology scale were used to identify 17 most commonly occurring symptoms in primary depressive illness in the combined sample. Ratings on these 17 items for 64 patients participating in the studies of four different antidepressant drugs were used to create a depression scale consisting of the 10 items which showed the largest changes with treatment and the highest correlation to overall change. The inner-rater reliability of the depression scale was high; scores on the scale correlated significantly with scores on a standard rating scale for depression, the Hamilton Rating Scale (HRS), indicating its validity as a general gauge of severity of symptoms. Its capacity to differentiate between responders and non-



responders to antidepressant treatment was better than HRS, indicating greater sensitivity to change.

In a study carried out by Dractu *et al.*, (1987), comparing the MADRS with the Hamilton Depression scale (an observer rated scale) and the Visual Analogue Mood scale (a self rating scale), the results showed correlation between MADRS and three other assessment tools, indicating that it is a good operational instrument to evaluate depressed patients and to use in a standardised approach to treatment outcome research. Furthermore the study showed the reliability of the application of MADRS in cross-cultural studies of depression in Brazil and other countries.

### Hamilton Anxiety Scale

*(Hamilton M, 1959)*

An observer rated, 14 item instrument, rating for 89 possible symptoms of anxiety, with each item rated on five levels of severity: a well validated tool which has been used in research studies for validation of the Y-BOCS scale.

Clinical Global Impression (Severity) Scale (*Guy 1976*).

CGI was developed whilst *Guy et al* were carrying out schizophrenic studies in order to rate severity of illness; the time-span to be rated is within the last week leading to this point in time: this is a two item instrument that rates 1) severity of illness on 7 points:

0 = not assessed	4 = moderately ill
1 = normal, not at all ill	5 = markedly ill
2 = borderline mentally ill	6 = severely ill
3 = mildly ill	7 = Among the most extremely ill patients

## 2) Global Improvement

0 = not assessed	4 = no change
1 = very much improved	5 = minimally worse
2 = very improved	6 = much worse
3 = minimally improved	7 = very much worse

This test has been included in discussions under the primary outcome measure and was shown to correlate highly with the Y-BOCS in assessing severity of symptoms.

## Social Adaptation Self Evaluating Scale (SASS)

(*Bosc, M., et al, 1997*).

Social Functioning as an Outcome Measure in Depression: The Social Adaptation Self – evaluation scale (SASS) is a 21 item self rating questionnaire which evaluates an

individual's social functioning: it takes approximately five minutes to complete and explores the four main areas of social functioning:

1. work
2. Spare Time
3. Family
4. Ability to cope with resources and finances

The psychological and physical symptoms of depression, e.g. low mood and lethargy impact on every area of a patient's life, affecting relationships at home, work and with friends; therefore if a treatment is effective in lifting such symptoms it should follow that there would be a return to effective social functioning. Severity of depressive symptoms can be evaluated with the Montgomery & Asberg Depression rating scale, being symptom oriented but in order to assess an individual's level of functioning within their social environment the SASS will be used in this study.

Both quantitative (e.g. level of activity) and qualitative aspects (self – perception/role satisfaction) of an individual's performance are assessed. Not all questions relating to one of the four areas have been grouped together, ensuring that questions are answered independently. SASS was used with a sample of the general population (4,000 individuals), in addition to a sample of depressed patients (549 individuals) from two randomised controlled studies. SASS was shown to possess the mandatory requirements for a psychological scale: validity, reliability and sensitivity to change. SASS is scored on a quantitative scoring system with each item scoring 0 – 3 points; higher scores indicate better social functioning. The normal range of level of functioning has been identified as 35 – 52; the scale can be repeated over time to provide a guide to how a patient is responding to treatment.



*N.B. For copies of all scales used in this study, please refer to appendix J*

*This includes a copy of training procedure for observer rated scales used for raters in the study and generally at the Department of Psychiatry, QEII Hospital, (Hawley, C., Hertfordshire Neuroscience Research Group)*

Patients were rated at initial assessment by the research therapist, and thereafter at baseline (wk-0), at fortnightly intervals and post treatment (wk-12 and three month follow-up), by a rater “blind” to the treatment modality.

At baseline all scales were administered, followed by 10 item rating on Y-BOCS, MADRS, Hamilton Anxiety scale and CGI at fortnightly intervals: at week twelve and three month follow-up all scales and full Y-BOCS were administered.

### 2.3.5 Data Analysis

There was no interim analyses and project data was given to the therapist only when all rating sessions were completed. Data was then entered on an SPSS database and continuously distributed data was entered into an Analysis of Covariance (ANCOVA) model. Planned (a-priori) comparisons were made between treatment groups on each outcome measure, with rating interval being repeated – measures factor in analysis of Y-BOCS scores. Baseline scores were used as co-variate measures in order to mediate for between group sources of initial bias. At each treatment group mid-point (i.e. 6 weeks) the blind rater remained uninformed of the study rationale but was asked to guess what type of therapy each patient was undergoing. This same procedure was repeated at study

endpoint in an effort to ensure that blind rating procedures were working effectively (Marks, 1986).

### 2.3.6 Health Economics:

Although the study carried potential health economic implications, we did not undertake a health economic analysis. We had approached a group of health economists based at the Institute of Psychiatry to obtain their views about the logistics and cost of undertaking such analysis within this study. The view expressed was that such an analysis would not be viable for a pilot study of this nature without increasing the cost beyond a level that was justifiable. The project team did not possess the requisite skills nor tools to undertake a health economics analysis on their own and this would necessitate buying in the time of a health economist. The resulting fee would have more than doubled the cost of the study and the conclusions that could be extrapolated from such a small study would be too limited to justify the extra cost. We are cognisant of the importance of health economic evaluations in the development of new treatments but felt that it would be unwise to request additional funding for this purpose until we had obtained proof of principle that group CBT is efficacious. We viewed this first controlled pilot study very much as a first step towards developing a much larger programme of work, for which we would ultimately seek funding from an external funding body (e.g The MRC). We would, at that point enlist the help of a health economist in the design of this much larger study provided that the results of the controlled pilot study warranted further research. Indeed, in a larger trial, we would make provision for an additional treatment arm which would

allow us to compare group CBT with individual CBT, both in terms of cost effectiveness and efficacy.

#### 2.4 Ethics Approval of Research:

Ethics Approval was obtained from East Herts NHS Trust & Thameside Community Healthcare NHS Trust Local Research Ethics Committees.

#### 2.5 Identified possible effects on the research:

1. Drop out rate of patients in either condition.
2. Insufficient numbers of OCD sufferers willing to participate in group therapy
3. Patients simultaneously consulting other mental health Professionals
4. Subjects refusing to give permission for data to be used in this study.
5. Patients commencing a course of medication during the study.
6. Same therapist delivering both therapies – experimenter effects

#### Proposals to address the above:

- It was planned to recruit a higher level of patients to the study in order to allow for points 1,2 & 4.
- In order to address points 3 & 5 the ‘blind’ rater monitored these two issues during the course of group therapy.



- Point 6 was addressed by asking participants to complete a post-therapy evaluation questionnaire.

## **2.6 Research Timetable:**

Group therapy programme dates:

**1999**

April- July – recruit patients to group I

July – September - Group I – CBT

December      three month follow up

**2000**

October to December recruit patients to group II

January - March - Group II - RT

June              three month follow up

**CHAPTER THREE**

### **3 Results**

#### **3.1 Data Analysis**

All parametric outcome measures were entered into an ANCOVA model, with planned comparisons between groups on *all* primary and secondary outcome measures. Baseline scores were entered as co-variates and rating interval was a within groups factor where sample size permitted. Primary outcome data were analysed using last observation carried forward (LOCF) and observed cases (OC) analyses. Last observation carried forward means that in cases where a patient *had dropped out* of the study, then their last recorded psychometric scores were carried forward to end-point and these were then used in data analysis. Observed cases means that only cases where patients *had not* dropped out of the study were used in data analysis i.e those patients with fully recorded data. Secondary outcome data were analysed using only OC analysis (except where stated). Non-parametric data were analysed separately for each group using Wilcoxon's signed ranks test.

#### **3.2 Primary Outcome Measure**

Table 1 shows how mean Y-BOCS score changed for each group over the study duration (OC). There was a significant main effect of rating interval under both LOCF and OC analyses ( $F = 7.5, p < 0.01$ ;  $F = 12.8, p < 0.01$  respectively) but no interaction between interval and group ( $F = 1.6, p < 0.2$ ;  $F < 1, ns$ ). Although the CBT group had lower Y-BOCS scores at week 12, the main effect of group was not significant when baseline scores were co-varied out ( $F = 2.6, p < 0.1$ ;  $F < 1, ns$  for LOCF and OC respectively). The inconsistency between LOCF and OC  $F$  scores is due to a high dropout rate for the



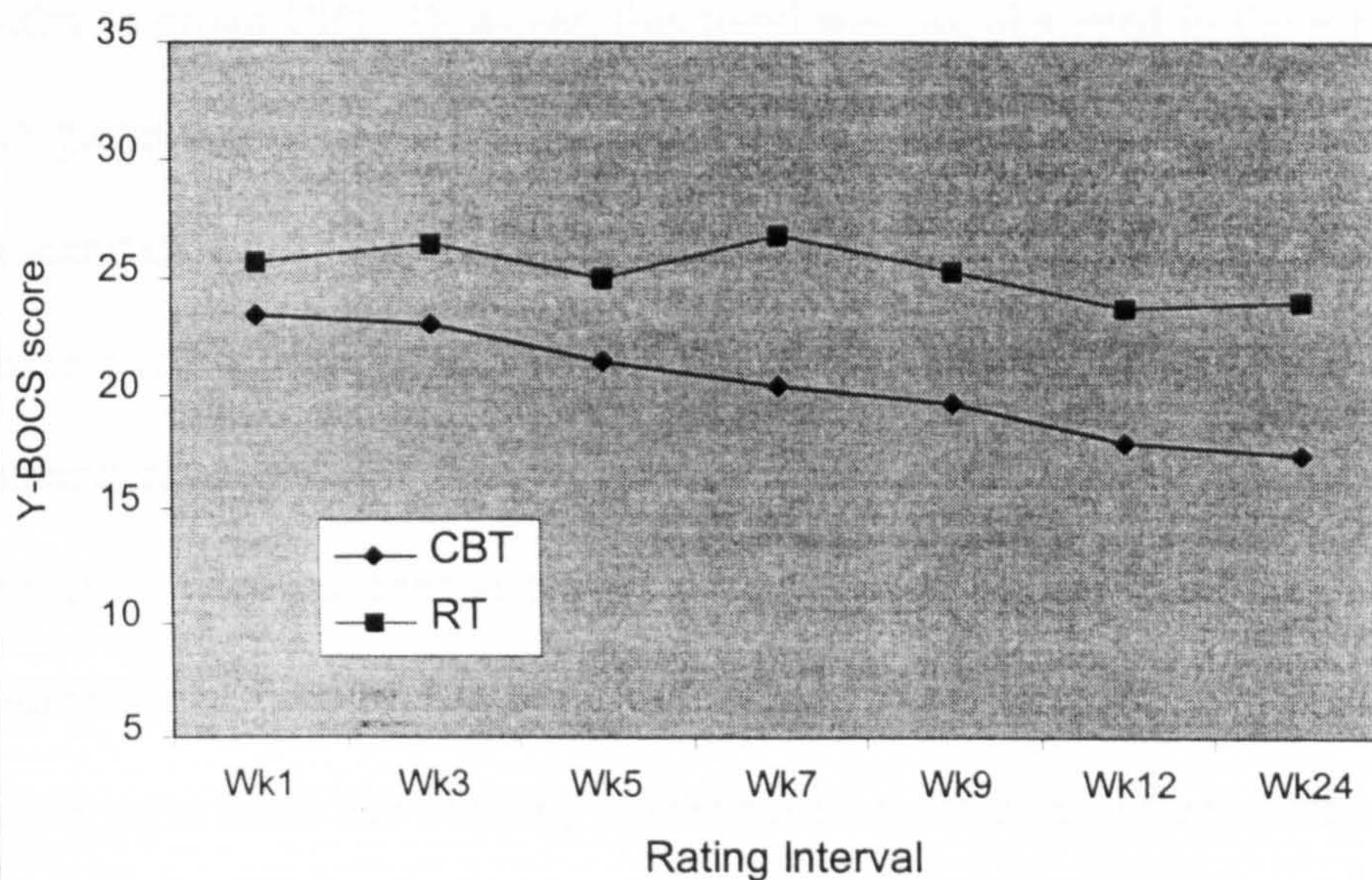
RT group (the week 12 Y-BOCS mean for the RT group is based on only 6 completers).  
 The LOCF Y-BOCS scores are plotted in figure 3.

Rating  Interval  (week)	CBT group		RT group	
	Mean Y-BOCS	<i>n</i>	Mean Y-BOCS	<i>n</i>
0 (baseline)	23	15	25.7	9
3	22.9	14	27.3	8
5	20.9	10	23.8	8
7	19.7	11	26.5	2
9	19.4	13	22.3	6
12	17.14	14	20.0	6
24 (follow-up)	16.3	10	21.2	6

**Table 1 Y-BOCS scores for each group over the 7 rating intervals**



**Figure 3 Y-BOCS score as a function of Rating Interval (LOCF)**



**Table 2 - ANCOVA Findings, Mean Scores (and standard deviations)**

**Showing differences between Pre& Post Tests Scores**

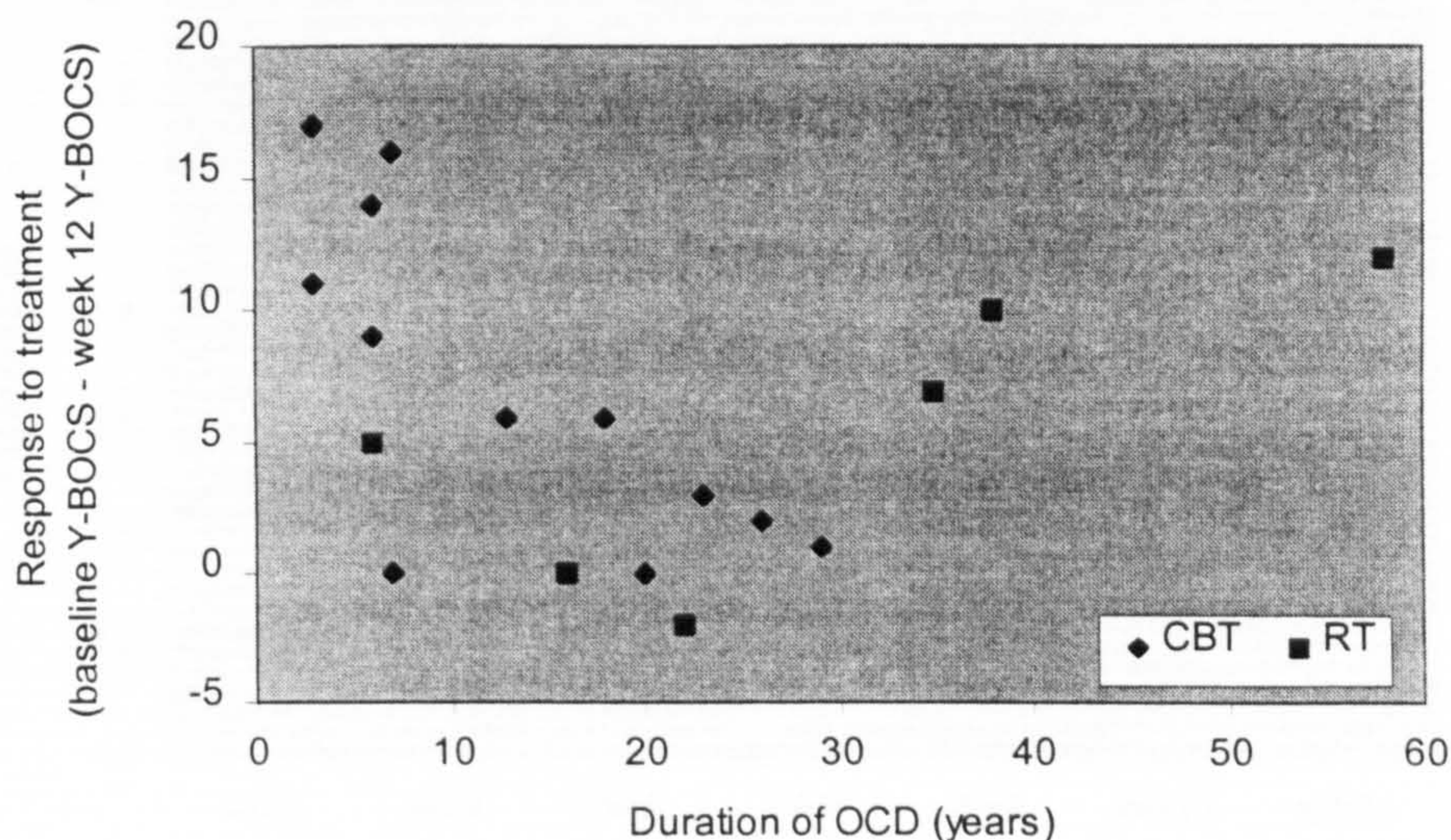
	CBT		RT			
	<u>N=15</u>		<u>N=9</u>			
Factor	Mean	(SD)	Mean	(SD)	F test	F (p)
Differences in						
<u>Y-BOCS</u>						
Session 1	23	(4.5)	25.7	(1.6)		
Session 12	17.14	(6.3)	23.7	(7.2)	2.6	ns
<u>MADRS</u>						
Session 1	14	(9)	19	(7)		
Session 12	9	(6)	15	(8)	0.9	ns
<u>HAS</u>						
Session 1	14	(6)	11	(7)		
Session 12	18	(7)	16	(4)	3.05	ns
<u>SASS</u>						
Session 1	35	(11)	34	(6)		
Session 12	34	(6)	34	(9)	0.38	ns



In the CBT group, duration of OCD correlated negatively with change in Y-BOCS score, ( $r = -0.72, p < 0.01$ ) suggesting that patients with a more recent history of OCD respond better to group CBT. However, this trend was not observed in the RT group; in fact, the RT group indicated the converse pattern, whereby patients with a longer history of OCD responded better to group RT ( $r = 0.74, p < 0.1$ ). These data are plotted in figure 4 for those patients where duration of illness was known. This is a potentially important finding although two factors limit the conclusions that may be drawn: firstly, the RT group included, by chance, the three patients with the longest duration of OCD and these patients may have biased the general trend of the group (figure 4); secondly, the small group sizes mean that outlying values have a greater chance of influencing the correlation between these variables. Nonetheless, the relationship between duration of OCD and response to *different* treatment types certainly warrants further research.



**Figure 4 The relationship between duration of OCD and response to CBT and RT**



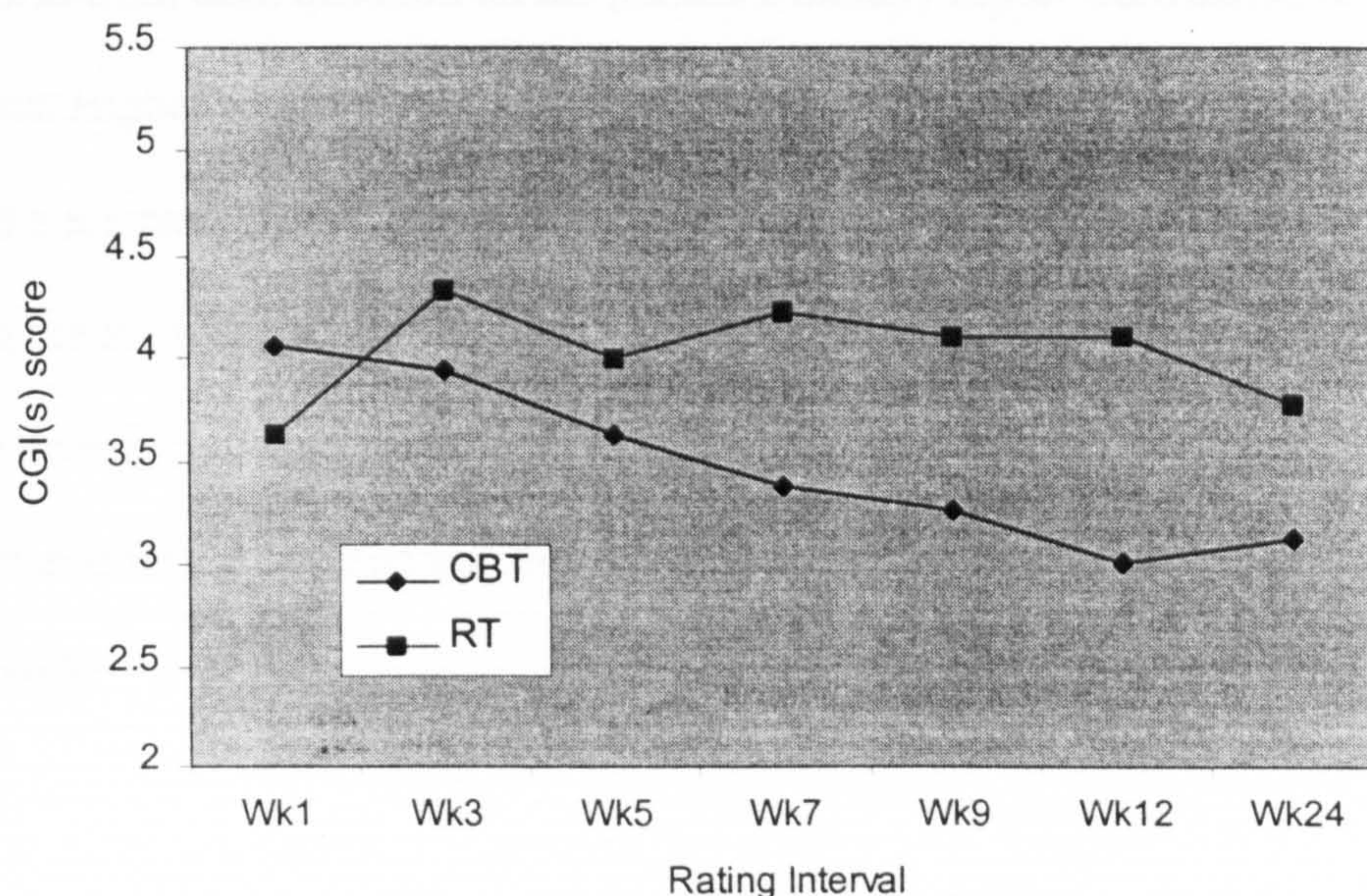
### **3.3 Secondary Outcome Measures**

Parametric secondary outcome measures (i.e. MÅDRS, SASS & HAS scores) included only 2 levels of the within groups factor (baseline and week 12) owing to missing ratings and a high dropout rate in the RT group.

Mean MÅDRS declined in both groups ( $F = 4.27, p < 0.05$ ) but there was no main effect of group ( $F < 1, ns$ ) and no interaction between group and rating interval ( $F < 1, ns$ ). There were no significant main effects or interactions for either the SASS or HAS. By contrast, CGI(s) scores decreased significantly between weeks 1 and 12 for the CBT group (Wilcoxon's  $Z$  corrected for ties =  $-3.17, p < 0.002$  for both OC and LOCF analyses), but not for the RT group ( $p < 0.3$ ). This trend is plotted in figure 5.



**Figure 5 Mean CGI(s) scores for CBT and RT groups as a function of Rating Interval (LOCF)**



Finally, the patients were grouped according to subtypes of OCD (i.e. contamination vs. checking vs etc.) but this had no apparent influence upon response to either treatment ( $p < 0.7$ ).

In addition, whether or not patients were on anti-obsessional medication did not predict response to therapy ( $p < 0.4$ ). Moreover, there was no group by medicine interaction suggesting that being on medicine did not have differential benefits in either one of the groups ( $p < 0.45$ ). However, medication was coded in a general sense (i.e. if patients were put on medication at *any time* in the study period, they were included as being on medicine).



### 3.4 Therapy Evaluation Questionnaires

Scores from each question on the patient's therapy report were summed to produce a total score. Higher scores would indicate a more positive attitude towards the therapy. 14 CBT and 5 RT patients completed this questionnaire. The CBT mean score was 25 (sd = 2.21) and the RT mean score was 20.6 (sd = 2.3), indicating that CBT patients had a more positive overall attitude towards their therapy. A one factor, between groups, analysis of variance was conducted and this difference was found to be reliable ( $F(1,17) = 14.23, p = 0.0015$ ).



## **CHAPTER FOUR**

## **4 Discussion**

### **4.1 Interpretation of results**

#### **4.1.1 Primary outcome measure**

To the author's knowledge, this was the first controlled study that compared active group treatment (CBT) with a control group (RT), in order to investigate the efficacy of CBT in a group setting, as opposed to group effects per se. As referred to in chapter one, previous studies have concluded that relaxation therapy is a non-efficacious treatment of OCD.

The results did not support the experimental hypothesis, therefore the null hypothesis was accepted: there was no significant difference between the experimental and control conditions, in reduction of the primary outcome measure, Y-BOCS scores, ( $F=1.6, p<0.2$ ).

Table 1, in the results section, showed that in the CBT group there was a steady trend in reduction of mean Y-BOCS scores over the course of twelve weeks, however there was no significant difference between reduction of Y-BOCS scores in the CBT and RT groups. In considering possible reasons why the results did not support the hypothesis, it is interesting to note that three of the six completers in the RT group, who were initially on no medication, began taking medication as follows:

- Patient 1 was prescribed 40mg Seroxat, six weeks prior to three month follow-up.
- Patient 2 was prescribed 70mg Clomipramine, eight weeks prior to three month follow up.
- Patient 3 was prescribed 40mg Paroxetine at twelve weeks.

Whereas, in the CBT group, two of the fifteen completers, who initially were on no medication, began taking medication as follows:

- Patient 1 was prescribed 20mg Paroxetine at week seven.
- Patient 2 was prescribed 40 mg Seroxat at week seven; this patient was on no medication at three month post treatment follow-up.

In addition one patient who had initially been taking medication at baseline (20mg Citalopram), had decreased medication to 10mg by week seven.

Therefore, the greatly reduced RT Y-BOCS scores at three month follow-up might be due to the effect of increased medication.

#### 4.1.2 Secondary Outcome Measures

Secondary outcome measures, MADRS, SASS and HAS scores showed no significant differences between groups: MADRS scores indicated depression of mild severity, declined over the twelve week period in both groups, ( $F(1,17) = 4.27, p=0.05$ ): SASS and HAS scores showed no reliable increase/decrease (respectively) in scores over the twelve week period. However, CGI scores (fig.5-results section) did show a significant difference between groups ( $F(1,16) = 6.8, p=0.05$ ), in that there was a greater decrease over time in CGI scores in the CBT group than in the RT group. Thus, indicating a greater overall clinical improvement in the CBT group. It is worth bearing in mind the strong correlation between Y-BOCS scale and CGI in previously discussed validation studies: thus indicating that the CGI scale might be more sensitive to change than Y-



BOCS. Therefore the non-significant result on the Y-BOCs may be due to the small numbers in the study, especially in the control group.

#### 4.1.3 Possible effects of variables on the outcome Y-BOCS scores

In addition to the main experimental hypothesis it was intended to investigate any possible effects of the following on Y-BOCS scores:

Duration of OCD

Medication

Type of OCD behaviour e.g. checking

When investigating a possible association between magnitude of change of Y-BOCS scores, taking into consideration type of group i.e. CBT or RT and Duration of OCD (fig. 4), the results showed that in the CBT group Duration of OCD correlated negatively with change in Y-BOCS scores ( $r = 0.72, p < 0.01$ ), a significant negative correlation: interestingly, in the RT group there was shown to be a positive correlation between Duration of OCD and change in Y-BOCS scores ( $r = 0.74, p < 0.1$ ). Such results might suggest that group CBT may be more effective for patients with shorter OCD Duration: if this were so then the fact that the CBT group included four people who had suffered from OCD over a long period of time (17 years +), then this might account for the non-significant change in Y-BOCS scores in the CBT group.

This is a potentially important finding, although two factors limit the conclusions that may be drawn: firstly, the RT group included, by chance, the three patients with the longest duration of OCD and these may have biased the general trend of the group (figure 4 – results section); secondly, , the small group sizes mean that outlying values have a greater chance of influencing the correlation between these variables. However, in view of the potentially important clinical information in the treatment of OCD, the relationship between duration of OCD and response to different types of treatment is worthy of further investigation.

#### 4.1.4 Effects Of Anti-Obsessional Medication

A possible important observation was that anti-obsessional medication did not predict response to therapy ( $p < 0.4$ ), and there was no group by medicine interaction; suggesting that being on medication did not have differential benefits in either one of the groups ( $p < 0.45$ ). However, it should be noted that medication was coded only in general terms, i.e. patients beginning medication at any time during the study were classed as being on medication.

Finally, the patients were grouped into sub-types of OCD (i.e. contamination, checking) but this had no apparent influence upon response to either treatment ( $p < 0.7$ ).

#### 4.1.5 Patients Report on Therapy

The final outcome measure was the Patient's Report on Therapy (appendix L): in this questionnaire more positive attitude towards therapy was evaluated. Higher scores indicated a more positive attitude towards therapy. Completion of the questionnaire was

left to patients discretion; in that each patient , at the individual post therapy feedback session, was given a copy of the Patient's Report on Therapy and asked to anonymously return it to the Department of Psychiatry. In response to this request fourteen CBT and five RT patients completed the questionnaire. A one factor between groups, analysis of variance was conducted and this difference was found to be significant ( $F(1,17) = 14.23$ ,  $p=0.0015$ ). Thus, patients in the CBT group were found to have a more positive approach to therapy: this may be an important effect which can be linked to lower drop out rate in the CBT group (this will be discussed later) and the significant negative correlation between change of Y-BOCS post therapy score and Duration of OCD: it may be that patients with a shorter duration of OCD were more motivated by the group interaction to carry out homework tasks etc., thereby feeling more positive towards therapy: however, as previously stated the results of this study should be treated with some caution in view of the small number of patients recruited, especially in the control group (RT).

#### 4.2 Possible Reasons Why the Results of the Study Did Not Support The Experimental Hypothesis

The experimental hypothesis stated that CBT group therapy would effect a significant decrease in patients post test Y\_BOCS scores, however the results have shown that this was not supported. Similar intra group changes might best be accounted for by group effects, rather than the *type* of treatment. If this were so then one might expect that both group programmes elicited a similarly positive approach to therapy and to attendance levels throughout the twelve week programme. However, it has been shown that there was a greater drop-out rate in the RT control group (i.e. 3 drop-outs where  $n=9$  in RT



group as compared to 1 drop-out in the CBT group, where n=15) and this can possibly be supported by the significant result of the Patients Report on Therapy, in which patients in the CBT group were found to have a more positive approach to therapy.

Following on from this, the fact that the CGI results were significant, may warrant further investigation of the original hypothesis, given that: a) a strong correlation between Y-BOCS and CGI scales has been shown in previously discussed validation studies, and b) in such studies it has been reported that the CGI scale might be more sensitive to change than Y-BOCS. Therefore, the results of this study would suggest that further validation studies in respect of Y-BOCS and CGI are needed.

Prior to the study being carried out, there were a number of possible effects highlighted, which were acknowledged as potential methodological problems: in order to assist future research in this field, the author will comment on these as follows:

#### 4.2.1 Insufficient numbers of OCD sufferers willing to participate in the study & Drop out rate of patients in either condition.

It was anticipated that 26 patients would be randomised to one of the two treatment groups i.e. thirteen patients allocated to each group in order to offset the typical drop-out rate in OCD patient studies (e.g. Greist et al, 1995). The numbers were kept low, viewing this study as a pilot controlled study, in an attempt to establish reasonable proof of principle, before seeking funding for a full scale multi-centred trial of group OCD in the treatment of OCD.

It was further anticipated that the expected number of completers would provide reasonable statistical power, based on earlier work (Hughes et al, 1997): mean improvement between baseline and week twelve Y-BOCS scores was expected to be in the region of 45% for patients in the CBT condition. Assuming a maximum placebo response rate of 20% improvement, then a conservative estimate of between group effect size was anticipated as 25%. In the uncontrolled study by Hughes et al (1997), mean baseline Y-BOCS score was approximately 28 points with standard deviation approximately six points. On this basis it was concluded that 10 patients completers per group, the estimated standard error was 2.68 points, which with an alpha level of 5%, ten completers in each group would give statistical power of about 75% (using the normal approximation to the binomial method for sample size calculation described by Bland, (1987).

However in practice, one of the main problems experienced in running the study was recruitment of OCD patients on no medication: prior to starting the study an audit of patients, referred to the OCD Clinic at the Department of Psychiatry, QEII Hospital, East Herts., demonstrated that there were more than sufficient outpatients to fulfil all recruitment criteria. However, in practical terms one could not have guaranteed that such patients would agree to participate in the study: also, when a patient was interviewed at initial screening, if they fulfilled inclusion/exclusion criteria they were invited to participate in the study and if they agreed to do so their name was placed on a group waiting list for the start of the next group: it was observed that even although the patient

had been on no medication at screening, by the time sufficient numbers of patients were recruited to run the next group, a proportion had been placed on medication: in addition some patients had changed their minds about participating. For example, one young female patient, with two young children, had deteriorated whilst on the waiting list over a two month period, which had co-incided with school holidays; her OCD affected her ability to shop for food and to cook family meals. Clearly, with two small children involved it was a priority to increase her daily functioning as quickly as possible and she was placed on medication.

In addition to the above, not only was it difficult to recruit patients on no medication, but a proportion of these began taking medication post screening, making it very difficult to run the groups with a) 13 patients per group and b) on no medication. In practice the CBT group ran with 16 patients and 15 completers (1 drop-out after session one, due to the patient being offered a full time job, which would have made it difficult to attend, given that her employer did not know about her OCD. And in contrast, the RT group ran with 11 patients and 6 completers. Of the five patients who dropped out, two dropped out just prior to the start of group, in both cases this was due to a deterioration in functioning, to the extent that they believed that they would be unable to commit to attending on a regular weekly basis. Of the remaining three, one patient dropped out after five sessions, due to a job offer; one dropped out after the third session and gave his reasons due to relationship problems with a new partner, with whom he had recently begun co-habiting; also, it is worth bearing in mind that this patient was the only male in the group and this may have been a contributing factor. The third patient dropped out after



session six because she found it difficult to relate to the other group members; she also believed that her OCD was not as severe as other group members. In fact her current OCD symptoms were as severe as other group members but her OCD was of the shortest duration in the RT group (6 years). Bearing in mind the positive correlation between the magnitude of change of Y-BOCS scores and Duration of OCD in the RT group, this observation would tend to support such results.

#### 4.2.2 Patients Simultaneously Consulting Other Mental Health Professionals

On the whole this was not a problem in practice, in that patients did not start other types of therapy programmes either individual or group, during participation in the study: however, where patients had appointments already planned with Psychiatrists or GPs, then these were attended and in some cases the patients were started on medication, as previously referred to in the RT group prior to three month follow-up.

#### 4.2.3 Subjects Refusing to Give Permission for Data to be Used in this Study

This was not the case and all patients who participated in the study were given a Patient Information Sheet (appendix A), together with a Patient Consent Form (appendix B), which they were all willing to sign. The patients themselves, recognised the value of developing more widely accessible effective treatment of OCD and welcomed the research initiative.

#### 4.2.4 Patients Commencing a Course of Medication During the Study

This point has been addressed at point at 4.2.2 and recommendations in order to address this problem will be outlined in the Conclusion of this Report.

#### 4.2.5 Same Therapist Delivering Both Therapies – Experimenter Effects

Experimenter expectancy effect is always a problem for any researcher. According to Bannister et al (1994), the only way to ensure that the experimenter is unable to bias the result is to prevent him/her from meeting the subjects or to know anything of the context from which the data was collected. Whilst one can endeavour to control for ‘experimenter effects’, bias to some extent will undoubtedly ‘seep’ through. In this study the author tried, as far as possible to control for ‘experimenter effects’, by having ‘blind raters’, unaware to which condition the patients were assigned, carrying out rating assessments throughout the programme. The same therapist (the author), was used in order to control for differences between ‘experimenter effects’. From an ethical perspective, whether it be a control or active treatment condition, the main focus should be the patients well being and in this respect ‘blind raters’ monitored this throughout each group programme.

Other methodological criticisms of this study might include:

#### 4.2.6 The design is satisfactory although there might be a case for adding an extra arm of individual CBT & no evaluation of cost of treatment was included in the study

It is quite true that there is an argument for adding an additional treatment arm in order to determine whether there are cost differentials between individual and group CBT.

However, at this pilot stage, an individual arm would have increased the cost of the study by a significant order of magnitude. It was the research team’s intention to establish whether there was a good basis for investigating group CBT further by first testing whether it leads to increased benefits above and beyond group interaction per se. If it



appeared that group CBT was a viable option, then funding would be sought for an additional multi-centre study, which would have a health economics component built in. It was considered more appropriate to compare group and individual CBT at this later stage of project development.

In this respect advice was sought from a group of health economists based at the Institute of Psychiatry. It was their view that a health economics component would be an unjustifiable expense at this stage of research. Inclusion of a health economics module (e.g administrator of the Client Service Receipt Interview, designed by Dr Jeni Beecham at the Institute of Psychiatry) would have more than doubled the cost of the study because the project team did not have the requisite training and skills to undertake this work on its own. Furthermore, the findings would have been of limited extrapolability, given the small number of patients participating in this first controlled pilot study. It was the author's considered opinion that a health economic analysis would be more appropriate in a larger follow-up study.

#### 4.2.7 From an Ethical Perspective What Happened to Patients who Participated in RT control condition and Treatment Failures in the CBT Active Treatment Condition?

In most cases participants were already on NHS waiting lists for individual treatment and participation in the group therapy research study was offered to them, if appropriate, as an additional therapeutic intervention which would in no way affect their rights to remain on waiting lists for individual treatments. This was explained to patients in the Patient Information Sheet (*appendix A*). In any event all participants, including those patients who were not on NHS waiting list but referred direct to the study (e.g via GPs) were re-



assessed at the individual follow-up sessions at the end of the 12 week programme and at three month follow-up. At these times suggestions for appropriate future treatment were included with correspondence giving an end of therapy report to the original referrers. It was not the intention of the research team to offer entry into the CBT group programme for those who had participated in the RT programme because, at this stage in the research project we do not yet have good evidence that group CBT is an efficacious intervention for OCD.

#### 4.2.8 Is it Ethical to Deliver an Ineffective Treatment (Relaxation) to the Control Group?

The patients participating in this research project remained on waiting lists for individual therapy. Thus, we were not denying patients the chance to receive other forms of individual therapy by participating in our programme. Indeed, given the currently long waiting lists for treatment, participation in our group programme (even if in the relaxation group) could be no worse for the patients than remaining on NHS waiting lists and receiving no treatment at all. Patients were at liberty to withdraw from this study at any time, should they be offered an alternative treatment. This was made clear in the Patients Information Sheet (*appendix A*). Furthermore, although individual relaxation therapy is considered a neutral treatment in OCD, we did not have any evidence to suggest that group relaxation therapy was a neutral treatment. It may well have been that there were treatment benefits from simply participating in a group setting. This study has provided valuable data in addressing this issue. Thus, it would have been unfair to say that we were delivering an ineffective treatment until the results of the controlled pilot study were known.

In addition the research protocol had been through two Local Research Ethics Committees and the issue of potentially ineffective treatment was discussed at both. However, both committees passed the application without reservation, given that participants would not be forsaking other forms of treatment to engage in the research study.

### 4.3 Group versus Individual Therapy

#### 4.3.1 The Advantages and Disadvantages of Treatment in Groups – an experiential view

Group therapy is often viewed as an economical way of spreading therapist time between several patients; however, there are many other reasons why treatment in groups can provide a valuable alternative to individual treatment. Groups offer a rich opportunity for interaction with several others, each of whose experience of life and style of coping is different. Members of the group will take on different roles as the weeks go by; for example, one member may have experienced similar symptoms to another and have adopted successful ways of coping, which he/she may feel able to pass on; in this way group members come to realise that they can be of assistance to others. In the CBT group this was demonstrated in a session when we as a group were discussing homework tasks for individual members: one group member had a contamination fear and in particular a fear of coming into contact with animal excrement. During this session the group were considering how he might be exposed to this fear, when a fellow member suggested that she happened to have, at home, some writing paper made of elephant dung, and would be pleased to bring it along to the next session; reluctantly the other group member agreed that this might be a good idea and went on, in the following session, to be able to hold the



writing paper. No other treatment setting allows such spontaneous opportunities for interpersonal learning and the reaction of fellow members can be a powerful motivator to face your fears. OCD sufferers usually experience an isolated existence, battling with their thoughts and fears alone, afraid to share their problems in case partners/families/friends believe that they are going mad. Imagine what a powerful release it is to be able to share with fellow sufferers their experiences, for many it would be the first time that they have felt safe to expose themselves in this way. However, it should be remembered that group treatment needs to be structured and well focused in order to provide a safe environment for group members. In this respect the role of the therapist is a highly skilled one and requires specific training. For example, an inexperienced group therapist may have difficulty making sense of what is occurring in the group; the therapist may be subject to strong emotional pressures and needs to present a good model to the group in order to assist in the therapeutic process. The complexity of group therapy far exceeds that of individual therapy, for example instead of focusing on one obsessional patient, the therapist focuses on eight or more such patients. In contrast to individual therapy the therapist achieves therapeutic effect in working with group members, rather than through a single relationship between therapist and patient. Thus, whilst group therapy may be viewed by some as an economic alternative to individual therapy, it is a highly complex process and needs an experienced and highly skilled therapist to create an environment in which all group members will feel safe, even when being exposed to their fears. For the therapist this can be a draining, if not a rewarding experience and some will be attracted to work with groups and others will find it too complex and potentially chaotic.



#### 4.3.2 Evidence in support of further development of group interventions in OCD

Van Oppen *et al* (1997), carried out a pilot study on group treatment of OCD in Boston, USA: it was stated that numerous studies of individual behavioural treatment of OCD had been conducted using exposure to feared obsessions, combined with prevention of carrying out rituals. Such studies indicated that between twelve to fifteen sessions of therapy produced good treatment effects, with approximately 75% of patients showing substantial improvement (Stanley & Turner, 1995). However, Salkovskis (1989), has criticised the behavioural approach to treatment used in individual therapy, claiming that actual success rates are less than 50%, as a result of non-compliance and non-acceptance of treatment. Bloch *et al* (1995) also claimed that whilst it has been shown that individual behaviour therapy produces between 60- 70 per cent improvement rate in the treatment of OCD, many patients drop out of treatment programmes, resulting in approximately 50 per cent of clients being helped in this way. Bloch *et al* concluded that there is a need for more effective treatment. Furthermore, efforts to identify cost effective treatments, such as serotonergic medications (Van Balkan *et al*, 1994), have been hampered by high relapse rates (Pato *et al*, 1998). Alternative treatments include individual CBT and group CBT; this study has endeavoured to provide the next stage in developing group CBT treatment of OCD, in that it was the first study to control for group effects, i.e. group CBT versus group effects. In delivering a placebo group treatment in the same structured way as the active treatment, as Van Oppen *et al* (1997) refer to, we can control for such variables as group members identity raising self esteem, reducing demoralisation and isolation, learning from other members, group cohesiveness that may increase motivation to participate. Van Oppen *et al* (1997), suggested that these were important

considerations and that assessment of such potentially important process variables would be helpful for future research of group interventions. This research study has gone some way in addressing such important process variables, in the first controlled study of group CBT treatment of OCD, comparing group treatment with group effects.

Fals-Stewart *et al* (1993), conducted the first partially controlled comparison study of behavioural group therapy and individual behaviour therapy in the treatment of OCD; results showed that both individual and group interventions were equally effective in reducing severity of OCD symptoms, general depression, and anxiety. Following on from that important work, this research study has taken the next step forward in the investigation of group effects versus treatment: as such it has produced some interesting results, even although it was shown that there was no significant difference between Y-BOCS scores of the CBT and RT groups.

#### 4.4 General Observations Linked to Previous Research Studies

It was interesting to learn from most group members that a death, separation or birth of a child had occurred at or within two years of the onset of OCD symptoms, usually. The loved one was usually a parent or grandparent with whom the group member had experienced a close relationship and there was an increased sense of having to take responsibility for living relatives, usually surviving parent/s; or in the case of a birth an increased sense of responsibility for the child. Such observations would tend to support the theory of responsibility for others maintaining OCD behaviours (Salkovskis 1998). There were also cases where the parents had been critical of the patient as a child, and/or anxious for the child to achieve at school; a common factor among such group members



was low self esteem. Similarly, Hand & Tichatzky (1979) and Enright (1991) identified low self esteem as a common factor in their treatment studies of OCD patients. Both of these studies were uncontrolled, but neither showed significant clinical improvement

Following on from this, Steketee *et al*(1997), showed that, between post test and follow up, more members of the multifamily behavioural group treatment programme were clinically significantly improved than members of the alternative group behavioural treatment programme; which indicates the need for family support in preventing relapse. Interestingly, such results were supported by the findings of this study; in that group members who had the emotional support of a partner or relative/ friend made the most progress in terms of reduced post test scores and increased confidence to maintain gains thus preventing relapse. There was further evidence that family support is an important factor in the treatment of OCD in that the two group members who dropped out and were not as confident in maintaining gains, both lacked the support of their respective families; one was experiencing relationship difficulties, whilst the other's family lived abroad and she had no other close relationship in this country. These two group members did not have the opportunity of discussing, outside of the group, what went on during group sessions or their progress within the treatment programme, whereas all other group members reported back to partners/ relatives who were keen to know how they were progressing.

Although Steketee *et al* (1997) showed that the group behavioural treatment (GBT) programme also produced significant improvement in OCD symptoms at post test, it was



at follow up that the multifamily behavioural treatment (MFBT) group members showed continued clinical improvement at follow up; whilst GBT members had maintained change but had not improved

Salkovskis (1997) was somewhat dubious about the efficacy of group treatment in comparison to individual treatment; however, could it be the efficacy of the *type* of group treatments carried out to date that is questionable, rather than *group* treatment per se. For example most studies reviewed, in the Introduction of this study, have employed behavioural therapy as the main component, if not the only component i.e exposure and response prevention, on an individual basis as standard treatment for OCD. However, Foa et al (1984) showed that between twenty to twenty five per cent of OCD patients refuse individual behaviour therapy and a further twenty to thirty per cent fail to comply or complete such therapy; is it not feasible, therefore, that should such treatment be transposed from individual to group treatment there may be even higher drop out or non compliance. This would tend to suggest that further investigation of alternative/additional treatments of OCD is needed e.g additional components to exposure and response prevention such as cognitive coping strategies based on the model of individual treatment as developed by Salkovskis (1998).

## **CHAPTER FIVE**

## **5 Conclusion**

### **5.1 Summary**

The results of this study showed that there was no significant difference between decrease in Y-BOCS scores in the Cognitive Behavioural Therapy and the Relaxation Group: this means that the research hypothesis was not supported.

However, the results of a secondary measure, the CGI scale showed significant reduction in post test scores in the CBT group. It is worth bearing in mind that evidence of previous studies have shown the CGI scale to be strongly correlated to Y-BOCS. Such results indicate the potential benefit in carrying out further investigation of the sensitivity of Y-BOCS to change.

The results of this study showed that in the CBT group, duration of OCD correlated negatively with change in Y-BOCS; however, in view of previous comments in respect of Y-BOCS sensitivity to change and the fact that there was no significant difference between decrease in Y-BOCS scores in either group, these results should be treated with caution. Whilst this is a potentially important finding such results have limitations as discussed previously. However further investigation is clearly warranted in order to assist in clinical decision making about which OCD patients are likely to benefit most from which type of treatment, thus making optimum use of scarce NHS resources.

The results may also indicate that further investigation is warranted into self help support groups as a means of providing sufficient contact with other sufferers, which may in turn assist in more effective coping with OCD symptoms: part of the reason for this might be



the isolation factor felt by long term OCD sufferers, which group dynamics could possibly address, helping sufferers feel less isolated and more supported by fellow sufferers.

#### 5.1.1 Potential Future Studies of OCD Treatment

This study was designed to investigate the efficacy of group CBT, however a major component of group CBT was behavioural therapy (BT) exposure and response prevention techniques and it might be argued that group behavioural therapy might have produced similar/ improved results. In other words do additional cognitive techniques have a significant impact on treatment. In order to address the question of whether the addition of a cognitive approach (Salkovskis 1998) is more or less beneficial than behavioural therapy in group treatment of OCD, in any subsequent studies it might be beneficial to compare group CBT with group BT. The issue of which type of OCD patients respond better to which type of treatment could also be addressed in such a future study (i.e correlation of duration of OCD and outcome scores. Given the results of this study it might be useful to include a self help group as an additional control group to test treatment versus group effects. Any future study could include a health economist as a member of the research team, in order to carry out a health economics analysis of potential costs involved in delivering treatment programmes (i.e. individual versus group).

In view of the recruitment difficulties highlighted during the running of this study, it might prove beneficial to run the proposed future study on a multi-centre basis,

identifying referral sources as early as possible; preferably recruiting from primary care level, when it might be easier to access patients on no medication.

### 5.1.2 Value of this Research to the NHS

This controlled pilot study has formed the first, albeit small, yet potentially important step towards establishing whether group CBT is a viable and efficacious treatment of OCD. Even although the research hypothesis was not supported the results of this study have raised some potentially important questions, to be addressed in future research studies e.g the sensitivity of Y-BOCS and CGI scales to change in OCD, behavioural group therapy versus cognitive behavioural therapy, what type of treatment works for what type of OCD patient. The answers to these questions would no doubt have important impact on clinical delivery of services to OCD patients. Whether group treatment of OCD would cut waiting list times would also need to be addressed. Although a full scale trial with detailed health economic evaluations would undoubtedly be required before group CBT could be implemented as a first-line treatment, the potential savings to the NHS are great. Not only could therapist/client hours be used with maximum efficiency (and, indeed, possibly reduced) but the number of patients on current waiting lists for treatment could be cut considerably. The OCD patients themselves would benefit from being able to obtain their first choice of treatment more quickly, thereby eliminating for some OCD patients, unnecessary suffering or endurance of unpleasant side effects that are associated with pharmacotherapy. Furthermore, there is potential for the socio-economic burden of the disorder to be offset by a cut in waiting lists for treatment since (i) fewer patients would be in prolonged states of untreated sickness and (ii) the number of patients engaging in non-efficacious ‘alternative’

treatments would also be reduced. In short, from a very small initial research project, this study has the potential to lead on to large scale savings for both OCD sufferers and the NHS.

In this respect the author has been awarded funding by the NHS Executive to carry out a larger study, which will form the next stage in a series of research projects, leading on to a large scale study.

Finally, it is perhaps worth re-focusing on the need for future development of treatment of OCD from the patient's perspective: the following poem was written by a female member of the CBT group and was triggered by the difficulties that she was experiencing with carrying out homework tasks. She read this aloud in the fourth group session and a shared emotional silence descended:

*As the night approaches  
My anxiety levels rise  
All the things I have to do  
Before I sleep, I do despise,  
Checking everything downstairs  
Is now not so bad  
But the battle starts again  
Upstairs, then I feel so sad.*

*I wish I could stop these thoughts and pictures,  
Sooth the panic and repeated actions,  
My efforts take longer because I am tired  
And as the night time goes by, I am so less inspired.  
Why can't I let go, relax, untwist my mind  
Instead I give in for sleep I must find.*

(An anonymous OCD sufferer, 1999)



**Patient Information Sheet**

**Purpose of the Study**

You have been invited to participate in a research study program which will evaluate the effectiveness of group therapy in the treatment of Obsessive Compulsive Disorder. There will be one group programme focusing on relaxation techniques and one focusing on cognitive behaviour therapy. If you agree to participate in the study you will be allocated to one of the two programmes, depending on which one is planned to start at the time of your referral to the programme.

The group therapy programme will consist of twelve, two hour, weekly sessions and you will need to be committed to attend all sessions. In addition to group sessions, you will be required to attend an individual 90 minutes assessment interview and a 30 minutes individual follow up session. Individual 30 minute assessment sessions will also take place on a fortnightly basis whilst you are attending the group programme. You will also be required to attend a two hour group follow up session, at three months from the date of the final weekly session.

Obsessive Compulsive Disorder can be a distressing and disabling condition. By taking part in this study you may not only benefit yourself but also others through the development of more efficient and effective treatment programs.

**Confidentiality**

You can rest assured that your identity will not be disclosed. The results of measures taken during the study, usually referred to as data, will be used to compare pre and post measures taken at assessment. Your identity will be allocated a code word and in this way will remain anonymous.

**Other available treatment**

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If you decide that you do not wish to take part in this study at anytime, either before or during the programme, then your name will be placed on the waiting list to receive alternative available treatment. This means that by taking part in the study, your right to receive alternative treatment will not be affected.

Participating in the study will not affect your rights to remain on any other treatment waiting lists.

Finally, if you agree to participate in this study would you kindly confirm this by completing and signing the attached Patient Consent Form.

**EAST HERTS NHS TRUST**  
**PATIENT CONSENT FORM**

**Patients Name:** .....**Date of Birth:**.....

**Address:** .....

.....

**Post Code:**.....**Telephone No:**.....

**I, the undersigned, agree to participate in a group therapy study in the treatment of Obsessive Compulsive Disorder and hereby authorise (name of clinician/s), \_\_\_\_\_ and East Hertfordshire NHS Trust to receive information gained from my participation in group therapy and to use that information for research purposes including:**

- a) assessment/treatment/evaluation**
- b) ongoing co-ordination of treatment**

**I understand that at no time will my identity be disclosed or in any subsequent professional publication of the results of this study.**

**I further understand that I can drop out of the group therapy programme at any time and that any measures already taken may be used in the publishing of the results of the study.**

**Signature of patient, parent or legal guardian** \_\_\_\_\_

**Date signed** \_\_\_\_\_

## **CBT GROUP PROGRAMME**

### **AN OVERVIEW OF THE TWELVE WEEKLY SESSIONS**

<b>Session 1 :</b>	Welcome to your Group Definition of OCD Coping with stress.
<b>Session 2:</b>	What is Cognitive Behavioural Therapy? Defining problems. Setting goals.
<b>Session 3:</b>	Interrelationships between. feelings behaviour and thoughts.
<b>Session 4:</b>	Reinterpretation of thoughts Identifying distorted thoughts and trigger situations.
<b>Session 5:</b>	Rationale for response prevention. Rationale for reassurance as a form of compulsive behaviour.
<b>Session 6:</b>	Transferring responsibility – fearing for the well being of others.



- Session 7:** Maintaining factors in OCD  
(Including nutrition)
- Session 8:** Identifying reasons for holding  
on to distorted thinking. Costs/Benefits of OCD
- Session 9:** You can change the way you feel  
your thoughts and feelings
- Session 10:** Anxiety and fear  
challenging unhelpful thoughts
- Session 11:** Maintaining improvement.  
Preventing relapse  
Problem Solving Techniques  
Set dates for individual feedback session
- Session 12:** Progress Report - Questionnaires  
Where do we go from here?  
Re-stating goals.  
Self-help for the future.  
Farewell

**RT GROUP PROGRAMME**

**AN OVERVIEW OF THE TWELVE WEEKLY SESSIONS**

<b>Session 1:</b>	Welcome to your group  Definition of OCD  Coping with stress
<b>Session 2:</b>	What is relaxation?  Setting Homework tasks
<b>Session 3:</b>	Progressive muscle relaxation
<b>Session 4:</b>	Imagery and relaxation
<b>Session 5:</b>	Relaxation through breathing
<b>Session 6:</b>	Yoga – meditation

**Session 7:** Deep relaxation

**Session 8:** Reflexology

**Session 9:** Aromatherapy

**Session 10:** Art therapy

**Session 11:** Alexander Technique

**Session 12:** Review of programme

*What was helpful*

Maintaining relaxation skills in the future

Farewell



**STRUCTURE OF TWO HOUR SESSIONS IN BOTH CONDITIONS**

<b>2pm</b>	Welcome members - Agenda modification
<b>2.10pm</b>	Warm up exercise –
<b>2.30pm</b>	<i><b>Homework Review</b></i>  Feedback on last weeks tasks set in previous session  Share success and guidance for any problems encountered
<b>3pm</b>	<i><b>Mini - lecture</b></i> 10 minutes - topic of the week – handouts if appropriate  Demonstration of patient understanding -Feedback  Role play/small group work
<b>3.30pm</b>	<i><b>Group discussion</b></i>  Summary of the session - Flip Chart  Comments - What was helpful  Suggestions for future topics  Brief review of next session  Set Homework Tasks to be achieved before next session
<b>4pm</b>	<i><b>Group farewell</b></i>

## **CBT GROUP PROGRAMME**

### **Session 1:**

<b><i>Introduction</i></b>	<b>Welcome</b>
<b>Agenda modification</b>	
<b>Warm up exercise</b>	<b>Feedback</b>

### ***Mini lecture***

**Definition of OCD**

**Coping with stress**

### ***Small groupwork -***

**what does OCD mean for you?**

**what was life like before OCD?**

**what did you enjoy doing that you don't do now?**

**Choose an end of Group Reward.**

### ***Feedback***

### ***Homework Assignments - self monitoring***

**Frequency of thoughts - time taken up by behaviour - rating of discomfort (anxiety levels).**

### ***Brief review of next session***

## **CBT**

### **Session 2:**

#### ***Introduction***

Welcome

Agenda modification

Warm up exercise – Relaxation - biofeedback

Feedback

#### ***Homework Review***

#### ***Mini Lecture***

Applying CBT to OCD - handout

Defining challenges

Setting goals short - medium - long term

Keeping diaries - daily log - thoughts, behaviour ,coping strategies.

***Small groupwork*** - define challenges – set goals -graded hierarchy.

#### ***Feedback***

***Negotiate homework tasks*** - small groups.

***Brief review of next session.***



# **CBT**

## **Session 3:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise - Relaxation

Feedback

### ***Homework Review***

### ***Mini Lecture***

Interrelationships between feelings, behaviour and thoughts - A B C model - handout.

***Small groupwork*** - identify Antecedence-Behaviour- Consequence of individual problem.

### ***Feedback***

***Negotiate homework tasks*** - small groups

***Brief review of next session***

# **CBT**

## **Session 4:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise - Relaxation

Feedback

### ***Homework Review***

### ***Mini Lecture***

Multimodal Profiling.

How OCD impacts on your lifestyle

### ***Small groups – individual profiles***

### ***Feedback***

***Negotiate homework tasks - small groups***

***Brief review of next session***

# **CBT**

## **Session 5:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise - Relaxation

Feedback

### ***Homework Review***

### ***Mini Lecture***

Modelling - handout.

Rationale for response prevention.

Rationale for reassurance as a form of compulsive behaviour - comparison to other forms of neutralising.

***Small groupwork*** - Modelling coping with the challenge.

### ***Feedback***

***Negotiate homework tasks*** - small groups

***Brief review of next session.***



# **CBT**

## **Session 6:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise - Relaxation

Feedback

### ***Homework Review***

### ***Mini Lecture***

Transferring responsibility - fearing for the well being of others.

Small group work - discussion about concerns in respect of responsibility.

Feedback

***Short term goals*** - monitor progress.

***Planning homework task*** - individually

***Brief review of next session***

# **CBT**

## **Session 7:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise – Relaxation - independent

Feedback

### ***Homework Review***

### ***Mini Lecture***

Maintaining factors in OCD - handouts

(adopting anxiety distractions rather than facing the anxiety)

Nutrition- serotonin enhancing foods

***Small groupwork*** - Imaginary exposure

### ***Feedback***

***Plan homework tasks*** - independently.

***Brief review of next session***

# **CBT**

## **Session 8:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise – Relaxation - independent

Feedback

### ***Homework Review***

Progress Report - small groups reset goals.

### ***Mini Lecture***

Identify reasons for holding on to distorted thinking/current behaviour.

What are the advantages/disadvantages

***Small groupwork*** - list advantages and disadvantages for holding on to current thinking/behaviour

### ***Feedback***

***Plan homework tasks*** - individually.

***Brief review of next session.***



# **CBT**

## **Session 9:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise – Relaxation - independent

Feedback

### ***Homework Review***

Reasons for not doing self-help assignments

### ***Mini Lecture***

You can change the way you feel

Your thoughts & feelings

Forms of twisted thinking

***Role play*** - identify twisted thinking.

### ***Feedback***

***Plan homework tasks*** - independently

***Brief review of next session.***

# **CBT**

## **Session 10:**

### ***Introduction***

Welcome

Agenda modification

Warm up exercise – Relaxation - independent

Feedback

### ***Homework Review***

### ***Mini Lecture***

Anxiety and fear

Identifying distortions and challenging unhelpful thoughts - ANTS

Problem focused and emotion focused coping.

Maintaining ANTS diary

***Small groupwork*** - identify and list ANTS  
challenge ANTS

### ***Feedback***

***Planning homework tasks*** - independently

***Brief review of next session***

## **CBT**

### **Session 11:**

#### ***Introduction***

Welcome

Agenda modification

Warm up exercise - Relaxation - bio feedback - independent

Feedback

#### ***Homework Review***

Set dates for individual feedback session

#### ***Mini Lecture***

Maintaining improvement

Preventing relapse - preparation for termination

Problem Solving Techniques

***Small groupwork*** - Plan how to maintain improvement

Identify likely pitfalls and find ways to overcome these

#### ***Feedback***

***Planning homework tasks*** - independently

***Brief Review of next session***



# **CBT**

## **Session 12:**

### ***Introduction***

Welcome

Agenda Modification

Warm up exercise – relaxation - independent

Feedback

### ***Homework Review***

Progress Report - Rewards

### ***Mini Lecture***

Where do we go from here

Re-stating goals

Self-help for the future

***Small groupwork*** - Re-state goals and possible reasons for not achieving them

Work out a strategy to overcome these

### ***Feedback***

Evaluation Forms

Farewell

**CBT HANDOUTS**

**SESSION 1**

**DEFINITION OF OBSESSIVE - COMPULSIVE DISORDER**

**Obsession** is frightening repetitious thoughts

**Compulsion** is repetitious action that results from frightening repetitious thoughts.

The Compulsion is a behaviour which is performed in order to reduce the discomfort caused by the Obsession.

Five million people suffer with OCD in the USA and it is thought that about one million people suffer from OCD in the United Kingdom.

The most common kinds of Obsessions concern violence, contamination or doubt.

Eg. Terrified by the irrational fear that you will suddenly lose control and act impulsively

or -

Obsessive doubt - worried that the house might burn down because of failure to turn off the cooker or iron.

## **Most Common Compulsions**

Handwashing, cleaning things, counting, checking things or touching things.

**The Compulsive act is connected to the Obsessive thought**

The Compulsive act may be **overt - behaviour can be seen or**  
**covert - a purely mental ritual**

eg. Thinking of a phrase or counting a sequence of numbers.

If the Compulsive behaviour is not carried out then this leads to a build up of tension which makes the person anxious.

Obsessions are usually unwanted and difficult to control: yet the more a person tries **not to think of whatever the Obsession is, the more likely they are to focus on what they do not wish to think about.**

eg. **If you try not to think of an orange the chances are that's exactly what you will think about.**

Obsessive - Compulsive disorder is an anxiety disorder - feelings are often associated with anxiety - such as sadness, worry, guilt and general discomfort.



**The complicated relationship between the external and internal worlds:**

**How a person reacts to an event is due to his or her perceptions of it and how much he/she believes themselves capable of dealing with it**

***Homework diary – to be given out at the end of session 1 (Appendix N)***

APPLYING CBT TO OCD

WHAT IS CBT?

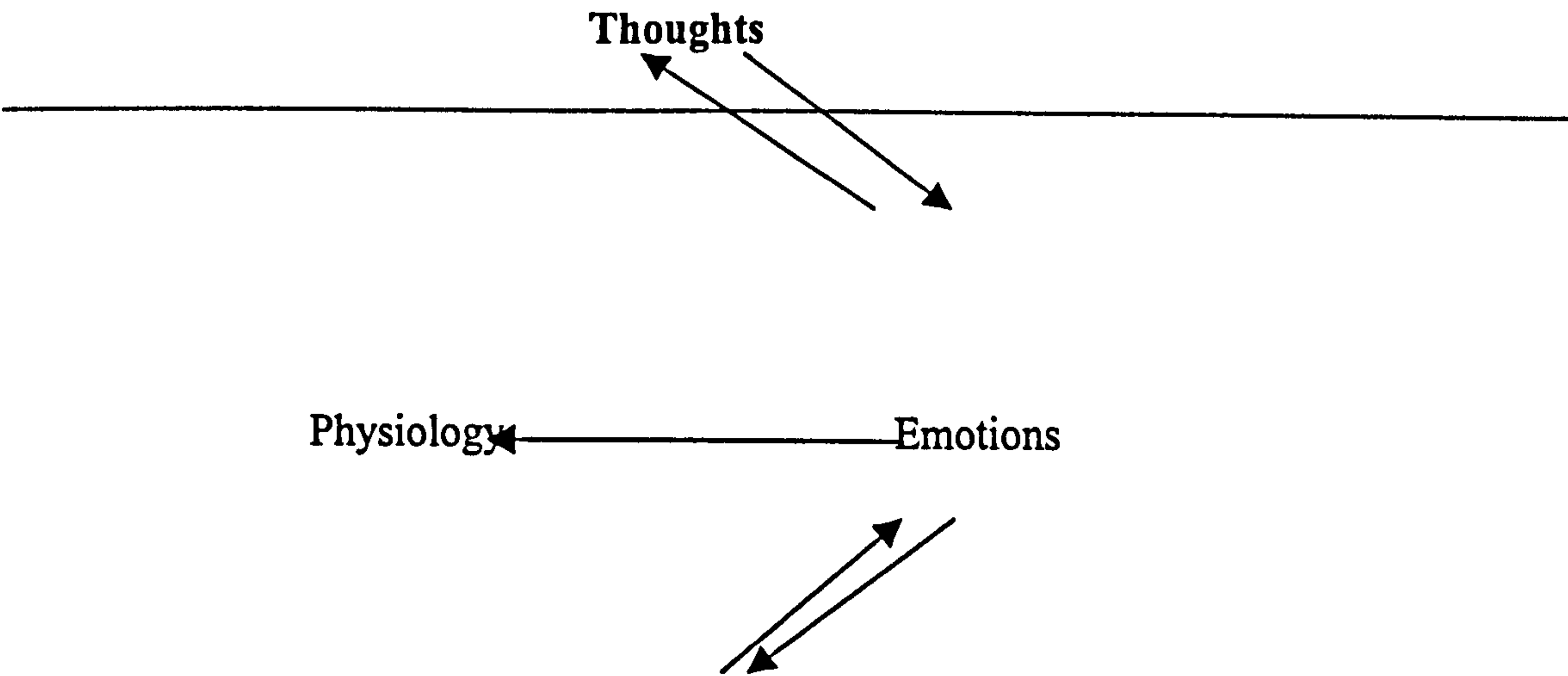
CBT stands for Cognitive Behavioural Therapy.

Origins of CBT – First Century AD – Philosopher named Epictetus, who claimed:

*“People are disturbed not so much by events as by the views which they take of them”.*

What this means is that people can choose how they view a particular person, object or situation.

Our views (thoughts or beliefs) are influenced by our own experiences, cultural, family and social; which in turn influence our feeling (emotions) which results in our acting or behaving in a particular way.



## **Behaviour**

### **The Cognitive Behavioural Model**

#### **Applied to OCD**

In respect of OCD the assessment (thought) of a particular situation produces discomfort or anxiety which is perceived by the individual as being reduced by carrying out a particular ritual or behaviour or seeking reassurance.

Because these thoughts produce anxiety the individual spends much of their time trying to avoid having such thoughts in the first place; which is why OCD is so disabling, taking over an individual's life and can become quite overwhelming and isolating.

Unfortunately the anticipation that an anxiety provoking thought is just around the corner only serves to maintain high anxiety levels and consequently brings about having unwanted thoughts.

Therefore the inability to dismiss such unwanted thoughts becomes very distressing for the individual and interferes more and more with every part of their lives.



In CBT terms if we change the thought we can change the emotion which will change the outcome or behaviour.

Burns(1989) lists 10 ways to overcome your fears:

**1 The Experimental Method:** Do an experiment to test your belief that you're 'cracking up' or 'having a heart attack' or 'losing control'.

**2 Paradoxical Techniques:** Exaggerate your fears instead of running away from them. If you have the fear of cracking up, you try your hardest to crack up.

**3 Shame Attacking Exercises:** Purposely do something silly in public, in order to overcome your fear of appearing foolish.

**4 Confront your fears:** Expose yourself to whatever you're afraid of instead of running away and letting your fears cripple you e.g.

- **Sudden exposure or flooding** you allow the thought to come into your head then instead of running away from it by performing a ritual (compulsive behaviour) you stay with the thought whilst adopting coping strategies.
- **Gradual exposure** you gradually expose yourself to the fear by allowing yourself to have the unwanted thought then delaying the anxiety reducing behaviour for a period of time – say 5 mins to start with gradually building up to 30 mins until the anxiety subsides and you lose the desire to carry out the compulsive ritual.

It's always a good idea to make a list of your main fears in order of severity and start by tackling the least severe first: this will build up your confidence so that by the time you reach your main fear on the list you will be able to tackle it with confidence knowing that you can cope.

Having made a list then rate each fear on a scale of 0 (no anxiety) to 8 (extreme anxiety):

Here is an example of an individual's list with a contamination fear:

Using a public lavatory	8
Using my own lavatory	7
Sitting in my Doctors Surgery	6
Emptying the rubbish bin	5
Touching door handles	4
Touching household equipment	3
Touching food	2
Buying food in shops	1

**5 Daily Mood Log:** Write down the negative thoughts that make you feel anxious or frightened. Identify the distortions in these thoughts and replace them with more realistic, positive thoughts. Instead of worrying yourself sick by constantly predicting failure and catastrophes, tell yourself that things will turn out reasonably well.

**6 The Cost Benefit Analysis:** Make a list of the advantages and disadvantages of worrying and avoiding whatever you fear. Weigh the advantages against the disadvantages. Make a second list of the advantages and disadvantages of confronting your fears. Weigh the advantages against the disadvantages.

**7 Positive Imaging:** Substitute reassuring and peaceful images for the frightening day dreams and fantasies that make you feel so anxious.

**8 Distraction** Distract yourself with intense mental activity (crossword puzzles), strenuous exercise, or by getting involved in your work or a hobby.

**9 The Acceptance Paradox:** When you feel anxious or panicky, you may make things worse by insisting that you shouldn't feel this way. This is like throwing petrol on to a fire and your anxiety gets worse. One way to develop greater self acceptance is to write out a dialogue with an imaginary hostile stranger who is putting you down for feeling anxious ( this is in fact your own self criticisms). When you talk back to them you will develop greater self – acceptance, and your anxiety will usually diminish or disappear.

**10 Getting in Touch:** When you feel anxious or panicky, you are probably ignoring certain problems that need to be dealt with. Review your life and try to get in touch with the situation that's making you feel so upset. When you find the courage to deal with the problem more openly and directly, it can be very liberating.



Ask yourself what triggered the unwanted thought – what was the event or situation immediately before the unwanted thought occurred?

***Session3 - Dysfunctional Thought Form. (see appendix O)***

**PAGE  
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ORIGINAL**

**7 Emotional Reasoning:** you reason from how you feel: “I feel like a failure, so I really must be one,” or “I don’t feel like doing this so I’ll put it off.

**8 “Should Statements”:** you criticise yourself or other people with “shoulds” or “shouldn’ts” – “musts” – “oughts” – have tos.

**9 Labelling:** you identify with your short comings, instead of saying “I made a mistake – I’m not perfect”, you tell your self “I’m a failure”, “I’m a loser” or I’m a fool.

**10 Personalisation and blame:** you blame yourself for something you weren’t entirely responsible for, or you blame other people and overlook ways that your own attitudes and behaviour might contribute to a problem.



## **RT GROUP PROGRAMME**

### **Session 1:**

#### ***Introduction***

Welcome

Groundrules

What to expect over the next 12 weeks

Feedback

#### ***Mini lecture***

Definition of OCD

Coping with stress

#### ***Small groupwork -***

what does OCD mean for you?

what was life like before OCD?

what did you enjoy doing that you

don't do now?

#### ***Feedback***

***Homework Assignments*** - self monitoring of anxious feelings

***Brief review of next session***

**RT**

**Session 2:**

***Introduction***

Welcome

Agenda modification

Warm up exercise - biofeedback

Feedback

***Homework Review***

***Mini Lecture***

What is relaxation?

Setting homework tasks

***Small groupwork*** – Identify when and where you are able to relax and draw up a timetable of your week showing activities

***Feedback***

***Negotiate homework tasks - small groups.***

***Brief review of next session.***

**RT**

**Session 3:**

***Introduction***

Welcome

Agenda modification

Warm up exercise - Biofeedback

Feedback

***Homework Review***

***Mini Lecture***

Progressive muscle relaxation

***Small groupwork*** – Practice progressive muscle relaxation

***Feedback***

***Negotiate homework tasks*** - small groups

***Brief review of next session***



**RT**

**Session 4:**

***Introduction***

Welcome

Agenda modification

Warm up exercise - Bio-feedback

Feedback

***Homework Review***

***Mini Lecture***

Imagery and relaxation

***Group imagery exercise***

***Feedback***

***Negotiate homework tasks - small groups***

***Brief review of next session.***

**RT**

**Session 5:**

***Introduction***

Welcome

Agenda modification

Warm up exercise - Biofeedback

***Homework Review***

***Mini Lecture***

Relaxation and breathing

***Small groupwork – Breathing exercise***

***Feedback***

***Negotiate homework tasks - small groups***

***Brief review of next session.***

**RT**

**Session 6:**

***Introduction***

Welcome

Agenda modification

Warm up exercise - Biofeedback

***Homework Review***

***Mini Lecture***

Yoga

***Short term goals*** - monitor progress.

***Planning homework task*** - individually

***Brief review of next session***



**RT**

**Session 7:**

***Introduction***

Welcome

Agenda modification

biofeedback

***Homework Review***

***Mini Lecture***

Deep Relaxation

***Small groupwork*** - Self Evaluation –how often are you able to complete homework tasks –have you achieved any of your goals?

***Feedback***

***Plan homework tasks*** - independently.

***Brief review of next session***

**RT**

**Session 8:**

***Introduction***

Welcome

Agenda modification

Biofeedback

***Homework Review***

Progress Report - small groups reset goals.

***Mini Lecture***

Aromatherapy and relaxation

***Small groupwork*** - discussion of personal experiences –have you tried aromatherapy – what oils would you choose? Relaxation exercise with choice of aromatherapy oils.

***Feedback***

***Plan homework tasks*** - individually.

***Brief review of next session.***

**RT**

**Session 9:**

***Introduction***

Welcome

Agenda modification

Biofeedback

***Homework Review***

Reasons for not doing self-help assignments

***Mini Lecture***

Reflexology

***Feedback***

***Plan homework tasks - independently***

***Brief review of next session.***

**RT**

**Session 10:**

***Introduction***

Welcome

Agenda modification

Biofeedback

***Homework Review***

***Mini Lecture***

An introduction to art therapy as a form of relaxation

***Small groupwork*** – experiment with self expression through art

***Feedback***

***Planning homework tasks*** - independently

***Brief review of next session***



**RT**

**Session 11:**

***Introduction***

Welcome      Agenda modification

Bio feedback

Feedback

***Homework Review***

Set dates for individual feedback session

***Mini Lecture***

Maintaining improvement

Preventing relapse - preparation for termination

The Alexander Technique

***Small groupwork*** - Plan how to maintain improvement

Identify likely pitfalls and find ways to overcome these

***Feedback***

***Planning homework tasks*** - independently

***Brief Review of next session***

**RT**

**Session 12:**

***Introduction***

Welcome

Agenda Modification

Biofeedback

***Homework Review***

Progress Report - Rewards

***Mini Lecture***

Where do we go from here

Review relaxation techniques

Self-help for the future

***Small groupwork*** - Re-state goals and possible reasons for not achieving them

Work out a strategy to overcome these

***Feedback***

Evaluation Forms

Farewell

Set date for the follow up session

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## **RT – SESSION HANDOUTS**

### **SESSION 1**

#### **DEFINITION OF OBSESSIVE - COMPULSIVE DISORDER**

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The Compulsion is a behaviour which is performed in order to reduce the discomfort caused by the Obsession.

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Obsessive doubt - worried that the house might burn down because of failure to turn off the cooker or iron.



## **Most Common Compulsions**

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eg. Thinking of a phrase or counting a sequence of numbers.

If the Compulsive behaviour is not carried out then this leads to a build up of tension which makes the person anxious.

Obsessions are usually unwanted and difficult to control:

Obsessive - Compulsive disorder is an anxiety disorder - feelings are often associated with anxiety - such as sadness, worry, guilt and general discomfort.

**Session 5 -Correct Breathing**

Although we tend to think that breathing comes naturally and we can all do it, there is a right and a wrong way. It is rather like standing and sitting – you can get away with a bad posture for a while, but eventually it will cause you discomfort. Similarly, breathing too quickly will not seem troublesome in the short term, but continued fast respiration causes physical discomfort which can be quite frightening. This sort of rapid breathing is a perfectly normal response to stress and is called hyperventilation. We all hyperventilate whenever we are tense or anxious or doing exercise. We breathe faster at these times in order to provide our muscles with oxygen to burn during activity. In this way, our body is prepared for action to relieve the stress – e.g. running away.

When overbreathing becomes a habit , however, it can become a problem. Continuous overbreathing causes the oxygen levels in the blood to rise too much; at the same time, the relative carbon dioxide levels fall. This imbalance causes many unpleasant physical symptoms, such as:

- ◆ Tingling face, hands or limbs
- ◆ Muscle tremors and cramps
- ◆ Dizziness and visual problems
- ◆ Difficulty breathing
- ◆ Exhaustion and feelings of fatigue

### ◆ Chest and stomach pains

These sensations can be alarming, often causing even more anxiety and hyperventilation.

You can learn to correct over-breathing and combat the symptoms for yourself by developing the habit of correct breathing. This simply means breathing gently evenly, through your nose, filling your lungs completely. Use your lungs fully and avoid breathing from your upper chest alone. Breathing should be a smooth action, without gulping or gasping.

### *The breathing exercise:*

It is generally easier to do this exercise lying down. When you can feel the difference between shallow and deep breathing, you can try the exercise sitting or standing.

- ◆ Place one hand on your chest and one on your stomach
- ◆ As you breathe through your nose, allow your stomach to swell. This means that you are using your lungs fully. Try to keep the movement in your upper chest to a minimum and keep the movement gentle.
- ◆ Slowly and evenly, breathe out through your nose.

- ◆ Repeat this, while trying to get a rhythm going. You are aiming to take 8 to 12 breaths a minute: breathing out again counts as one breath.

At first you may feel that you are not getting enough air, but with practice you will find this slower rate of breathing is comfortable.

### **Practice:**

It is important to practice the exercise whenever you can as you are trying to develop a new habit, which will only come through repeated rehearsal. To help you to practice, try putting a coloured dot somewhere eye catching to remind you to use correct breathing each time you see it. You might find it useful to put the dot on your watch, as most of us look at our watches regularly throughout the day.

As your skill improves, you will find it easier to switch to correct breathing whenever you feel anxious. As with all anxiety management techniques, you will be most successful if you tackle your stress when it is at a low level.

### *Emergency Measure:*

If you are feeling panicky and not confident enough to take control of your breathing pattern, use a **paper** bag to breathe into. Cover your nose and mouth and breathe as naturally as possible. By collecting and re-breathing your exhaled air, you can restore the



oxygen/carbon dioxide balance in your bloodstream and thus control the unpleasant feelings.

OCD GROUP RESEARCH STUDY  
(Rating pack)

<b>Base: Dept of Psychiatry QEII Hospital / MHU Basildon Hospital (delete as applic.)</b> <b>Clinicians Name(please print clearly):</b>
--

<b>Name of Patient:</b>	<b>Ref:</b>
-------------------------	-------------

Week no	Visit no	Type of Rating	Clinicians signature
-1	-1	Screening/consent	A. Hughes

0 Baseline	1	Full YBOCS
		SASS
		HAS
		MADRS
		CGI/imp/sev
		Medication check
1	2	No rating
2	3	YBOCS rating only
		HAS
		MADRS
		CGI imp/sev
		Medication check

OCD GROUP RESEARCH STUDY  
(Rating pack)

Base: Dept of Psychiatry QEII Hospital / MHU Basildon Hospital (delete as applic.)  
Clinicians Name(please print clearly):

Name of Patient: Ref:

Week no	Visit no	Type of Rating	Clinicians signature
4	5	YBOCS rating only	
		HAS	
		MADRS	
		CGI imp/sev	
		Medication check	
5	6	No ratings	
6	7	YBOCS	
		HAS	
		CGI imp/sev	
		MADRS	
		Medication check	
7	8	No ratings	

<b>OCD GROUP RESEARCH STUDY</b> <b>(Rating pack)</b>			
<b>Base: Dept of Psychiatry QEII Hospital / MHU Basildon Hospital (delete as applic.)</b>			
<b>Clinicians Name(please print clearly):</b>			
<b>Name of Patient:</b>		<b>Ref:</b>	
<b>Week no</b>	<b>Visit no</b>	<b>Type of Rating</b>	<b>Clinicians signature</b>
8	9	YBOCS	
		MADRS	
		HAS	
		CGI imp/sev	
		medication check	
9	10	No ratings	



<p align="center"><b>OCD GROUP RESEARCH STUDY</b> <b>(Rating pack)</b></p>			
<p><b>Base: Dept of Psychiatry QEII Hospital / MHU Basildon Hospital (delete as applic.)</b></p>			
<p><b>Clinicians Name(please print clearly):</b></p>			
<p><b>Name of Patient:</b></p>		<p><b>Ref:</b></p>	
<b>Week no</b>	<b>Visit no</b>	<b>Type of Rating</b>	<b>Clinicians signature</b>
<b>10</b>	<b>11</b>	<b>No Ratings</b>	
<b>11</b>	<b>12</b>	<b>FULL YBOCS</b>	
		<b>HAS</b>	
		<b>MADRS</b>	
		<b>CGI imp/sev</b>	
		<b>SASS</b>	
		<b>Medication check</b>	
<b>3 Months Follow up</b>		<b>FULL YBOCS</b>	
		<b>HAS</b>	
		<b>MADRS</b>	
		<b>CGI imp/sev</b>	
		<b>SASS</b>	
		<b>Medication check</b>	

<p style="text-align: center;"><b>OCD GROUP RESEARCH STUDY</b> <b>(Rating pack)</b></p>
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**INSTRUCTIONS TO BLIND RATERS:**

Please complete the accompanying rating sheet for the appropriate week and ensure that you sign the form for each score.

The Full YBOCS and SASS tests need only be taken on Week 0 – Baseline and Week 11: at all other times score YBOCS rating scale only.

During the rating process please try to discourage the client from speaking about therapy sessions as this may lead to you becoming aware of the experimental condition.

On completion of rating, please send the originals of the tests scored together with a copy of the scoring sheet in the enclosed stamped addressed envelopes, to be sent off immediately after each rating session. The original scoring sheet to be handed to either of the following administrators who will lock them away until the research programme is complete:

QEII base: Mrs Kim Fox, Dept of Psychiatry.

Basildon base: Mrs Elaine Brooks, Dept of Psychology.

Thank you for taking part in this research study – your contribution is greatly valued. You will receive feedback on the results of the study following analysis of the data.

## Rating Scales – General Guide

---

There is no 'right' way to administer observer rated scales. However using a standardised guideline helps to improve reliability with an overall aim of reducing standard error and therefore optimising the power of a clinical trial.

### Time Frame for rating

The rating is based on the last seven days unless there are specific instructions to the contrary.

### Rating blind to previous assessments

Do not refer to the results of previous weeks' ratings prior to making the current .

### Disregarding explanations

Do not reduce the score on an item when there is an explicable cause for a symptom other than the depressive disorder itself. For example, the severity of current lassitude should not be scored as less because of an intercurrent viral illness. Allowing 'explanations' ultimately leads to inconsistent rating practice.

### Ambiguous scores

When there is genuine difficulty in choosing between two scores on an item the higher value should be chosen.

### Anchors as signposts (semiotics)

Do not interpret the legends for anchor points as operational definitions of symptom severity. Keep in mind the general meaning of the legend rather than the exact wording.

### Avoid Central Tendency

Less experienced raters may play safe and be reluctant to use the highest, or lowest, scores on an item. A conscious effort should be made to use the whole range of scores. For example, the maximum score on the sleep item on MADRS is 6 points indicating 'less than two or three hours sleep'. The very worst patient would have a hypothetical score of 7 for no sleep at all.

### Treatment contrast effect

Commonly termed 'placebo rating'. This refers to the tendency to score lower after treatment has taken place based on a shared belief by patient and clinician that improvement should have taken place. A conscious effort should be made to resist this effect.

### Symptoms that fluctuate

1. *Ultradian variation*: for symptoms that fluctuate from day to day the score for an item should be based on the average for that past week as a whole.
2. *Circadian variation*: for symptoms that regularly fluctuate in severity within a day the average severity should be taken.

### Pro-rating

On rare occasions an answer cannot be elicited from the patient on a particular item. Under this circumstance other cues may be used to estimate the score, for example collateral reports. If no estimate can be made at all the score for the item should be guesstimated from the average of the other items. However pro-rating should be regarded as a last resort.

### When to assess Global Impression scales.

These should be rated at the beginning of the consultation before structured scales are administered. In assessing CGI at the beginning of an interview the patient's account should be elicited with very broadly phrased questions, avoiding target symptoms, for a minimum of two minutes.

**Scores without anchor points**

Some scales do not have anchor statements for each score on each item. A conscious effort should be made to use these intermediate values.

**Rating up, down or flat**

The policy should be one of consistent rating throughout the study.

**Time of day and rating**

As far as possible rating should be made at the same time of day for each patient.

**Avoiding drift and fatigue**

Before commencing a study the use of the scale should be practised on a non investigational patient. This should be repeated at intervals during the course of a study, for example three monthly. Video, or live rating with a colleague is recommended.



**OCD INITIAL ASSESSMENT STANDARDISED INTERVIEW FORM**

**DATE OF INTERVIEW:**

**PATIENTS NAME:**

**REF:**

**DATE OF BIRTH:**

**REFERRERS NAME & ADDRESS:**

**CONTACT NUMBERS:**

**ANY CURRENT MEDICATION & LEVELS:**

**GP NAME & ADDRESS:**

**CONTACT NUMBERS:**

**PATIENTS ADDRESS:**

**CONTACT NUMBERS:**

## **PRESENTING PROBLEM (patient's perspective)**

**Cigarettes per day:**

**Alcohol intake(units per day/week):**

**Illegal substances and level of use – (daily/weekly):**

## **FAMILY HISTORY**

## **MEDICAL/MENTAL HEALTH HISTORY**

## **WORK /DAILY LIVING IMPACT**

**CLINICIANS FORMULATION:**

**PSYCHOMETRIC RESULTS:**

**YBOCS:**

**MADRS:**

**HAMILTON ANXIETY SCALE:**

**SASS:** .

**CLINICAL GLOBAL IMPRESSION:**

**PATIENTS REPORT ON THERAPY**

**Please reply to the questions asked using a scale of 1 to 4 and circling the number that most applies to you.**

**Example: in question no1 - 1 =none -2= some -3= a lot -4=a complete recovery**

**1. Before you came to the OCD group therapy programme, how much progress did you expect to make in dealing with your problems?**

**1      2      3      4**

**2. Since attending the OCD Group Therapy programme how much progress do you believe you have actually made?**

**1      2      3      4**

**3. In the future how much progress do you think you will be able to make in dealing with your problems?**

**1      2      3      4**

**4. How satisfied are you with the therapy you have received?**

**1      2      3      4**

**5. How well do you think the therapist understood your problems?**

**1      2      3      4**

**6. How well were you able to convey your concerns or problems in the sessions?**

**1      2      3      4**

**7. How much do you feel you had confidence in the therapist?**

**1      2      3      4**

**8. How much did you have confidence in the therapy you received?**

**1      2      3      4**



**APPENDIX M**

**PATIENT PREPARATION FOR GROUP THERAPY**

**INFORMATION SHEET**

**What to Expect?**

- 1. To teach group members anxiety management techniques; all group members can benefit from being more relaxed which will enable them to gain more benefit from the therapeutic group programme.**
- 2. To reduce or eliminate recurring unwanted thoughts, images and urges.**
- 3. To enable group members to participate in activities which they might have previously avoided.**

**How will these aims and objectives be achieved?**

**Each group member will set themselves short, medium and long term goals:**

**Short term – to be achieved by the sixth session**

**Medium term – to be achieved by the end of therapy – twelfth session**

**Long term – to be achieved by follow up session – three months after the end of therapy**

**Each session is structured so that group members will learn and develop skills in order to help them achieve their goals. Printed handouts detailing information about individual sessions will be given to each group member at the beginning of each session.**

**Please note: group members will not be expected to do anything that they are not willing to do.**

**During the learning period of each session the group will split up into pairs or small groups to encourage discussion/ reinforcement of what has been learned during the session.**

**This means that group members will not be expected to expose personal concerns or fears in front of the whole group if they are not comfortable to do so. Information disclosed during the sessions will be treated in a confidential manner and group members will be asked to agree on this at session 1.**

**Finally, all group members will need to be committed to attend all twelve weekly sessions, an individual follow up session immediately after the end of therapy and thereafter, one three month follow up session.**

# **TEXT BOUND INTO THE SPINE**





Daily Record Sheet of Obsessions & Compulsions						Appendix O
Date						
Target						
	Obsession being monitored					
Time:	Trigger:	Obsession: Thought Doubt Image	Discomfort: 0-100 scale	Compulsive Urge 0-100 scale	Compulsive behaviour: Overt Covert None	Discomfort 0-100 scale

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## **CHAPTER SIX**

## **SECTION C**

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### **Autobiographical Memory in the Maintenance of Severe Depression:**

#### **A Single Case Study**

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##### **1. Theory and Practice Link**

**1.1** This case study will describe how cognitive behavioural therapy was used in the treatment of severe depression.

**1.2** It has been suggested that cognitive behavioural therapy is only one of several psychotherapies that are effective in the treatment of depression. Final Pathway studies have evaluated the effects of such psychotherapies. In particular Goldfried (1980 p 274) claimed that the commonality amongst psychotherapies in the successful treatment of depression are as follows:

- 1. They provide patients with new corrective experiences**
- 2. They offer patients direct feedback**
- 3. They induce in patients the expectations that therapy will help them**
- 4. They create a therapeutic relationship**
- 5. They provide patients with repeated opportunities to test reality**

Therefore Williams (1997) suggested that common to all therapies is the patients increase in self esteem and problem solving which lead to change being brought about.



**1.3 Williams (1997) suggests that cognitive behaviour therapy can be referred to as a type of problem solving and that the goal of therapy is to find solutions to the patient's problems using cognitive behavioural strategies. Thus the aim of such therapy is not only to help the patient to think more rationally but also to solve situational life style problems that otherwise might prevent the patient from maintaining progress.**

**However, Williams emphasises that for the Cognitive Behavioural Therapist it is useful to understand not only how change is effected but also what cognitive mechanisms help to bring about such change.**

**1.4 MacLeod (1989) claimed that whilst patients may still experience depression post CBT treatment they will hopefully have learned two things during the course of therapy:**

- 1. to prevent depression from activating negative thoughts and images**
- 2. to ignore depression as a source of valid information about current events.**

**Following on from this in research carried out Williams (1992) claimed that the reason for a person being able to bring about changes suggested by MacLeod is their newly established post therapy ability to retrieve alternative information from long term memory. Further, Williams suggests that if a person is unable to do this then he/she is more likely to experience relapse.**

Williams (1996) has since carried out research into autobiographical memory in depressed persons and has found that such memories are not only biased towards retrieving negative appraisal of events but also take longer to retrieve positive events.

In this way depressed people then develop a general bias towards retrieval of negative appraisal of events and are unable to reinterpret old memories. Thus dysfunctional schemata develop.

1.5 Evans *et al* (1992) tested this hypothesis in a study of a group of suicide attempters: it was found that the level of over generality in autobiographical memory was highly correlated with attempted suicide and that this group of people had difficulty in specific recall of memory for problem solving strategies.

1.6 In the case study presented here it will be shown how the therapist hypothesized using the Cognitive Behavioural paradigm that the client, Alice had developed an overgeneralised bias in autobiographical memory and that this inhibited her ability to reinterpret information processed in current daily life.

It was particularly interesting to test this hypothesis with this client given that she had received many different types of psychotherapy over a ten year period but she described no effective long-term change in her mood.

## **2 Setting/ Context**

**2.1** Eight sessions took place in a therapy room which forms part of an Occupational Health Counselling Service for staff of an NHS Trust. The Service is located off-site in a private building so that confidentiality can be maintained. This Service has been developed by the writer and has been in existence for almost two years. The service policy outlines that any employee may self refer direct to the service but other referrals are made via occupational health and/or line managers. The maximum number of sessions available to clients is eight. The client in this case study self-referred whilst being registered on a Psychology Dept waiting list to which she was referred by a Psychiatrist.

## **3. Biographical Details**

**3.1** Alice is a 36-year-old female who has been working in a secretarial capacity for an NHS Trust for the past ten years. During that time she had received various types of psychotherapy for depression.

**3.2** A family friend sexually abused Alice at age 9 – this occurred on one occasion.

Alice's mother had a history of mental ill health beginning with what Alice described as a 'breakdown' also when Alice was age 9. At that time mother was admitted to hospital and that is when the abuse took place.

**3.3 Alice has no brothers or sisters. She described her father as unemotional who showed her no support at a time when she felt vulnerable due to lack of support from mother.**

**Alice's mother used to criticise her and by the age of 16 Alice was expected to take on mother's role – looking after her mother and father and doing the household chores.**

**Alice's mother's mental health continued to decline and there were several suicide threats and on one occasion Alice found her mother after attempting to commit suicide.**

**Although Alice had enjoyed school, seeing it as a place to escape and managed to achieve success in exam results, she was forced to leave school at the age of 16 in order to take on the role of full-time carer for her mother who had by that time become an alcoholic.**

**3.4 When Alice was 20 years old her mother died of a massive heart attack. Alice recalls feeling relief that she could now start to do things for herself. She got a job at a local supermarket having left school with few qualifications and within two years had formed a relationship with a colleague and became pregnant. She felt resentful of this - feeling that she again had to take on the role of carer and felt she had messed up yet again.**

**Having married the father of her child she went on to have two more children and now has three children aged 14, 12 and 9. She has remained married.**



**3.5** Alice's father is still alive and she sees him regularly although she describes their relationship as being on a 'practical level' with her 'making sure he's ok' and in return he offers support in other ways, such as financial if needed.

Since the age of 22 Alice reported a fluctuating history of depression and has experienced many psychotherapies with no effective change.

#### **4 Reasons for Referral**

**4.1** Just prior to Alice's self-referral to the Service, she had been visited at home by a duty psychiatrist from the A&E service at a local hospital. The reason for this was that she had left her children with a neighbour and had gone off to travel to Yorkshire by train to try to make contact with a cousin whom she had not seen for some years. Prior to beginning the journey she had taken six amitriptyline tablets previously prescribed by her GP.

**4.2** On reaching London, Kings Cross station she was found wandering in a distressed state by Transport Police and then escorted home. Her husband had contacted the local Accident and Emergency Service and a Psychiatrist had made a home visit, admitted her to hospital for observation, and she was discharged 48 hours later. The psychiatrist had referred her to a psychologist within the community mental health team and her name had been placed on a waiting list to be seen at some time in the future.

Both Alice and her husband had been frightened by the experience and she had, therefore, decided not to wait for the appointment with the psychologist, but to self refer to Occupational Health.

## **5. Initial Assessment Session**

### **5.1 Alice's description of the problem:**

Alice explained that she was very ashamed about her recent behaviour. She described a feeling of hopelessness and needed to get away to seek help from a cousin whom she had been close to. She explained that her intention in taking the excessive medication was not to kill herself but to relax enough to make it through the journey. Although she had experienced suicidal thoughts.

Alice mentioned that the psychiatrist had wanted her to remain in hospital whilst starting her on lithium: she had refused because she no longer wished to take medication saying she didn't wish to be a zombie all her life like her mother.

### **5.2 Key background events:**

Alice explained that this incident was not an isolated incident and that there had been several times when she had felt hopeless and needed to get away but that each time she had always made sure that the children were cared for.

The onset of such incidents were preceded with arguments between herself and her husband which she described as verbal abuse – he would criticise her for not cleaning the house properly or not being a good mother – accusing her of spending more time on helping others rather than her own family.

### **5.3 Therapist's Overall view of the Client's Difficulties:**

**5.3.1** This initial assessment interview focussed on the therapist being able to understand the problem from the client's perspective, creating an overall view of the client's situation (Fennell 1989): including onset and development of problems, lifestyle difficulties e.g. housing or finances etc and associated negative thoughts.

Alice confirmed that she did not wish to take her own life and wanted to bring a change to her overall level of happiness.

On the Beck Depression Inventory (BDI – a 21 item self-rating scale)(Beck, Ward, Mendleson, Mock and Erbaugh 1961) she rated 38 indicating severe depression.

**5.3.2** The therapist's preliminary formulation of the case informed by the cognitive model of depression (Beck *et al* 1979), was that a dysfunctional schemata and assumptions had developed from childhood and now influenced daily thoughts/appraisals.

For example, the early experience of sexual abuse combined with mother's constant criticism had led Alice to assume that she was a worthless person whose needs did not matter and so learned that by doing things to please others she could be of some worth. Then the critical incident of becoming pregnant led to negative thoughts being reinforced – “I'm useless – I have no control over events – I've made a complete mess of my life – I can't get anything right”. Such thoughts then developed and were maintained by difficulties in her relationship with her husband leading to the onset of symptoms as follows:

- Behavioural – social withdrawal and the need to escape from time to time.
- Motivational – loss of interest in daily living including sex.
- Affective – shame, guilt and resentment
- Cognitive – self-criticism and indecisiveness together with suicidal thoughts.
- Somatic – loss of appetite and sleep.

According to Beck's theory, cognitive behaviour therapy not only focuses on changing negative thoughts but also memories and beliefs that maintain depression and make people more likely to experience a fluctuating pattern of relapse in the future.

Therefore, it was important in the assessment session to share with Alice the CBT explanation of how thoughts can affect emotions and more specifically how memories of her traumatic experiences during childhood might now be maintaining the negative appraisal of her current day situation, - “I'm useless” – “people will think I'm awful”



which in turn make her feel sad, guilty, shameful and resentful, thus mediating bouts of depression.

5.3.3 Alice appeared to understand this explanation and was in agreement that this may be the case and was prepared to engage in therapy. Thus a problem list was drawn up:

1. Being unable to communicate openly her own needs, thoughts and feelings.
2. Discounting her own opinion – believing herself to be of no value.
3. Difficulty in facing up to situations and unable to problem solve leading to procrastination which in turn leads to feelings of helplessness – withdrawal/unable to cope with day to day life events.
4. Feeling ashamed because of her inability to cope – what will other people think of me?

In this way Alice had begun to take a small step in taking back some control over her situation. The list was a therapeutic task that helped to set down her difficulties – breaking them down into smaller parts to make tackling them more manageable and not so overwhelming. This is known as problem reduction and is critical in implying hope and control for the future.

**5.3.4** Given that the Occupational Health Service provides a brief intervention for staff it was important to assess Alice's expectations of therapy and in doing so we set goals for therapy which were as follows:

1. To be able to identify feelings and express emotions
2. To be able to identify negative thoughts and challenge them.
3. To plan pleasurable activities for herself.
4. To test out whether the memories she has of herself apply in daily living situations.
5. To agree to read self-help material about coping with depression.
6. To agree to carry out negotiated homework tasks in respect of the above.

**5.3.5** The homework task negotiated at this session was to maintain a diary of mood and associated thoughts that preceded the emotion and to rate the intensity of emotion and the belief in the thought out of 100%. 100% being the highest level of intensity and belief.

At the end of the session the therapist reflected on the fact that the psychiatrist had wanted to prescribe lithium: this might indicate a diagnosis of manic depression (bipolar

depression)(British National Formulary - BNF). which if were the case the client might have benefited from being persuaded to take the suggested medication. This was an issue that the therapist took to supervision and it was agreed that the therapist should try to identify any patterns of manic behaviour.

## **6. Session 2**

**6.1** Alice had completed her homework assignment and we reviewed this together. Alice had described a fairly constant low mood and on her dysfunctional thought record had recorded a 90% for feeling guilty because she had shouted at her eldest daughter. Her automatic thoughts were: “I shouldn’t have done that – I am just like my mother – how could I shout at her when I know how awful that feels”. She rated the belief in these thoughts as 100%.

In the session we discussed alternative more rationale responses to the automatic thoughts:

“ Just because I raised my voice doesn’t make me a total failure as a mother”. (50%)

“I am only human and her behaviour was unacceptable – fighting with her younger sister” (50%)

“Just because I reacted in that way doesn’t mean that I can’t talk to her and calmly explain that I am concerned that she was upset by the incident and explain why I was upset, reassuring her of my love for her and asking for her point of view” (75%).

“Because I raised my voice does not make me like my mother – she constantly criticised me – wouldn’t allow me to have friends in the house and was always drunk – I do none of these things”. (75%).

Alice rated how far she believed these thoughts as indicated in brackets above.

When asked how she thought she would now re-rate the original automatic thoughts she said:

“I am just like my mother” (50%)

“How could I shout at her when I know how awful that feels” (70%)

This indicated that there was some movement in challenging those automatic thoughts and beliefs in them had lessened somewhat.

6.2 In respect of supervision issues, on further questioning about mood swings the client did not describe any manic phases but did describe difficult situations with her husband as precipitating depressive periods which in turn had led to her wanting to escape from



the situation because she viewed the situation as hopeless – “he always criticised her – she could never be good enough”.

The homework task was to continue to monitor emotions.

### **7. Session 3**

**7.1** In line with CBT approaches to structuring sessions we reviewed Alice’s week and she reported having coped a little better – she attributed this to having had the opportunity to talk to the therapist in therapy sessions – again discounting her own part in bringing about change.

**7.2** In reviewing her homework task she had noted one incident on the dysfunctional thought record. We used this to discuss the main topic for the session in order to reinforce how she might bring about change in her automatic appraisals of current situations.

The incident had occurred mid-week. Alice had been feeling a little brighter and her husband had remarked that she was more like her old self. That evening he had initiated sex but she had not wanted to go through with this. She recorded her emotions as feeling guilty (70%), sad (90%). Her automatic thought was “ I don’t want to do this but if I say so he will be hurt and angry. He has to put up with so much with me being unstable so I’d better just get on with it – this is awful – but I can’t say no”. (80%).

**7.3** The therapist was aware that these feelings may be linked to previous memories of sexual abuse and feelings of helplessness: this led to a momentary dilemma for the therapist – should we focus on the abuse and explore feelings and thoughts around that or should we whilst acknowledging that the memory of the abuse was distressing and might be maintaining cognitions focussed around helplessness instead try to move forward to challenging those thoughts in the ‘here & now’.

The therapist decided to go with the latter and asked Alice what alternative responses she could have had in the same situation. This was based on the fact that memory task research (Williams 1992) has shown that depressed patients tend to recall negative descriptions which have been attributed to themselves in the past and that personal emotional memories tend to be general indicating a pattern of thinking in terms of general emotional responses. Therefore, the therapist hypothesized that personal emotional memories of Alice’s childhood in respect of sexual abuse and critical mother had now become generalized responses rather than thinking in terms of specific episodes.

**7.4** The therapist began by asking her whether or not she thought that her husband would have stopped lovemaking if she had asked him to – she confirmed that he would. Following on from this the therapist asked did she always feel the same about making love with her husband – she confirmed that she did not always feel like that – sometimes she initiated it but only when she was relaxed and having a good week.

The therapist's aim was to check out whether there was a longstanding problem with sex in general which may have been linked to the experience of sexual abuse and if so that would have influenced how the therapist proceeded. However as Alice confirmed that she loved her husband and wanted to remain in the relationship and that she actually enjoyed making love on occasions then the therapist decided to continue with challenging the automatic beliefs.

7.5 Alice's core beliefs were that she couldn't express her feelings because she didn't count – she had always been a failure so what was the point in having an opinion – her husband always made the decisions anyway. We then went on to discuss a more rational response to her situation –

“I have the right to have my needs met as well as my husband (50%)

“I do not feel like doing this right now – that doesn't make me a failure as a wife/partner – it just means that I feel tired and have the right to say no. (70%).

Alice rated these more rational thoughts as indicated in brackets above.

7.6 Her homework task was negotiated in respect of achieving therapeutic goals 4 & 5 – to agree to read a self help leaflet on depression based upon Appendix in Hawton *et al* (1989) and to test out whether memories she has of herself apply to current daily living situations.

In this respect she agreed to invite a few friends around to her home for an informal meal. She was a good cook and used to enjoy this activity. She had not invited people to her

home for some time believing that they probably wouldn't turn up anyway and even if they did they wouldn't enjoy themselves.

## **8. Session 4**

**8.1** In this session Alice had been very surprised that she had been able to telephone a few friends and had arranged an informal meal for the following week. She was even more surprised that they had sounded really pleased to be invited and had accepted.

Alice's husband had also been pleased with this outcome as he saw this as a return to a more normal lifestyle.

**8.2** In order to follow on from the last session and to reinforce the fact that Alice could have control over her situation and bring about a change in her thoughts and emotions, we focused on expressing her emotions i.e. identifying what she was feeling and being able to communicate that to her husband.

We rehearsed what she might say when something happens that she doesn't agree with. This was particularly important because Alice had explained that on occasions when she had left the home, with the sole intention to escape, she had feelings of hopelessness because she had been unable to communicate her feelings about issues that she and her husband had argued over.



**8.3** The therapist at this stage became aware that it might be more beneficial for Alice and her husband to have couple therapy but then the therapist hypothesized that given that Alice had a generalized emotional response to situations both internal and external to home it was probably more beneficial for Alice to work on reinterpretation of current daily events in order for her to take control over her life and change feelings of hopelessness before deciding whether couple therapy was an option for her. The therapist shared this hypothesis with the client and it was agreed that couple therapy might be an option for her at some time in the future. This was an issue that the therapist took to supervision – it was agreed that it would be more beneficial for Alice to continue to work individually in order to help her to feel more hopeful for the future and to take back some control – thus preventing relapse and eradicating any suicidal ideation.

**8.4** The homework task was to go ahead with the dinner party as arranged and we rehearsed challenging automatic thoughts that she may have had leading up to and during the evening. For example, if she thought – “they are only coming because they don’t want to hurt me by saying no” – she could challenge this with ‘where is the evidence for this?’

This is based on research that shows that positive information processing is less likely to be recalled than negative information. (Clark and Teasdale, 1982).

Alice could follow this type of challenging with – ‘what alternative views could there be in this situation?’ – thus introducing positive information such as –

“they haven’t seen me for a long time and are looking forward to spending an evening together”

“I know that I am a good cook and hostess and friends used to say they enjoyed coming to our house – so if I can just relax and enjoy their company the evening will go well.”

Other forms of challenging were introduced such as – ‘ what are the advantages and disadvantages of thinking like this?’ Thus challenging self-critical thoughts that have been maintained by autobiographical memory.

8.5 Williams (1996) claimed that from research studies it was shown that autobiographical memory in depressed people is biased towards negative events and that it takes them longer to remember positive events. Therefore, in challenging as above Alice was prompting herself to remember the positive events in her life, which would hopefully help to shift the balance from automatic generalized negative recall.

## **9. Session 5**

9.1 In this session Alice reported having coped with the dinner party even though there was an incident before the guests arrived.

She reported feeling good as she was putting the finishing touches to the food and was pleased with the way that she had managed to remain calm and relaxed and looking

forward to spending an evening with friends. Then her husband reminded her not to speak of her 'illness' in front of the guests. She said that she immediately felt as though she were a child and resented the fact that he thought she needed to be told how to behave and what to say.

This time, however, instead of bursting into tears and escaping the situation, as she wanted to, she made herself remain in the situation and expressed those feelings of resentment to her husband. He had then become supportive and apologised saying he didn't realise that she would be so upset by the comment. She then continued on with what she was doing and reported a feeling of strength that she had been able to express how she felt and nothing bad had happened. She went on to have a thoroughly enjoyable evening and her husband commented on how he had also enjoyed it.

In therapeutic terms this was a turning point for Alice and represented a shift away from helplessness towards taking control of her feelings and beginning to communicate openly.

9.2 In this session we tackled goals 3&2 – planning a pleasurable event just for herself and to identify any automatic negative thoughts and to challenge them herself (thus again creating independence and control). These were to be her homework tasks for the week.

## **10. Session 6**

**10.1** In this session Alice had been out for an evening with two old friends and had enjoyed herself. Her husband had not been very supportive before she went – implying that she was selfish in leaving him to look after the children. She had automatically felt guilty and thought – “he’s right – why should I go out on my own – I’m being a bad mother”. However, she had been able to challenge these thoughts with – ‘where is the evidence that going out for one night makes me a bad mother? I stay in and look after the children all the time – I drive them to school and collect them and take them to after school activities – I help them with their homework and am always around at bedtime to settle them down – so where is the evidence that I am a bad mother or being selfish?’

We then discussed this in comparing the original automatic thought to selective abstraction – concentrating on weaknesses and not on strengths – such as condemning herself based on one event – going out for an evening.

**10.2** Alice had managed to interrupt a depressive thought by using a technique that Beck *et al* (1979), Williams (1992) and Teasdale *et al* (1994) refer to as decentering – i.e. shifting away from negative thoughts and thereby preventing deterioration of mood. In view of Alice’s progress to date we reviewed how being able to challenge automatic negative thoughts and express her feelings had helped her to take control and bring about change to her situation. She no longer reported feelings of helplessness and had begun to become more involved in activities that she had thought were too much for her.



She recollected that something that had been mentioned in therapy had really motivated her to bring about change – it was that if she kept doing exactly what she was doing at the onset of therapy – then she would just get more of the same feelings and outcomes – but if she were prepared to work at putting changes into practice then she could have some control over her future and bring about lasting change. She said that she had imagined her life stretching ahead as it was and became committed to bring about changes.

The homework task was to continue to plan pleasurable events and to challenge any negative thoughts.

## **11. Session 7**

**11.1** In this session Alice reported feeling much better – she had initiated sex with her husband and felt much more in control of her feelings and she was actually beginning to enjoy life. She had become more involved in events outside the home – eg helping to organise a fashion show for charity and felt that she was coping well.

She had discussed with her husband how she had felt in the past when they argued and emphasised that they both needed to make changes if she was to remain in the relationship. Her husband had remarked on the difference in her behaviour and commented that he preferred her this way instead of depressed all the time.

He had therefore agreed to discuss problems in future before they reached crisis level and that they both needed regular breaks with and without the children.

**11.2** In this session we reviewed how far she had come since session 1- looking at how she had achieved therapeutic goals and how she would need to continue working to bring changes about even when therapy had come to an end.

She completed the BDI and rated 11 – mildly depressed. This was a significant improvement on her initial rating of 38.

## **12. Session 8**

**12.1** Alice had maintained progress and was feeling very pleased with herself. She was amazed at how she was able to enjoy being socially active in ways that she never had before.

She is an insightful person who had not realised her academic potential because of demands made of her whilst she was still at school and then having to leave school to look after her mother until she died by which time Alice was 20 years of age. Alice had been reflecting on this and had decided to return to studying – she was going to take ‘A’ levels as a start with a view that she may go on to study at graduate level.

**12.2** Alice had engaged in the therapeutic process and had significantly improved her mood and control over inhibiting negative thoughts. The session ended with Alice looking and feeling very much more confident about the future than at the onset of therapy.

### **13. Evaluation of the Sessions:**

**13.1** At the onset of therapy it was of concern to the therapist that a possible diagnosis of manic depression by the psychiatrist and need to prescribe lithium may have meant that the most beneficial way forward for the client was medication before therapeutic intervention. As the client's mother had a history of mental ill health there was of course the possibility that biologically Alice would be predisposed to depression. These were issues that were taken to supervision for guidance. It was agreed that therapy should continue whilst observing any excessive mood changes but none were observed. It appeared to be the difficulty at home that precipitated a frenzied period of trying to escape and suicidal ideation.

**13.2** From the therapist's perspective her hypothesis was based on the assumption that low self esteem is recognised as a vulnerability factor for depression and plays an important role in predisposition to suicide (Kienhorst *et al* 1990, Fergusson and Lynskey 1995). Therefore, it was hypothesised that her autobiographical memory had become focussed on negative information processed which was maintaining negative self-critical thoughts, which in turn maintained low self-esteem.

**13.3** There had been times during therapy when the therapist had questioned whether an alternative approach might have been more beneficial in bringing about change e.g.

couple therapy. However, the therapist believed that she must be guided by therapeutic progress made and successful achievement of therapeutic aims. In this respect Alice had worked hard to bring about change and to her credit achieved all of her therapeutic goals.

13.6 In conclusion the original case hypothesis was supported; using a Cognitive Behavioural paradigm, Alice had developed an overgeneralised bias in autobiographical memory and this had inhibited her ability to reinterpret information processed in current daily life – this would appear to be supported based on therapeutic progress made in this case (e.g BDI score reduced from 38 to 11) and the fact that she had previously experienced many types of therapy, but none had brought about freedom from depression. In fact Alice herself made a comment to this effect in the final session as she expressed her appreciation for the help that she had received.



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## **CHAPTER SEVEN**



## **SECTION D**

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### **Stress In The Nhs Workforce: A Literature Review**

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#### **1 Introduction**

**1.1** The author's aim in writing this literature review was to investigate the notion that stress does not exist within the National Health Service working environment: this aim was triggered by the author's own experience whilst working as an Occupational Health Counselling Psychologist within an NHS Trust.

**1.2** In the setting as described above there seemed to be a widely held belief by managers, that NHS staff did not suffer from stress, that they were used to coping with difficult workloads and that those who found that they were unable to cope were in the wrong job and should leave.

**1.3** The result of such beliefs was that staff usually invented reasons for sickness absence rather than admit that they were having difficulties coping with workload pressures. Also, they were reluctant to have 'stress' recorded as the reason for absence, by line managers as they perceived this to be a sign of weakness, which might influence how the line manager subsequently reacted to the individual. In other words staff perceived that there was an unwritten rule that the NHS workforce should be able to cope with heavy workloads and associated occupational trauma – a 'super race of copers and carers'.

1.4 Therefore, in order to dispel the myth of a 'super race of copers and carers' and to support the author's hypothesis that there are higher levels of stress within the NHS than in other similar professions of the working population, this report will provide an overview of what is meant by the term stress, how it is understood to affect people in a working environment and in particular the outcome of research into stress in the NHS workforce.

## 2 What is stress?

2.1 The word 'stress' is derived from the Latin word 'stringere,' meaning 'to squeeze or press'.

2.2 Stress is by no means a new concept: in the 14<sup>th</sup> Century stress was perceived to imply hardship, adversity and affliction(Lumsden 1981). The word stress was later used by physicists to describe the force exerted upon an object resulting in changes of shape and size.

During the 1950's stress was perceived as something in the environment that affects people in adverse ways: Selye (1956) claimed that as a person tried to adapt to initial 'stressors' they developed a 'disease of adaptation'.

Then in 1966, Lazarus developed an interactionist model of stress, which emphasised the impact of the individual's perceived threat of danger, which included attention, perception and evaluation of the situation, as affecting outcome rather than the situation itself.

Therefore, different meanings were attributed to the word 'stress', depending on the applied theoretical perspective.

2.3 Major stress is usually considered as negative affect such as a person might experience at a time of crises. However, this does not necessarily mean that the effect of being in a stressful situation will automatically lead to adverse effects. Stress can also be perceived as being a positively helpful experience, for example, research carried out by Murphy & Moriarty (1976) showed that people can gain strength from stress in order to adapt effectively; and that children who were protected from stressful situations were more vulnerable to stress in view of their lack of learned coping skills, needed in order to adapt to novel, possibly threatening situations.

Also, according to Klausner (1968) and Zuckerman (1979), people often seek stress in order to set themselves challenges and to experience the rush of adrenalin in risk taking situations e.g. sky diving.

2.4 Therefore, 'stress' is best understood not in black and white terms of being 'good' or 'bad,' but rather that what causes stress to become 'distress' is the interaction of a



number of variables, such as how much stress, at what stage in life and under what environmental conditions and with what resources a person might experience in combination.

2.5 In support of this rationale stress can be thought of as evoking an emotional and physiological reaction. In this respect the same could perhaps be said of emotions

That it is not a case of negative emotions being harmful and positive emotions being healthy; through Bowlby's (1969,73) work on separation and loss it is evidenced that negative emotions are necessary to assist in healthy adaptation.

Therefore, it could be argued that stress or pressure together with negative emotions could in some circumstances be a healthy response to adaptation and survival: this point is reinforced by the work carried out by Cherniss (1995) with employees coping with burnout, as later referred to in this review.

2.6 It might be useful to consider redefining 'stress' in the following way:

Pressure is exerted which may produce strain which may affect psychological or physical stability resulting in distress. Cooper and Cummings (1979, p360) demonstrated this hypothesis in the following way:

<i>Steady State A Threat</i>	<i>Stress Adjustment</i>	<i>Successful Coping Strategies</i>
<i>Steady State B Threat</i>	<i>Stress Failure To Cope</i>	<i>Continual Stress</i>



**2.7** Therefore, it could be stated that if the pressures on a person exceed their ability to cope then stress or rather distress is the result. The amount of pressure will vary, in that what motivates one person might completely overwhelm another.

**2.8** When a person is working at their optimum level, they are less likely to suffer from stress or stress related illnesses. Too little pressure can be as stressful for some people as too much.

**2.9** When someone is in a situation that they perceive as threatening or challenging, their nervous system gets ready to deal with it. The body releases hormones to prepare the different organs for physical action. The heartbeat increases and blood pressure rises, while blood sugars are produced to provide extra energy. More blood goes to the heart and major muscles, and blood is directed away from areas where it is less urgently required, such as the digestive system. These physiological responses help the person to 'fight or flee' and when the threat has gone the physiological responses diminish and the body returns to a state of equilibrium. However, if the perceived stressor does not go away, and/or the person cannot adapt to or change the perceived stressor in some way, then the body continues to respond as though constantly under threat and the person will be in danger of developing long term stress-related illnesses, which can include:

- *Angina*
- *High blood pressure*
- *Rheumatoid arthritis*
- *Cancer*

- *Heart attack*
- *Diabetes*
- *Mental disorders*
- *Ulcers*

Some effects of stress (Palmer & Dryden 1995):

**2.10** The effects of stress can be experienced at psychological, physiological and behavioural levels.

*Psychological effects can include feeling:*

Anxious, angry, depressed, frightened, nervous, apprehensive, guilty, lack of concentration, reduced self esteem, drained no – enthusiasm, increased worrying and difficulty sleeping.

*Physiological effects can include experiencing:*

Palpitations, indigestion, breathlessness, nausea, tiredness, vague aches and pains, rapid weight gain or loss, constipation or diarrhoea, excessive sweating and migraines.

*Behavioural effects can include:*

Poor work, aggressive or passive behaviour, irritability, increased absence from work, increased alcohol consumption, poor time management, early morning waking, increased caffeine intake, overeating or loss of appetite.

### **3 Occupational Stress**

**3.1** The Confederation of British Industry estimated that, in the United Kingdom, absence from work caused by stress costs £1.5 billion per annum (Summers 1990).

Additional costs of stress to the employer have been highlighted since the legal recognition of job related stress; in 1994 a legal precedent was set when a social worker, John Walker, successfully sued his former employer, Northumberland County Council and won £200,000 compensation on the grounds that his job was so stressful that he had to retire on the grounds of ill-health. (Walker –v- Northumberland County Council). Since then more cases are in the process of being brought to Court.

**3.2** Alcoholism costs the UK £1.3 billion per annum in lost productivity and is often considered a stress related disorder. It also increases the risk of fatal accidents on the road, in the home and in the workplace.

Stress can affect all aspects of a person's life. Occupational stress can contribute to a breakdown in personal relationships inside and outside work, while stress emanating from the home can reduce job performance and satisfaction.

**3.3** Burnout or premature retirement from one's career due to stress, appears particularly common among nurses. Health professionals suffer from mental ill health to the extent that more of them are being admitted to hospitals and clinics for the treatment of mental



disorders. (Arnold, Cooper and Robertson 1995). This would appear to support results earlier studies of job related stress such as those of Maslach (1976): results in that study showed that job related stress and burnout was a considerable problem for employees in the caring professions.

3.4 According to Sigman,(1992) approximately 360 million working days are lost every year through sickness and according to the Health & Safety Executive approximately 50% of that number relates to stress related illness.

3.5 Anderson (1977) concluded from a study on the effects of stress that *“anxiety associated with high stress levels leads to over concentration on emotional and defensive coping mechanisms and insufficient attention to problem solving coping mechanisms, resulting in lower levels of performance”*(p169).

Interestingly, Lazarus & Folkman (1984), referred to just this type of situation:

*“It is also important to recognise that in some situations there are few, if any, options for problem solving. In such cases the absence of problem focused coping should not be interpreted as primitivization, but rather as a function of the situation.”* Janoff-Bulman and Brickman (1982), for example, point out that *adaptive coping includes knowing when to stop trying to achieve a goal that is unattainable.”* (p169).

3.6 Research suggests that ‘burnout’ in the NHS is not uncommon and in a book written by Cary Cherniss (1995) entitled ‘Beyond Burnout,’ she describes a nurse who decided to



remain in her situation despite experiencing the symptoms of burnout. The nurse, Gloria, stated “ *Classic burnout. I think I withdrew. I think it was just easier to stay.* ” Cherniss goes on to state “*Burnout is often seen as synonymous with quitting, but Gloria’s statement about why she remained in an unsatisfactory job suggests that, paradoxically, burnout can be a reason to stay rather than leave.*” (p59).

Cherniss (1995) in her study of carers in public service jobs found that each year thousands of professionals choose to work in public service and each year thousands choose to leave:

“.....all the professionals in my study began their careers in public service – at a time of the follow-up interviews only 10 of the 26 subjects in the original study were still working as helping professionals in public institutions. Of the 10 who remained in public service, two were no longer working directly with patients. This out of 26 professionals who began serving the needy in public service, only 8 continued to do so most of the time.” (p51).

#### **4 Research studies into stress in the National Health Service**

##### **4.1** Only a small number of studies have been carried out in this area.

In 1998, a working group made up of representatives from the Nuffield Trust, UNISON, The General Medical Council, the Department of Health, the NHS Confederation, the BMA and the UK Central Council for Nursing, Midwifery and Health visiting (referred

to collectively as the 'partnership', carried out a survey into the health of the NHS workforce.

The survey found that whilst most staff enjoy good health, there is considerably higher incidence of ill health in the NHS workforce than in other occupations.

The levels identified were referred to as 'worrying' and also that there was an urgent need for compassionate action by employers, professional and staff associations and the government to implement the 'Partnerships' recommendations on addressing the problems.

The Department of Health highlighted three areas to be targeted – sickness absence, operational stress and staff empowerment in the introduction of improvements to patient services in the NHS.

4.3 In the sickness absence highlighted area, the DoH grouped musculoskeletal disorders together with stress as accounting for 70% of sickness absence, adding that the DoH had addressed this by issuing guidance to the NHS on good practice in manual handling. This is somewhat misleading; can one assume from this that musculoskeletal disorders formed the greater part of 70%, hence the proposed resolution: this does not appear to be the case as in the following highlighted area- 'operational stress' – it was stated that stress is the major cause of sickness absence in the NHS. The DoH subsequently piloted a model of

management of organisational stress in the NHS and have apparently published practical ways of tackling stress at work.

4.4 This may be misinformed comment on the author's part but the Occupational Health Counselling Psychology Service within an NHS Trust, where the author worked as a clinician, did not receive any material of this nature. This may have been a simple matter of communication misfeed; however, with a subject highlighted as being the major cause of sickness absence in the NHS, one might have assumed that all Occupational Health Departments of NHS Trusts would have received material addressing the proposed resolutions, preferably backed up by a letter to all chief executives emphasising the importance of taking action in this area.

4.5 A major programme of research studies into stress in the NHS workforce was carried out over a five year period by Borrill *et al* (1994-98) which formed part of the work carried out by the Institute of Work Psychology, University of Sheffield and Psychological Therapies Research Centre, University of Leeds, between 1994 – 96 and 1996 – 98.

These studies formed part of a long term research programme, funded through the Mental Health of the NHS Workforce' initiative of the NHS Research and Development Programme on Mental Health.



**4.6** This long term research programme took the form of a repeated measures large scale survey of NHS Trust staff, conducted over two time frames –Time 1 1994-96 and Time 2 1996-98: thus, enabling monitoring of stability of findings and mapping of changes over time.

Nineteen Trusts were selected as being representative of England: from each Trust a random sample was obtained from all major occupational groups including, managers, doctors, nurses, professions allied to medicine, professional and technical staff, administrative and ancillary staff.

Seventeen Trusts participated in the research programme during both timeframes and a total of 11,000 respondents participated on each occasion.

The research programme included four main study areas:

1. To determine levels of stress in major categories of NHS employees.
2. To examine the extent to which stress is associated with key work-related factors.
3. To establish the relationships of stress with absence and staff turnover
4. To evaluate the effects of selected organisational changes or interventions with the potential to reduce stress among staff.



4.7 In the first study area, determining stress levels, the General Health Questionnaire GHQ-12 (Goldberg, 1972, Goldberg & Williams 1991) was used as the measurement tool.. Goldberg developed this measure for minor psychiatric disorder in general population and is a self administered test which is well established and validated and had previously been used in community and workplace studies.

However, Borrill *et al* (1996) took the precaution of assessing validity of GHQ-12 as an assessment tool in an NHS staff setting, in order to validate the GHQ-12 against independent psychiatric assessment for NHS staff and to determine cut-off scores for identification of stress 'cases'. Both of these aims were met and it was confirmed that validity of the GHQ-12 in use with NHS staff was as good as previously found with general population.

4.8 In the second study area, work factors associated with stress, it was identified that an increase in work demands, low influence over decisions affecting work role, poor feedback on performance and role conflict accounted for the difference between stress levels.

4.9 The third study area, focused on the relationship of stress with staff sickness absence and turnover and looked at two types of absence data: self reports of sickness absence were collected to examine the correlation of stress with sickness absence. Data collected in this way would of course have limitations i.e. respondents under or over reporting

recall of past events. Therefore, Hardy *et al* (1998) also collected organisational records of sickness absence and compared this data with that of the self reported absences.

4.10 The fourth study area, that looked at change and intervention included five separate studies of efficacy of interventions, usually considered to be beneficial in the management and reduction of stress at work.

## 5 Analyses of the results of the long term research programme

5.1 In study 1 staff from nineteen Trusts (11,000 people) were psychiatrically screened using psychometric test GHQ-12 which showed that in 1996 26.8% and in 1998 26.6% of staff suffered significant stress levels.

5.2 Of the categories, managers were amongst the highest proportion of 'cases' (33.6% in 1996 and 32.8% in 1998) and ancillary staff ranked amongst the lowest (20.4% in 1996 and 23.1% in 1998). In 1998 the level of stress for managers was significantly higher than for any other occupational group, except for nurses.

5.3 To determine whether stress levels differed between NHS staff and non-NHS staff an ANCOVA was used to analyse data taken from two samples, which controlled for age and gender ( $p < .001$ ) and results were highly significant. No other factors however, were taken into consideration e.g number of years in the job. The comparative sample used

was taken from the British Household survey data base which consists of over 9,000 adult respondents, considered to form a representative sample of British households and whose measures included GHQ-12. It was evidenced that in 1996 the 'stress' rate for NHS staff as a whole was 26.6% which was considerably higher than that of non NHS comparable occupational populations (18.4%). Results indicated a rate of 1 in 4 NHS staff suffered from stress.

5.4 In particular, NHS managers stress rates were 50% higher than managers in general employment at both times 1 & 2 (i.e. 1996 & 1998).

Nurses had a stress rate of 40% higher than their comparison group in general professional and technical occupations.

Doctors 'stress' rates were 30% higher than fellow professionals e.g. lawyers & scientists.

Within the NHS sample, across the managerial categories, junior managers and finance professionals had higher stress rates than middle and senior management in 1998.

Also, in 1998 senior female managers had much higher stress levels than male counterparts (42.2% & 17.5 % respectively).



**5.5** Such findings were supported by results of previous studies looking at stress levels in the NHS: Managers, Caplan (1994); Doctors, Ramirez *et al* (1996); Nurses, Fagan *et al* (1995).

**5.6** Stress levels across Trusts ranged from 20.7% to 31.5%. There were no significant differences between types of Trusts i.e. Acute, Community Trusts and Teaching and District General Hospitals. Trust differences in stress levels were explained by higher level trusts having lower emphasis on staff training and levels of co-operation and conflict.

**5.7** Work factors associated with stress levels included high work demands, low influence over decisions, poor feedback and role conflict. Also, changes in work demands, role conflict and influence over decisions reflected employee stress levels between 1996 – 98.

Self reported sickness absences, collected from a six months period, were significantly higher in the identified (GHQ-12) ‘stress’ cases than in non- cases i.e 5.2 as compared with 2.6 respectively. Such results were consistent across seven occupational groups except for doctors which group failed to reach significance; the others ranged from  $p < .01$  to  $p < .001$ .

**5.9** The relationship between self reported and organisationally recorded absences was determined by correlating the self reported absences over a six month period, at Time 1 of the research programme, with organisationally recorded data for the same period; to ensure that the small number of very high absences did not skew the findings, log



transformations were carried out on raw absence scores in order to minimise the effect. The correlation between the two sets of data was significant at  $p < .001$ , indicating the validation of self reported sickness absences; however, we are not told the reasons for the number of sickness absences and therefore cannot assume that each one related to a stress factor.

5.10 It might have been interesting to compare numbers of sickness absences with change introduced in the workplace over the same period, e.g higher work demand, increased role conflict. This would address the question - were the reported sickness absences caused by extraneous factors which occurred outside of the workplace or were they directly related to work characteristics.

## 6 Work characteristics associated with stress

6.1 As part of this long term research programme, Haynes *et al* looked at perceived work characteristics in the NHS which might be associated with stress. It was shown that over time –Time 1 (1994-6)– Time 2 (1996-8), there were four work characteristics that were strongly associated with stress, accounting for 22% of the variance in stress – they were identified as follows:

*Work demands influence      feedback      role conflict.*

6.2 In considering what effect change in the characteristics might have on stress levels, analysis of the data (linear regression) showed that three work related characteristics were primary predictors of change in stress levels, they were:

*Work demands, role conflict and influence.*

This meant, for example that between Time 1 and Time 2 a decrease in work demand equalled a reduction in stress levels. In this study data was analysed using zero-order correlations with linear and logistic regression, appropriate to the GHQ-12 likert scoring system. All relevant variables were taken into consideration e.g marital status, number of dependents, gender, Trust membership, length of service.

6.3 Out of nine work characteristics measured - eight were shown to be statistically significant (at  $p < .001$ ) as associated in determining a change in stress levels, they were as follows:

Work characteristic	Direction of association with stress
<i>Work demands</i>	<i>More</i>
<i>Role conflict</i>	<i>More</i>
<i>Feedback</i>	<i>Less</i>
<i>Role ambiguity</i>	<i>More</i>
<i>Professional compromise</i>	<i>More</i>
<i>Leader support</i>	<i>Less</i>
<i>Social support</i>	<i>Less</i>
<i>Influence</i>	<i>Less</i>

These findings at Time 2 were almost identical to Time 1, indicating that the relationship between work characteristics and stress had remained stable over a long period of time.

## **7 Efficacy of interventions used to reduce stress levels**

**7.1** In this part of the research programme Murphy (1998) looked at five interventions and evaluated their effects on stress levels.

**7.2** Murphy suggests that traditionally, interventions to deal with stress can be thought of at three levels: tertiary – stress counselling 1 to 1 to treat the effects of stress; secondary – stress management programmes given in the workplace to help manage pressure; primary – to bring about a change to work tasks in order to reduce the likelihood of stressful outcome.

**7.3** The five interventions investigated by Murphy could be identified as belonging to one or more of the three levels above and they were as follows:

1. Counselling service (tertiary)
2. Team working initiatives (primary)
3. Upward feedback programme (primary)
4. Introduction of Programmes of care (primary)
5. Stress management initiative (secondary/primary)

**7.4** In the first intervention, worksite counselling, a sample of 58 employees across two NHS Trust sites (one a post graduate teaching hospital and the other a community site), completed pre and post questionnaires as follows: GHQ-12 – an 18 item version of the



Symptom Checklist, (Derogatis 1983) and a 32 item version of the inventory of Interpersonal problems (Barkham *et al* 1994, Harrowitz *et al* 1988), which measures the level of relationship difficulties both in and outside of work.

Pre-counselling measures indicated a high level of psychiatric symptoms 84.5% (49 of the 58 clients with scores of 4 and above). Post measures showed a reduction of 27.6% (16 of 58).

7.5 Murphy (1998) concluded the positive efficacy of worksite counselling. However, such results are limited and cannot be generalised because this study was uncontrolled and it is not reported whether these stress cases were specifically suffering from work stress or whether there were a combination of factors. Also, there appears to have been no standardised therapeutic approach used in this study, if there was it was not reported. It is stated that improvement followed an average of five sessions.

7.6 The second intervention was the introduction of team work and was carried out by West *et al* (1996,1998). The rationale for this study was that teamwork is expected to affect stress because it can clarify role, provide social support and facilitate effective decision making.

The results of this study showed that teamworking can benefit the mental health of NHS staff if it includes:

1. Goals set for performance.
2. Feedback on the team's progress towards goals.
3. The physical environment of the team needs to enable effective interaction via reward of barriers.
4. Team members need to be clear about their roles and how their contribution can assist in achieving team goals.
5. Adequate organisational support needs to be provided to enable team members to carry out their tasks.

7.7 The third intervention, carried out by Anderson & West (1998) was a 'management development initiative' which took place over a period of eighteen months, comparing the process of upward feedback i.e. employee giving opinion on line-managers impact with a view to bringing about change in working practice and deepening understanding while improving communications.

For this intervention middle and first line managers were recruited to the study. Twenty four managers and staff across an NHS Trust took part. The managers were randomly allocated to two groups.

7.8 Group 1 underwent a survey in March 1996 followed by feedback from staff in May then a repeated survey took place in July, plus participating in management skills workshops, addressing – providing and presenting feedback to staff, coaching and support and communication.

The survey took the form of questionnaires, which were sent out five times over the period of the study, to both managers and their staff. The questionnaires included measurement of management behaviour, work related factors, mental health(GHQ-12) and job satisfaction. Management behaviours were assessed on ten dimensions:

- Creating a team environment
- Commitment to quality/Client satisfaction
- Valuing diversity
- Participation and empowerment
- Communication
- Coaching and support
- Integrity and respect
- Fairness
- Presenting feedback
- Providing feedback

7.9 Group 2 followed the same methodological approach as group 1 with the exclusion of management skills workshops. Thus, the effectiveness of feedback alone impacting on management style was compared to management skills training plus feedback.

7.10 The results showed that for group 1, although results were shown to be in the expected direction i.e. staff ratings of managers improved, managers and staff anxiety and depression measures improved, none were statistically significant. In group 2 – there was little change and if there was it was in a negative direction.

It was rationalised that group 1's results were such due to their increased contact with researchers; however, the effects of the management skills workshop on management behaviour were small. However, by meeting as a group and having a forum for discussion on management issues, in a safe supportive environment, had increased the managers commitment to the study process.

7.11 There were also a number of design problems with this study, in that there seemed to be confusion on the part of the managers as to how the study process linked in to Trust wide managerial aims and objectives: therefore, some managers were less committed to the study and not understanding how they should react to the feedback given by staff. Conclusions from this study did show that senior management commitment to any intervention is needed in order to ensure that the process is taken seriously and change implemented.



**7.12** The fourth intervention evaluated the efficacy of a planned improvement/change in patient care/service delivery in reduction of staff stress levels.

Over a two year period the Chief Executive and senior colleagues developed and implemented a programme of care strategy across an NHS Trust. Six multidisciplinary teams, each designed a programme of care for – head injuries, cystic fibrosis, disability, bronchiolitus, oncology and epilepsy. Each design team attended workshops facilitated by an external consultant and implemented processes between workshops.

**7.13** Pre-care programme all staff completed GHQ-12 and a 42 item questionnaire, on their perception of work roles. These were then repeated post care-programme, nine months later. A control group of Trust staff not involved in the projects also completed repeated measures. The results showed no change in GHQ-12 scores or perceptions of work role and there were no differences at either time between the intervention and comparison group.

**7.14** There could be several reasons for these results being non-significant, as follows – no standardised intervention procedure across all groups which led to some design teams deciding no changes were necessary, albeit that they found the process valuable in informing weaknesses of patient care. There was no clear indication whether the managers of departments involved were supportive of the planned interventions and their influence over whether any changes would be fully implemented.

**7.15** The fifth intervention consisted of the introduction of stress management workshops and the impact on mental health plus the effects of changed work practices implemented as a result of workshops on staff mental health.

The intervention took place in a large District General Hospital which had taken part in stage 1 of the research programme in 1994. The results of the initial survey had shown poor levels of mental health (GHQ cases = 33%). The staff counselling unit developed stress management workshops with follow-up focus group sessions in order to identify and change work related and organisational factors associated with poor mental health.

**7.16** The sample group was taken from the Renal Directorate (114 participants) and the comparison group was the Neurosciences Directorate (101) which was comparable in sample size and composition. In October 1995 all staff completed a questionnaire about work roles and GHQ-12.

Following this between November 1995 and February 1996 all staff in the Renal Directorate were asked to attend a stress management workshop. Workshops were three hours in length and included definition of stress, causes of stress, strategies for dealing with stress and action plan for reducing stress: 69% of staff attended, mainly nurses and no medical staff.

**7.17** In March 1996 all measures were repeated. The results showed no significant change in GHQ-12 scores for the whole sample. Once again, the results of this study

might have been affected by reported lack of managerial support for the intervention; therefore, any proposed changes in practice were not implemented as a long term strategy but rather implemented on a short term '*ad hoc*' basis. There was also a highlighted need to adopt a multidisciplinary approach to stress management workshops, enabling identified changes to have more of a chance of being implemented.

7.18 As reported by the research team, such changes are likely to lead to disruption of working patterns and therefore need management support in encouraging change for the benefit of staff mental health.

7.19 It was interesting to note that staff 'training' was not selected as a possible intervention for managing/reducing stress; in the experience of the author, NHS staff who are expected to carry out work tasks for which they have not been trained i.e front line unqualified mental health staff and professional staff who take on management roles, tend to find themselves under considerable pressure, which some find it difficult to cope with. Further research in this area, comparing GHQ-12 measures pre & post training might be useful.



## **8 Conclusion and Summary**

**8.1** Borrill *et al* (1998) concluded that as a result of all studies conducted in their five year research programme, the first systematic investigation of the psychological well-being of the NHS workforce, indicated that whilst there is evidence of the adverse effects of stress at work on employee mental health, there appears to be a lack of commitment to introduce and consistently implement interventions to assist in prevention/reduction of such stress.

**8.2** Borrill *et al* (1998) estimate that over one million people are employed in the U.K by the NHS, which makes it the nation's largest employer.

They also draw attention to the fact that in the Green Paper (DoH 1998), 'Our Healthier Nation', the government urged the NHS to set a good example as an employer in being responsible for the mental well being of it's staff.

**8.3** Based on research presented in this review there would appear to be incongruence between government directives and implementation of long term strategies for the improvement of employee mental health is evident. In other words a 'gap' exists between what is recommended and what happens in practice.

**8.4** In order for the effects of stress to be taken seriously in the NHS it might be seen to be necessary to effect organisational cultural change at management level; as research



indicates it is at this level that failure of commitment to introduce and consistently support an integrated programme of change, on a long term basis will inevitably affect efficacy of outcome of any intervention introduced for the benefit of employee mental health.

8.5 Such results reinforce and support the author's hypothesis that stress levels in the NHS are higher than in other general working populations and are currently largely denied, whilst issues of introduction of interventions to assist in bringing about changes to improve staff morale and improve mental health remain unaddressed.

8.6 The question remains – how can government directives become a reality without a long term planned strategic programme to support aims and objectives? Perhaps one answer might be to begin by adapting the government's Modernising Mental Health Services (DoH, 1998) strategy to 'Modernising Mental Health well being for NHS staff', with a planned, integrative standardised approach to achieving reduction of distress and improvement of mental well being; which in turn could impact on the quality of service delivery and possible reduction of sickness absence rates and associated costs.

8.7 It is evident that research carried out to date has provided valuable insight into this problem of the nature of stress in the NHS working environment, it's effects on staff and possible ways of overcoming this.

It would seem timely to now build on the work carried out by Borrill *et al* and to try to identify and develop efficient standardised interventions to reduce the impact of strain and which long term could benefit all NHS employees.

**8.8** Based on the author's own experience of working in the NHS, and supported by the findings in the studies reported in this review, such standardised approaches to managing stress might begin by ensuring that the following procedures are implemented with an adequate evaluation process.

- Emotional support mechanisms in place to assist health professionals to cope with traumatic incidents, as and when necessary.
- An increase in workload to be balanced with an increase in supervision.
- Any changes that take place in terms of the employee's working pattern to be discussed with that individual in order for them to feel that they have contributed to the decision and retained some control.

Implementing these three changes may go some way to addressing the identified 'gap' between government directives and current practice in the NHS in respect of employee mental health.

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