

PSYCHOLOGICAL WELL-BEING OF MOTHERS IN THE
POSTNATAL PERIOD AND THE ROLE OF VIOLATED
EXPECTATIONS

TOWARDS A MODEL OF POST-TRAUMATIC STRESS

AND RESEARCH PORTFOLIO

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

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1ST AUGUST 1997

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CHAPTER ONE

LITERATURE REVIEW

**PREGNANCY, BIRTH AND PSYCHOLOGICAL WELL-BEING IN
THE POSTNATAL PERIOD**

TARGET JOURNAL:

JOURNAL OF PSYCHOSOMATIC RESEARCH

This paper reviews the childbirth literature, documenting research on the emotional factors affecting the process and outcome of pregnancy, as well as discussing psychological well-being in the postnatal period. Particular emphasis has been placed on reviewing studies which investigate the occurrence of anxiety in the postnatal period rather than depression, and precipitating factors in the development of anxiety symptoms are discussed. The role of expectations is highlighted as an important factor in the outcome of psychological wellbeing postnatally, and the development of a post-traumatic stress model to aid understanding of psychological symptomatology in the postnatal period is discussed and highlighted as an important area of further research.

Keywords: Anxiety; Birth Experience; Expectations; Postnatal; Post-Traumatic Stress; Psychological Well-Being.

Introduction

Childbirth has been described as 'uniquely stressful among normal expected life experiences' [1]. It involves not only profound physiological changes but also psychosocial and psychological changes and adaptations.

The psychological effects of pregnancy and childbirth have been the focus of many research papers over several decades, many of which have investigated the occurrence of psychiatric disorders in the postnatal period. One such disorder which has perhaps been documented the most is postnatal depression. In 1968, Pitt [2] reported that psychiatric disorder is a common characteristic of the postnatal period and that 'at least 10-15% of mothers experience a depressive illness at this time.' The plethora of studies

in this area has led to the development of a self-report scale to screen for postnatal depression in the community [3].

Fewer studies have focused on anxiety symptoms during the postnatal period however much is written about the role of anxiety in pregnancy and its relation to obstetric complications.

The actual birth experience for the mother and subsequent emotional reactions in the postnatal period appears to have been investigated less thoroughly in the literature. This is an important area of research as mothers' perceptions of their birth experience, based on prior expectations, may affect their subsequent psychological well-being postpartum.

Some researchers have proposed a model of post-traumatic stress to help understand the emotional consequences of miscarriage [4]. It may however be hypothesised that this model could also be relevant in explaining the emotional consequences following a birth experience which is perceived as a negative event by some mothers and a disconfirmation of prior expectations.

In this review paper, research investigating the above areas will be discussed, focussing mainly on symptoms of anxiety related to the birth process and the postnatal period rather than on depressive symptomatology. Gaps in the current literature will be highlighted and future research proposed.

The Influence of Psychological Factors on the Outcome of Pregnancy

Several studies have suggested that stress and tension can have an adverse effect upon pregnancy and childbirth. The relationship between emotional factors and obstetric complications has been investigated extensively, especially with regard to anxiety.

In an early review paper by McDonald [5] the most consistent finding reported was that women who experienced obstetric complications had higher anxiety levels during pregnancy than those who had normal pregnancies and deliveries, however no causal relationships were established. Ammal [6] studied the relationship of gynaecological problems to neuroticism in multiparae and found a significant relationship between pregnancy problems and maladjustment score as tested on the Mathew Maladjustment Inventory.

Spielberger and Jacobs [7] stated that anxiety appears to be a very important factor in obstetric complications.

In a study by Edwards and Jones [8] the State-Trait Anxiety Inventory [7] was administered to fifty-three unwed women at the beginning of their third trimester of pregnancy and each week until they went into hospital for delivery. Approximately half of the subjects experienced obstetric complications during the third trimester, irregularities during labour and delivery, or their babies suffered developmental abnormalities. No difference

was found between this group and a normal pregnancy group with regard to trait anxiety, however the women whose pregnancies were normal exhibited a reduction in state anxiety six weeks prior to the birth with an increase in the week just before the birth. In comparison, the group who exhibited complications had consistently higher state anxiety until the week prior to the birth when their state anxiety decreased significantly.

The relationship between maternal anxiety and obstetric complications was further documented by Crandon [9]. The I.P.A.T. Anxiety Self-Analysis Form was administered to a large sample of women during their third trimester of pregnancy. On the basis of this the subjects were split into either a 'high anxiety' or 'normal' group and it was found that the incidence of complications including pre-eclampsia, forceps delivery and prolonged and precipitate labour were significantly higher in the 'high anxiety' group. As stated in McDonald's review paper [5], Crandon was also unable to illustrate a causal relationship between anxiety and obstetric complications and with regard to the anxiety measure used, Crandon did not mention whether this was a measure of state or trait anxiety.

In a separate paper investigating the same sample, Crandon [10] reported that the apgar scores of babies born to highly anxious mothers were significantly less than those born to mothers with normal anxiety scores. This is not surprising as in his previous study [9], Crandon reported that women with high anxiety had a higher incidence of complications. These complications would therefore have had a detrimental affect on the physical health of their babies in many cases, and renders the relationship between maternal anxiety and neonatal well-being somewhat unclear.

Psychological factors have also been related to the 'minor' symptoms of pregnancy as well as to the major. In a retrospective study by Wolkind [11] the Malaise Inventory which assesses somatic symptoms common in neurotic disorders was administered to mothers attending an antenatal clinic. The subjects were also asked to complete the Pregnancy Questionnaire which rates the occurrence of the most common physical symptoms of pregnancy. From this study Wolkind concluded that women who had previous neurotic or psychological difficulties were more likely to report a high number of uncomfortable symptoms during pregnancy. Wolkind does report however, that the absence of previous psychological difficulties does not predict a low occurrence of physical discomfort during pregnancy. It therefore appears that as in the previous studies, a direct causal relationship between emotional maladjustment and pregnancy difficulties has not been found.

Life events which in turn cause psychological stress have also been shown to have an adverse effect on the process of pregnancy [12-14]. Williams et al administered the Schedule of Recent Experience to a group of postpartum mothers who had delivered prematurely and a group who delivered at full-term. Both groups reported similar magnitudes of life events during pregnancy and within the two years prior to conception. No effect was therefore found between life events and the incidence of premature births in this sample. However, Williams cited a study by Schwartz which did find significant differences in life events experienced between mothers delivering prematurely and those whose pregnancies were full-term. Gennaro et al also found a significant relationship between antenatal negative life events and infant morbidity.

Maternal Anxiety in the Postnatal Period

Lips [15] reported that late in pregnancy and in the first month postpartum there is a tendency for mothers to report an increase in the experience of negative emotions. Leifer [16] documented that there is mounting evidence to suggest that early motherhood is experienced as being emotionally stressful by a significant proportion of normal American women. In Leifer's study of first-time mothers she quoted that 'most women were completely unprepared for the extent to which their emotional lives would be disrupted by the advent of motherhood'.

Emotional disturbance was assessed by Ballinger et al [17] in a group of women in the first few days postpartum and at follow-ups of two months and one year. All subjects had normal vaginal deliveries and healthy babies. A semi-structured interview was administered which included asking subjects about depression of mood as well as feelings of anxiety. The General Health Questionnaire, (G.H.Q.), was administered at follow-up. On the third postpartum day 52% of subjects were reported as having some abnormality of mood or anxiety. At the two month follow-up the most frequently reported symptoms were that of anxiety, depression and irritability and fatigue, with the most prominent psychological signs of distress being that of anxiety and depression. It was also found that the majority of women who obtained high scores on the G.H.Q. at the one year follow-up also had high scores at the two month follow-up indicating that postnatal psychological disturbance can be prolonged. It was reported that parity did not affect emotional disturbance.

The prolonged nature of emotional distress in the postnatal period has also been highlighted in a study investigating first time mothers who continued to report emotional reactions fourteen months after the birth [18].

In contrast to the previous studies, Singh and Saxena [19] carried out a cross-sectional study of a sample of pregnant women in India and concluded that state anxiety increases during pregnancy but shows a marked decline immediately after confinement and continues to decrease until reaching normal levels six months after delivery. These conclusions however should be interpreted with some caution as this was a cross-sectional study and changes in anxiety levels across time for individuals could not be monitored. It is also unclear as to whether these mothers were primiparae or multiparae.

Postnatal Anxiety Related to the Birth Process and Outcome

Several studies have investigated the psychological effects of premature births on the parents [20-22]. Thompson et al investigated the psychological adjustment of ninety mothers with very low birthweight infants. Significant psychological distress was found in 33% of mothers at three to six weeks postpartum. In comparison Miles et al found that stress and uncertainty decreased significantly over time in mothers and fathers whose babies were in intensive care units and Casteel reported that the number of affective responses in parents of preterm babies decreased from the hospital to the home.

Some studies have investigated the actual birth process and its affect on the psychological well-being of mothers in the postnatal period, however this has rarely been the focus of research. Engle et al [23] reported that complications during labour and delivery were related to postnatal anxiety and O'Hara et al [24] found delivery complications to be associated with depressive symptomatology in new mothers.

In a study by Ballinger [25] forty-seven women were followed through pregnancy to ten days following delivery. Subjects completed the Wakefield Depression Scale and the Multiple Affect Adjective Checklist, (MAACL), and it was found that women delivered by caesarean section had significantly higher ratings for anxiety and depression in the early postpartum days as compared to those who had spontaneous vaginal deliveries. This study however, did not control for the number of previous deliveries each mother had experienced which may have affected their perception of their experience, nor was there any mention of psychosocial factors which may have confounded the results.

These findings were not replicated in a study by Gjerdingen et al [26] which investigated changes in women's mental health during the first postpartum year following the birth of their first baby. This research documented that mental health outcomes did not appear to be related to type of delivery, ie. vaginal or caesarean. Cox et al [27] found similar results using the Anxiety and Depression Scales of Bedford and Foulds, (SAD), showing no association between anxiety or depression measured at one week and five months postpartum and the method of delivery.

The Role of Expectations in Postnatal Psychological Well-Being

With regard to the birth experience it is perhaps not only the actual process of pregnancy and childbirth which can influence the psychological well-being of mothers in the postnatal period but also, more importantly, their expectations of their labour and birth and their subsequent perception of their overall experience.

Some studies have been primarily concerned with the impact of childbirth education classes on the process of labour and delivery and the mother's ability to cope [28,29]. Bocchese undertook a descriptive study to ascertain whether there were differences in self-efficacy with regard to labour and birth between women attending childbirth education classes and those who did not. The relationship between self-efficacy, satisfaction with the birth experience and anxiety in the postnatal period was also investigated. The conclusions were that pregnant women who attended childbirth education classes had higher self-efficacy than those who did not but that this was not related to satisfaction with the birth or subsequent postnatal anxiety. In contradiction, Sturrock et al found that first time mothers who had attended childbirth education classes showed a trend towards a longer second stage of labour, and increased use of assistance and medication compared to mothers who did not attend antenatal classes, ie they exhibited less self-efficacy. However, no attempt was made in this study to measure mothers' subjective responses toward their birth experience and as Sturrock reported, some researchers have suggested that women who attend education classes have a more positive attitude towards their birth experience and are

more likely to indicate a desire for more children in the future [30].

Expectations in relation to pain experienced during labour and childbirth has also been documented in the childbirth literature. In a large prospective study by Green [31], it was found that anxiety with regard to pain in labour was a strong predictor of negative experiences during birth, a subsequent lack of satisfaction with the overall birth experience and poor emotional well-being postnatally. It has also been cited that medication expectation during labour is an important factor contributing to childbirth outcome [32]. It was found that women who had general anaesthesia had expected to take more medication and were more likely to harbour negative attitudes regarding childbirth.

Terry in 1991 [33] carried out a longitudinal study to investigate the proposed relationship between subjective stress associated with new parenthood and subjects' generalised control beliefs, appraisal of the event, (eg. importance, anticipated difficulty), and event-related characteristics, (eg. delivery complications, infant temperament). It was found that the importance of the event, (ie. having a baby), anticipated difficulty of the event and familiarity with the event were all predictors of postnatal anxiety and appraisal of the event's stressfulness.

Research by the midwifery profession has highlighted and brought together many important factors contributing to the birth experience and the subsequent affect upon postnatal psychological well-being which have so often been over-looked in other studies.

In a paper by Smith [34] the concerns of primiparae and multiparae at one month postpartum were investigated. One of the most frequently expressed concerns of the primiparae and multiparae groups was the labour and delivery which they had experienced. This was reported by approximately one-third of each group. As cited in Smith's study, Konrad [35] quoted that 'the actual experience of childbirth needs to be integrated with the expected experience.' Hans, 1986 [36] stated that if a mother's expectations have not been met with regard to her birth experience then she will require assistance in understanding the experience and working through the loss.

One of the most comprehensive studies to date in the field of childbirth research has been undertaken by Ball [37]. The aim of this study was to ascertain the effects of psychological and social factors and midwifery care upon the emotional well-being of mothers during the first six weeks postpartum.

Ball researched over two-hundred women from the thirty-sixth week of pregnancy until six weeks into the postnatal period. The mother's birth experience as compared to their expectations was analysed as well as their reported feelings after the birth and six weeks later. From this study Ball found that mothers who had low emotional well-being in the postnatal period exhibited symptoms of depression, anxiety and lack of confidence amongst others. Three main parameters which contributed to mother's emotional well-being in the postnatal period were highlighted. These were anxiety and its effects; stress related to life events and postnatal care; and satisfaction with motherhood. The age and parity of the mother, as well as the type of labour and delivery experienced by the mother, were not found to be related

to emotional outcome in the postnatal period. With regard to the overall birth experience just over half of the sample said the birth had been a 'good experience' or 'the best experience of their life'. 31.5% of mothers reported that the experience was 'worse than they had expected', 21.9% said it was 'as they had expected' with 39.4% reporting it to be 'better than expected'. Ball however does not go on to explain the affect that mothers' perceptions of their birth experience had on emotional outcome in the postnatal period.

In an earlier study Ball [38] found a relationship between mothers' reported feelings after the birth and their subsequent emotional well-being six weeks later. This again highlights some continuity of emotional well-being in the postnatal period.

Pierce [39] stated that effective coping in childbirth will be influenced by the 'childbirth schema'. If the birth event is not as expected then the 'childbirth schema' will have to be revised so that the individual can cope more successfully with the next childbirth event. Pierce reported that schemas are important with regard to anticipatory coping, and women may develop cognitive representations of childbirth in order to predict and control the experience.

If an event turns out to be far removed from an individual's expectations and is perceived as negative, then if the underlying schema is not revised, feelings of helplessness and despair may develop. More specifically, symptoms of post-traumatic stress may develop if an individual's experience is outwith their schema or 'normal' representation of that event.

The Occurrence of Post-Traumatic Stress Disorder (P.T.S.D.) Following Childbirth

Explaining the emotional consequences following childbirth within a post-traumatic stress model is an area yet to be thoroughly investigated in the childbirth literature.

P.T.S.D. is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity. The individual's response to the event must involve intense fear, helplessness or horror, (D.S.M. - IV) [40].

P.T.S.D. or symptoms of post-traumatic stress could develop following the 'normal' experience of giving birth if that experience is perceived as 'traumatic' by the mother and/or outwith her expectations.

There are three studies to date which investigate the possible occurrence of P.T.S.D. in mothers following a difficult childbirth or gynaecological procedure [41,42,43]. Menage investigated five hundred women volunteers with regard to psychological stress associated with obstetric and/or gynaecological procedures. Over one hundred women gave a history of an obstetric or gynaecological procedure which they described as "very distressing" or "terrifying" and was "out of the ordinary." These women were then sent P.T.S.D. - 1 questionnaires to complete and it was found that thirty women fulfilled the criteria for the diagnosis of P.T.S.D. (DSM - IIR). When

compared to a group of thirty women without P.T.S.D., it was found that the P.T.S.D. group had a larger number of invasive obstetric or gynaecological procedures compared to those who were not traumatised. Some women had experienced previous traumas which could have led to the development of P.T.S.D., however Menage reported that fourteen women had no antecedent traumas and their symptoms were related to their obstetric or gynaecological experiences.

In a further study by Ballard, four cases were highlighted with symptom profiles suggestive of P.T.S.D. within 48 hours of a difficult delivery. Ballard reported that these symptoms were related to the delivery itself and all four subjects exhibited persistent disorders. Ballard also found an associated depressive illness in each case and two had difficulties with mother -infant attachment. Fones described a case study in which the subject was experiencing symptoms consistent with the diagnosis of P.T.S.D. (DSM - IV) nine years after giving birth to her son. Fones reported that this subject recalled the pain of childbirth vividly and it was this that she feared the most.

In response to an article written by Bishay on nightmares, Beech [44] highlighted the problems of women who suffer severe nightmares a year or more after childbirth. Beech reported that these women appeared to have suffered painful and traumatic deliveries and stated that some women feel they have suffered 'technological rape'.

These studies support the need for further research into the prevalence of P.T.S.D. and post-traumatic stress symptoms following childbirth.

In some articles, discussing the midwife's role following a traumatic pregnancy, the possibility of maternal emotional difficulties in the postnatal period are not even acknowledged, with more emphasis placed upon the baby's condition and well-being [45]. However, a midwife, writing about her own birth experience, reported that she suffered psychologically in the postnatal period following a traumatic delivery and subsequent physical complications [46]. A further study by Simkin [47] on new mothers highlighted that practices involved in the labour and deliveries of normal vaginal births can be very stressful. A convenience sample of women completed the Childbirth Events Stress Survey between ten days and two months postpartum and the most highly stressful events reported included administration of anaesthesia; forceps and vacuum extractor delivery; and limited time with the baby.

Sanderson [48] reported on the benefits postnatal groups can give to new mothers. A questionnaire was developed to establish the views and needs of a group of mothers attending a health visitor clinic and the responses confirmed that clients wished more time with their health visitor, especially in the early postpartum weeks and wanted peer-group support. The word 'support' indirectly emphasises that the postnatal period is a time of major psychosocial and psychological adjustment.

Conclusions and Future Research

From the literature reviewed a relationship has been documented between anxiety and the process and outcome of pregnancy. However, due to confounding factors eg. parity and psychosocial variables, which have not been controlled for, it is unclear as to the causality of this relationship. Leifer [49] cited that first-time mothers are more likely to be anxious than those who have already delivered.

It has been highlighted that mothers who have neurotic psychological difficulties are more likely to perceive the event of childbirth as negative rather than experiencing more complications as compared to a 'normal' control group.

Anxiety has been documented as occurring within the postnatal period along with symptoms of depression and it has been highlighted that emotional disturbance postpartum can be prolonged.

Several factors contributing to the experience of anxiety in the postnatal period have been cited. There is conflicting evidence to support the relationship between premature births and subsequent psychological maladjustment postpartum. The literature concerning prenatal life events and their influence on postnatal psychological well-being has also proved to be inconclusive.

Research investigating the actual labour and birth experience in relation to

postnatal maladjustment has focused on objective complications and has not taken into account, in many cases, the mother's prior expectations of the birth and her subsequent perception and appraisal of the overall event. A birth experience which has violated prior expectations has been described as 'a loss' and mothers have to be helped to integrate the actual experience with the expected experience.

Articles written within the midwifery profession have highlighted the need and mother's expressed wish to have postnatal support groups.

It is therefore emerging from the literature that the role of expectations and mothers' perceptions of their birth experiences are important factors contributing to postnatal psychological well-being. This area however has only been mentioned and not investigated systematically within the research to date.

The occurrence of P.T.S.D. postpartum has been investigated in three studies, the results of which lend support to the hypothesis that following a difficult birth the resulting symptomatology could be best understood within a post-traumatic stress model. Post- traumatic stress symptoms experienced in the postnatal period can be severe and there is a need for further research in this area.

It would be interesting to integrate the role of violated expectations with regard to the mother's birth experience with a model of post-traumatic stress. A birth experience outwith a mother's expectations may not only be experienced as 'a loss' but also as a traumatic event. The research project

which I propose to undertake will hopefully help bridge the gap between mothers' birth experience and the role violated expectations have to play in their perception of the event and subsequent postnatal psychological well-being. It is hypothesised that mothers whose birth experiences turn out to be far removed from their expectations resulting in a negative appraisal of the event may be at risk of developing not only symptoms of depression, but also symptoms of anxiety and more specifically of post-traumatic stress in the postnatal period. The proposed research will therefore bring this model into a normal population of mothers rather than focussing solely on those who have experienced serious obstetric complications.

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CHAPTER ONE

APPENDICES

APPENDIX 1.1

AUTHOR'S NOTES

AIMS AND SCOPE

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References. These should be numbered consecutively in the text in the order in which they are first mentioned and be so denoted in the list. Their form should be that adopted by the US National Library of Medicine, as used in Index Medicus:

1. INGHAM JC, MILLER P McC. Self-referral to primary care: symptoms and social factors. *J Psychosom Res* 1986; 30: 49-56.
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CHAPTER TWO

MAJOR RESEARCH PROPOSAL

**PSYCHOLOGICAL WELL-BEING OF MOTHERS IN THE
POSTNATAL PERIOD AND THE ROLE OF VIOLATED
EXPECTATIONS**

TOWARDS A MODEL OF POST-TRAUMATIC STRESS

MAJOR RESEARCH PROPOSAL

25.3.96

APPLICANTS

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TITLE

Psychological Well-Being of Mothers in the Postnatal Period and the Role of Violated Expectations. (Towards a Model of Post-Traumatic Stress).

SUMMARY

This study will focus on the psychological well-being of mothers following the natural experience of giving birth in light of their expectations and their subsequent experience and perception of the birth. Many research papers have focused on symptoms of depression in the postnatal period but fewer

have investigated symptoms of anxiety and even less with a post-traumatic stress model in mind. There is also a dearth of literature on the actual birth experience and the development of subsequent psychological problems.

In view of this I propose to investigate a group of mothers at a point during their third trimester of pregnancy, gain information on their actual birth experience and follow up postnatally. This research will involve assessing mothers' expectations of their birth in the antenatal period as well as assessing the outcome of their expectations and their perceptions of the overall experience postnatally. Measures of anxiety and depression will be taken antenatally and postnatally using the H.A.D.S. and anxiety symptoms relating to post-traumatic stress will also be assessed. It is thought appropriate to assess anxiety symptoms within a post-traumatic stress model as although giving birth is usually not life threatening or would be defined as traumatic by the professionals, it is the mother's perception of the event which is important and whether the event turns out to be far removed from her expectations. A questionnaire devised by Ball (1994), which assesses emotional well-being, satisfaction with motherhood and family support will also be completed as part of the postnatal follow-up assessment. A personality questionnaire measuring the trait of resourcefulness will be administered in order to investigate the possible affect this trait has on postnatal symptomatology. The mothers will be followed up within a 10 day period after the birth once they have returned home. This study will be carried out in conjunction with the Midwifery and Obstetrics and Gynaecology Departments at Glasgow Royal Infirmary.

INTRODUCTION

To date I have found few research papers which have investigated the effects of the actual birth experience on the subsequent development of psychological problems in the postnatal period. Furthermore, many research papers have focused on postnatal depression with fewer investigating symptoms of anxiety postpartum and the role of violated expectations. I have also yet to find any that use a post-traumatic stress model when investigating anxiety symptomatology in the postnatal period.

Several papers have investigated the psychological impact of hospitalised pre-term infants on their parents (Miles, M.S.; Funk, S.G. et al, 1992); (Casteel, J.K., 1990). Another study by Singh et al (1991), focused on levels of state anxiety at all stages of pregnancy as well as investigating the period up to 6 months postnatally in 691 women living within an urban area of India. In this paper it was found that state anxiety showed a marked drop after birth and continued to decline until it reached normal levels, (ie. equalised that of a control group), six months after the birth. This paper however does not mention the actual birth experiences of these women.

In 1989, S.G. Landsman discussed verbal metaphors and subsequent behaviour in the context of perinatal trauma. This paper however investigated the birth experience from the perspective of the child with regard to their subsequent emotional and behavioural development and not of the mother.

In a paper by A.Crandon (1978), maternal anxiety was investigated in the

third trimester of pregnancy and its relation to subsequent obstetric complications such as forceps delivery, prolonged labour and the incidence of pre-eclampsia. It was found that patients who were classified as having high anxiety had a significantly higher level of obstetric complications as compared to a 'normal' group. However, the patients who suffered obstetric complications were not followed up nor was their anxiety re-assessed in the postnatal period.

Ball, J.A. (1994), researched 279 women from the 36th week of pregnancy until 6 weeks after the birth of their child in order to assess the affect postnatal care provided by midwives had on women adjusting to motherhood. In this study Ball reported, as with an earlier study, (Ball, 1981), that there was a 'relationship between mothers' reported feelings after the birth and their subsequent emotional well-being six weeks later'. The mothers' birth experience and their experience of labour and delivery as compared to their expectations were analysed, as well as their reported feelings after the birth and their subsequent emotional well-being six weeks later.

I have found two papers to date, (Ruble, D.N; Hackel, L.S. et al, 1988); (Hackel, L.S. & Ruble, D.N., 1992), which investigate the effects of violated expectations on changes in the marital relationship following childbirth. The expectations which these authors discussed were with regard to sharing child-care and housekeeping responsibilities.

Slack, B.D. & Boylan, C.H. (1974), investigated several factors which may contribute to childbirth outcome in particular with regard to the experience of pain. These authors found that none of the factors investigated which

included attitudes towards childbirth, medication expectation and antenatal training influenced patients self-report of pain. The underlying factor which contributed to a positive childbirth experience appeared to be the woman's desire to be an active participant in the birth. This paper however does not discuss the role of violated expectations and subsequent psychological well-being in the postnatal period.

With regard to post-traumatic stress, it was cited in *The Psychologist*, July 1995, by P. Slade and C. Lee, that evidence from two studies of miscarriage suggested a post-traumatic stress model to help understand the emotional consequences of this trauma.

The present research study will investigate the affect violated expectations have on the psychological well-being of mothers in the postnatal period with regard to their actual birth experience. This will therefore address one of the issues which Ball investigated in 1994 more fully. As in Crandon's study, (1978), mothers' levels of anxiety will be assessed antenatally, however, mothers will also be followed up postnatally to ascertain any change in their anxiety levels. In addition depressive symptoms will be assessed antenatally and postnatally. Symptoms of post-traumatic stress will also be investigated postnatally as it is hypothesised that mothers whose birth experiences turn out to be far removed from their expectations may be at risk of developing anxiety symptoms of this nature. There is a large gap in the literature with regard to post-traumatic stress and this therefore could form the basis of future research in this area.

AIMS AND HYPOTHESIS

The main experimental hypothesis is that mothers who have undergone a birth experience which has violated their expectations will be more at risk of developing psychological problems postnatally as compared to those who have not had their expectations violated. In more specific terms it is hypothesised that the former group of mothers will present with more psychological problems following the birth, will be less satisfied with motherhood and may be more at risk of developing symptoms of post-traumatic stress as compared to the latter group.

Further questions to be addressed are as follows:-

Is the trait of resourcefulness a possible protecting factor against the development of psychological problems in the postnatal period?

Does family support act as a possible buffer against the development of psychological problems postpartum?

PLAN OF INVESTIGATION

SUBJECTS

The subjects will be mothers who are having their first child. Subjects will be taken from Rottenrow Maternity Hospital and only those falling within Rottenrow's catchment area will be included in the study. Mothers will be excluded from the study if they suffer a still-birth or if there are serious

complications with their child following the birth. A sample of approximately 70-80 mothers will be gathered in order to have at least 50 participants who will be included in the study.

MEASURES

1. A personality questionnaire measuring the personality trait of resourcefulness will be completed as part of the antenatal assessment.
2. The Hospital Anxiety and Depression Scale, (H.A.D.S., Zigmond & Snaith, 1982). This scale has been found to be reliable in detecting states of anxiety and depression in a non-psychiatric population attending a hospital outpatient clinic. This will be completed antenatally and postnatally.
3. Expectations of the Birth Questionnaire. This will be a short questionnaire devised by myself in order to assess mothers' expectations of the labour and actual birth as well as the overall quality of their experience. This will be administered antenatally.
4. Outcome of Expectations Questionnaire. This will be a short self-report questionnaire devised by myself for mothers to complete at home in the postnatal period. This will assess the extent to which mothers' expectations may have been violated and their overall perception of the birth experience.

5. Post-Traumatic Stress Questionnaire. This self-report questionnaire devised by myself will assess the presence of symptoms of anxiety commonly associated with post-traumatic stress. This will be completed postnatally.

6. Emotional Well-Being, Satisfaction with Motherhood and Family Support Questionnaire (Ball, 1994). This questionnaire has been designed as a self-report measure which focuses on positive as well as negative emotions which may be associated with motherhood. This will be completed postnatally.

DESIGN AND PROCEDURE

A random sample of first-time mothers who fall within the Rottenrow catchment area will be taken while attending Professor Greer's antenatal clinic at a point during their third trimester of pregnancy, (ie. at 28-32 weeks gestation). A consent form will be given to the mothers which will inform them of the nature of the study and what their consent to involvement in the study will entail. It will be made clear at this point that they will be required to complete questionnaires at home following the birth. Demographic data will be obtained following which the mothers will be given the personality inventory and the H.A.D.S. to complete. Finally the Expectations of the Birth Questionnaire will be administered. Also within this session the postnatal questionnaires will be explained to the mothers, ie. how to complete them and the process by which these will be returned. It is hoped that this assessment session will take approximately 30 minutes.

The study will have a short-term follow-up in which mothers will be required

to complete further questionnaires once they have returned home following the birth. These questionnaires will include the H.A.D.S.; Outcome of Expectations Questionnaire; Post-Traumatic Stress Questionnaire and Emotional Well-Being, Satisfaction with Motherhood and Family Support Questionnaire. It is hoped that these questionnaires will take approximately 30 minutes to complete.

Before the mothers are discharged following the birth, a member of staff in the hospital, who is involved in the study, will hand out the questionnaires to those mothers participating to take home and complete. These questionnaires will then be collected by the community midwife on her 10th day visit to the mothers' homes. This follow-up will be the main focus of the study however some mothers may be followed up by myself at a six week interval if time allows.

Data will be collected by myself on the actual labour and delivery for each mother and the Apgar score for the baby will be recorded.

Mothers will be allocated to groups for analysis of the results according to the outcome of their expectations. Depending on the results this may form two independent groups ie.those whose expectations are violated, (experimental group), and those whose expectations are not violated or whose experience turned out to be better than expected, (control group). It may however be possible to form three independent groups depending on numbers. The analysis will involve investigating variables between as well as within groups.

SETTINGS AND EQUIPMENT:

Mothers will be seen within Rottenrow Maternity Hospital whilst attending antenatal clinics. Thereafter questionnaires will be completed by the mothers on their own and returned via the community midwife.

DATA ANALYSIS AND COLLATION:

The data will be collated by myself, entered into a computer and analysed using the statistical package SPSS. Names will not be used and the data will remain confidential.

PRACTICAL APPLICATIONS

It is hoped that this study will lend support for the need of some mothers to receive counselling in the postnatal period and for midwives and other health professionals to be aware of the emotional support that may be required at this time. This could be of benefit to the mother's psychological well-being in the long-term and as a consequence to that of her child.

TIME SCALES

It is hoped that the starting date for this study will be May 1996. The antenatal data will be collected over a five to six week period (ie. five to six clinic visits, one a week). It is envisaged that the follow-up questionnaires will be returned within the following six weeks after the antenatal assessment.

ETHICAL APPROVAL

Will be required and has yet to be obtained. The ethics committee at G.R.I. meets once a month.

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CHAPTER TWO

APPENDICES

APPENDIX 2.1

AMENDMENTS TO MAJOR RESEARCH PROPOSAL

AMENDMENTS

1. Due to difficulties recruiting the desired number of subjects in the time allocated for the study, it was decided to widen the catchment area to include four antenatal clinics rather than two. Subjects were also recruited up to 36 weeks gestation rather than 32 weeks, again due to the difficulty in obtaining sufficient numbers.
2. Due to ethical concerns, nurses and midwives were unable to administer the Postnatal Questionnaires or collect these at home-visits. Mothers were therefore given these questionnaires by myself following completion of the Antenatal Questionnaires and asked to complete and return them in a pre-paid envelope after their midwife had carried out her 10th day visit to their home.
3. As a result of administration difficulties, information regarding the actual process of labour and babies' Apgar scores for each subject could not be obtained.

CHAPTER THREE

MAJOR RESEARCH PAPER

**PSYCHOLOGICAL WELL-BEING OF MOTHERS IN THE
POSTNATAL PERIOD AND THE ROLE OF VIOLATED
EXPECTATIONS**

TOWARDS A MODEL OF POST-TRAUMATIC STRESS

TARGET JOURNAL:

JOURNAL OF REPRODUCTIVE AND INFANT PSYCHOLOGY

Psychological Well-Being of Mothers in the Postnatal Period and the Role of Violated Expectations

Towards a model of post-traumatic stress

Abstract

The role of expectations in the development of postnatal psychological disturbance is an area which requires further investigation within the childbirth literature. This prospective study of 50 first-time mothers tentatively concluded that violated expectations, particularly with regard to quality of the birth experience and method of delivery, appeared to have a significant effect on postnatal psychological disturbance, in particular with regard to the development of features associated with post-traumatic stress. This suggests that viewing postnatal symptomatology within a model of post-traumatic stress may be appropriate.

Introduction

Childbirth has been described as 'uniquely stressful among normal expected life experiences' (Brown, 1979). It not only has a major impact on women's physiology but also on their psychosocial and psychological functioning.

The occurrence of postnatal depression has been widely investigated within the childbirth literature, however less emphasis has been placed on

researching anxiety symptomatology postpartum. There is also a dearth of studies which focus on the actual birth experience for the mother and subsequent emotional reactions in the postnatal period.

Some studies have reported that labour and delivery complications can adversely affect the psychological well-being of mothers postnatally, however, this has rarely been the focus of research. (Engle et al, 1990; O'Hara et al, 1984).

In a study by Ballinger (1982), 47 women were followed through pregnancy to ten days following delivery and it was found that those delivered by caesarean section had significantly higher ratings for anxiety and depression in the early postpartum days as compared to those who had spontaneous vaginal deliveries.

It is perhaps not only the actual process of childbirth which can influence the postnatal psychological well-being of mothers but also, more importantly, their expectations of the labour and birth and their subsequent perceptions of their overall experience. Green (1990), found postnatal mood to be related to subjective experiences of labour which in turn was related to antenatal mood.

As cited by Smith (1989), Konrad (1987) quoted that the "actual experience of childbirth needs to be integrated with the expected experience".

Pierce (1994), suggested that effective coping in childbirth will be influenced by 'childbirth schema'. She stated that schemas are important with regard to

anticipatory coping, and women may develop cognitive representations of childbirth in order to predict and control their experience.

Some researchers have proposed a model of post-traumatic stress to help understand the emotional consequences of miscarriage (Walker, 1995). It may however be hypothesised that this model could also be relevant in explaining the emotional consequences following a birth experience which has violated expectations.

If an event turns out to be far removed from an individual's expectations and is perceived as negative, and if the underlying schema is not revised, then feelings of helplessness and despair may develop.

P.T.S.D. is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity. The individual's response to the event must involve intense fear, helplessness or horror (DSM - IV, 1994). It is therefore possible that P.T.S.D. or symptoms of post-traumatic stress could develop following the 'normal' experience of giving birth if that experience is perceived as 'traumatic' by the mother and outwith her expectations.

In a study by Menage (1993), over 100 women gave a history of an obstetric or gynaecological procedure which they described as "very distressing" or "terrifying" and was "out of the ordinary". From this group thirty women fulfilled the criteria for the diagnosis of P.T.S.D. (DSM - IIIR).

In a further study by Ballard (1995), four cases were highlighted with symptom profiles suggestive of P.T.S.D. within forty-eight hours of a difficult delivery. Ballard reported that these symptoms were related to the delivery itself and all four subjects exhibited persistent disorders. Fones (1996), described a case study in which the subject experienced symptoms consistent with the diagnosis of P.T.S.D. (DSM - IV) nine years after giving birth and Beech (1985), highlighted the problems of women who suffer severe nightmares a year or more after childbirth.

The results of these studies lend support to the hypothesis that following a difficult birth the resulting symptomatology could best be understood within a post-traumatic stress model.

This study was undertaken to help bridge the gap between mothers' birth experience and the role violated expectations have to play in their perception of the event and subsequent postnatal psychological well-being. It was hypothesised that mothers who had undergone a birth experience which had violated their expectations would be more at risk of developing psychological problems postnatally as compared to those who had not had their expectations violated, and in particular would be more at risk of developing symptoms of post-traumatic stress. Family support and the trait of 'resourcefulness' were explored with regard to their effect on postnatal symptomatology.

Methods

Subjects

Sixty-three first time mothers within their third trimester of pregnancy were approached to participate in the study. Fifty were included in the final analysis. The mothers attended one of four specified antenatal clinics within Rottenrow Maternity Hospital. Subjects were excluded from the study if they had suffered previous miscarriages/still-births or the outcome of their current pregnancy resulted in a still-birth or complications with their baby. (See Table 1 for summary of demographic data).

Table 1. Summary of Demographic Data. (n=50)

Age Range	16-40(yrs)	
Mean Age	26(yrs)	
<u>Marital Status</u>	<u>n</u>	<u>%</u>
Married	22	44
Cohabiting	14	28
Single	13	26
Separated	1	2
<u>Occupation</u>		
Employed	28	57.1
Unemployed	21	42.9
(n=49. 1 case missing)		
(See Appendix 3.2 for list of occupations - present / previous)		

Measures

Each subject was required to complete Antenatal and Postnatal Questionnaires.

The Antenatal Questionnaires included the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1982); Abbreviated Self-Control Schedule (SCS - A) (Espie 1990), [Devised from Rosenbaum's Self Control Schedule (SCS) (Rosenbaum, 1980)], and the Expectations of the Birth Questionnaire (EBQ) . This questionnaire was devised by the author to assess womens' expectations of their birth experience.

The Postnatal Questionnaires included the HADS; Emotional Well-Being, Satisfaction with Motherhood and Family Support Questionnaire (Ball, 1994); Outcome of Expectations Questionnaire (OEQ), which was devised by the author to assess the extent to which mothers' expectations of their birth experience were violated, and the Impact of the Birth Questionnaire (IBQ). The IBQ, based on the Revised Impact of Events Schedule (Horowitz et al, 1979), was devised by the author to assess the presence of post-traumatic stress (PTS) symptoms related to the birth experience. (See Appendix 3.3 for copies of questionnaires).

Procedure

Women who met criteria for inclusion into the study were identified by clinic staff. Following informed consent, demographic details were noted and the Antenatal Questionnaires administered.

The Postnatal Questionnaires were then explained to the subjects which they were asked to complete once they had returned home following the birth. A specific time was given, ie. after the midwife had carried out her '10 day visit', in order to act as a reminder to complete and return the questionnaires at this time. A stamped addressed envelope was provided.

Follow-ups

Those mothers who indicated high levels of PTS symptoms as measured by the IBQ, were followed up at approximately eight weeks postnatally. The HADS and IBQ were re-administered to assess if any changes had occurred in their symptomatology across time.

RESULTS

Fifty mothers who completed both antenatal and postnatal questionnaires formed the basis of analysis. The number of days between delivery and completing the postnatal questionnaires ranged from 2-64, with a mean of 19.88.

(A summary of the methods of delivery and pain control can be found in Appendix 3.4).

Investigation of main research questions

The outcome of postnatal symptomatology was measured using the total scores from the Impact of the Birth Questionnaire (IMPBIRTOT); the Postnatal Anxiety and Depression scales of the HAD (PHADANX),(PHADDEP) and the 'Emotional Well-Being' factor score, (EWB), from the Emotional Well-being, Satisfaction with Motherhood and Family Support Questionnaire. The occurrence of 'Baby Blues' in hospital and at home, (BBHOSP); (BBHOME), as recorded in the OEQ, were also used as outcome measures.

All questionnaire scores were normally distributed apart from the IMPBIRTOT scores which formed a bimodal distribution. This distribution was therefore categorised into those subjects who scored <10 as compared to those who scored >10 (IMPBIR2) Due to the large percentage of subjects scoring zero it was also felt appropriate to look at those who scored zero as compared to those who reported some PTS symptomatology. (IMPBIR3). (See Appendix 3.5 for distributions of scores).

It was hypothesised that mothers who had a violation of expectations would present with higher IMPBIRTOT; PHADANX and PHADDEP scores and lower EWB scores, as well as having a higher occurrence of 'Baby Blues'. Where the direction of results was predicted, 1-tailed significances were reported. Parametric or non-parametric analyses were carried out depending on the distribution of scores and the numbers in each group analysed.

Antenatal versus Postnatal HAD scores

The difference between antenatal and postnatal HADANX/DEP scores within the group was investigated. By comparison of means no significant differences were found. (See Appendix 3.6 for results).

Reported quality of the birth experience:- Q.6(b). (OEQ)

Subjects were divided into three groups depending on the reported quality of their birth experience. (See Table 2 below).

Table 2. Reported quality of the birth experience. (n=49.- One case missing).

<u>Reported Quality</u>		
	<u>n</u>	<u>valid %</u>
Negative	5	10.2
Neutral	16	32.7
Positive	28	57.1

All mothers who reported a 'negative' birth experience had expected a 'neutral' or 'positive' experience.

Kruskal-Wallis One-Way Anovas were performed to investigate if overall quality of the birth experience had a significant effect on postnatal symptomatology. It was predicted that the 'negative' group would experience more postnatal symptomatology as compared to the 'neutral' or 'positive'

groups. No significant differences were found between groups with regard to PHADANX; PHADDEP or EWB scores, although the 'negative' group had a higher mean rank value on PHADDEP scores.

The reported quality of the birth experience did have a significant effect on IMPBIRTOT scores. From Mann-Whitney post-hoc analysis significant differences were found between the 'negative' and 'neutral' groups as well as between the 'negative' and 'positive' groups ($U=12.5$; $p=0.014$; $U=11.5$, $p=0.001$).

Chi-Square analyses were performed to investigate differences between groups with regard to IMPBIR2; IMPBIR3 and 'Baby Blues'.

It was found that each subject who perceived their birth experience as 'negative' had some (PTS) symptomatology, as compared to half in the positive group, (14 out of 28, 50%) and (12 out of 15, 80%) in the 'neutral' group. Only one out of 28 (3.57%), in the 'positive' group scored >10 on the IBQ, as compared to (3 out of 5, 60%), in the 'negative' group and (3 out of 15, 20%) in the 'neutral group'.

No significant differences were found with regard to 'Baby Blues'.

(See Table 3 for full results).

Table 3. Comparisons between ‘reported quality of the birth’ groups across principal outcome measures.

<u>VARIABLES</u>	<u>† n</u>	<u>test</u>	<u>effect</u>	<u>d.f.</u>	<u>p</u>	<u>post-hoc</u> <u>analysis</u>
IMPBIROT	48	K-W	H=11.6239	2	.002*	Neg.>Neu.* Neg.>Pos.*
IMPBI2	48	CHISQ	$\chi^2=11.35849$	2	.002*	
IMPBI3	48	CHISQ	$\chi^2=6.90398$	2	.016*	
PHADANX	49	K-W	H=2.3089	2	.158	
PHADDEP	49	K-W	H=3.5357	2	.085	
EWB	48	K-W	H=2.9667	2	.113	
BBHOSP	49	CHISQ	$\chi^2=1.16355$	2	.279	
BBHOME	49	CHISQ	$\chi^2=1.37114$	2	.252	

†(some cases missing)

Violation of Birth Experience Expectation (Q.6a)

This was assessed by responses to Q. 6a in the OEQ, collapsed into 2 categories. This was because numbers in the original 5 categories were small. Responses ‘much better than expected’, ‘a little better than expected’ and ‘as expected’ were scored as a ‘non-violation’, and ‘a little worse than expected’ and ‘much worse than expected’ as a ‘violation’.

Fourteen subjects (28.6%), were in the ‘violated’ group, with 35 (71.4%), in

the 'non-violated' group. (n=49. - 1 case missing).

No significant differences were found between groups with regard to IMPBIRTOT scores, however, the 'violated' group's mean rank was higher than the 'non-violated' group, approaching significance at 0.05 level. It was also found that a significantly higher proportion of subjects in the 'violated' group scored >10 on the IBQ (5 out of 13, 38.46%), as compared to the proportion of subjects in the 'non-violated group' (2 out of 35, 5.71%).

Mann-Whitney analysis highlighted significantly higher PHADDEP scores in the 'violated' group, and from Chi-Square analysis, a higher proportion reported BBHOSP, 10 out of 14, (71.43%) as compared to the 'non-violated' group. (16 out of 35, 45.71%). This difference approached significance at 0.05 level.

No significant differences were found with regard to PHADANX; EWB scores or incidence of BBHOME. (See Table 4 for full results).

Table 4. Comparisons between ‘violation’ and ‘non-violation’ groups, (Q.6a), across principal outcome measures.

<u>Variable</u>	<u>+n</u>	<u>Test</u>	<u>Effect</u>	<u>d.f</u>	<u>p</u>
IMPBIROT	48	M-W	U=163		.062
IMPBI2	48	CHISQ	$\chi^2=8.16057$	1	.002*
IMPBI3	48	CHISQ	$\chi^2=.16835$	1	.341
PHADANX	49	M-W	U=209		.212
PHADDEP	49	M-W	U=135.5		.007*
EWB	48	M-W	U=182		.145
BBHOSP	49	CHISQ	$\chi^2=2.65485$.052
BBHOME	49	CHISQ	$\chi^2=.13754$	1	.355

+(some cases missing)

Overall Violation Score

The second method used to measure birth experience violation was to summate the responses on each question which assessed violation in the OEQ with regard to various aspects of the mother’s birth experience. This gave a total violation score (VIOSCORE). (Due to negative values, the lower the VIOSCORE, the greater the violation). The questions selected for the total score assessed violation with regard to outcome of length of labour (Q.1); experience of pain (Q.2a); type of pain control (Q.3a); relief from pain (Q. 4a); and type of delivery (Q. 5a). Questions 1, 2a and 4a were recoded in the same manner as Q.6a, and questions 3a and 5a were recoded as a ‘violation’ if the outcome was not as expected and as ‘non-violation’ if the

outcome was as expected. (See Appendix 3.7 for distribution of VIOSCORES).

A Spearman Rank Order Correlation was performed on the variables 'experience of pain' and 'relief from pain'. ($r = 0.502$, $p = 0.000$). ($N=49$, 1 case missing). Although a correlation of .502 was found, this accounts for only 25% of explained variance and therefore it was decided to include both in the analysis.

Spearman Rank Order Correlations were performed between VIOSCORE and IMPBIRTOT; PHADANX; PHADDEP and EWB scores. It was predicted that the lower the VIOSCORE (ie. the greater the violation), the higher the PHADANX/PHADDEP scores and the lower the EWB score. However, no significant correlations were found. (See Appendix 3.8 for results).

Mann-Whitney tests were performed to investigate if VIOSCORE had an effect on IMPBIR2/3 and on the occurrence of BBHOSP/HOME. No significant differences were found, however, subjects scoring >10 on the IBQ had a lower mean rank VIOSCORE than those scoring <10 . (Approaching significance at 0.05 level). (See Appendix 3.8 for results).

It was also predicted that mothers who reported a 'negative' birth experience would have lower violation scores. From a Kruskal-Wallis One-Way Anova a difference was found between the groups, with the 'negative' group scoring lower than the neutral and positive groups, the greatest difference observed being between the 'negative' and 'positive' groups. ($H=4.4271$; $d.f=2$; $p=.055$) (Approaching significance at 0.05 level). ($n=48$ - 2 missing cases).

Individual Violation Variables and their Effect on Postnatal Symptomatology
(Questions 1, 2a, 3a, 4a, 5a, from OEQ).

Again each variable was analysed as two groups - 'violated' and 'non-violated' group. Mann-Whitney tests; t-tests for independent samples; or Chi-Squares were applied.

Some significant differences were found in three variables, Q1, Q3a, Q5a. No significant differences were found with regard to Outcome of Experience of Pain (Q.2a), or Outcome of Relief Experienced form Pain Control (Q.4a). (See Appendix 3.9 for non-significant results).

Q1. Outcome of Length of Labour:

The 'violated' group had significantly higher PHADDEP scores than the 'non-violated' group ($U=181.5$; $p=0.0421$).

Q3a. Outcome of Method of Pain Control:

The 'non-violated' group had higher scores on EWB as compared to the 'violated' group, nearing significance at 0.05 level. ($t=-1.55$; d.f.=47; $p=0.0640$); ($N=49$ - 1 missing case). Also a higher proportion of the 'violated' group scored >10 on the IBQ (5 out of 22, 22.73%), as compared to (2 out of 27, 7.41%) in the 'non-violated' group. This difference approached significance at 0.05 level. ($\chi^2=2.32351$; d.f.=1; $p=0.064$).

Q5a. Outcome of Method of Delivery:

The 'violated' group had significantly higher IMPBIRTOT scores than the 'non-violated' group. A significantly higher proportion of the 'violated' group had some PTS symptomatology (20 out of 26,76.9%), as compared to the 'non-violated' group, (11 out of 23, 47.83%). Six out of 26 (23.08%) of subjects in the 'violated' group had scores >10 on the IBQ compared to 1 out of 23 (4.35%) in the 'non-violated' group. A significantly higher proportion of subjects in the 'violated' group (18 out of 26,69.23%) reported BBHOSP compared to the 'non-violated' group (9 out of 24, 37.5%). (See Table 5 for results). (See Appendix 3.10 for frequencies and percentages of subjects in 'violated'/'non-violated' groups for each variable).

Table 5. Comparisons of violation/non-violation across principal outcome measures. (Q. 5a).

Variable	⁺ n	Test	Effect	d.f	p
IMPBIRTOT	49	M-W	U=149		.001 [*]
IMPBIR2	49	CHISQ	$\chi^2=3.49610$	1	.031 [*]
IMPBIR3	49	CHISQ	$\chi^2=4.44589$	1	.018 [*]
PHADANX	50	T-TEST	t=.06	48	.476
PHADDEP	50	T-TEST	t=1.55	48	.064
EWB	49	T-TEST	t=-.87	47	.196
BBHOSP	50	CHISQ	$\chi^2=5.05853$	1	.012 [*]
BBHOME	50	CHISQ	$\chi^2=.42662$	1	.257

⁺(some cases missing)

Further Analysis of Outcome of Method of Delivery (This variable was analysed further due to the significant effects on postnatal symptomatology).

Method of Delivery - Same or Different than expected

Some mothers who reported their deliveries as 'not as expected' did not have a different method of delivery than expected.

Nineteen mothers, (38%), had a different delivery than expected. Each had expected a 'normal' delivery, however their actual experience was of a more invasive procedure eg forceps, caesarean or episiotomy. Thirty-one (62%) had the same delivery as expected.

Mann Whitney tests highlighted significantly higher IMPBIRTOT scores in the 'different delivery' group as compared to the 'same delivery' group. ($U=184.5$; $p=0.017$).

From Chi-Square analyses it was found that a significantly higher proportion of mothers in the 'different delivery' group scored >10 on the IBQ (6 out of 19, 31.58%), as compared to those in the 'same delivery' group (1 out of 30, 3.33%). ($\chi^2=7.57924$; d.f.=1; $p=0.003$); ($N=49$ - 1 missing case). With regard to BBHOSP 15 out of 19 (78.95%), in the 'different delivery' group reported this as compared to 12 out of 31 (38.71%) in the 'same delivery' group. ($\chi^2=7.67821$; d.f.=1; $p=0.003$).

No further significant results were found. (See Appendix 3.11 for non-significant results).

Happy/Unhappy with different delivery

It was predicted that mothers who were unhappy with a different delivery would suffer more postnatal symptomatology than those who were happy/neutral.

Six (31.6%), were unhappy with a different delivery, compared to 13 (68.4%), who were happy/neutral. (n=19). No-one was unhappy with the same method of delivery as they had expected.

From Mann-Whitney tests it was found the mothers who were unhappy with a different delivery had significantly higher IMPBIRTOT scores as compared to those who were happy/neutral. (U=11; p=0.006).

Chi-Square analyses also revealed that in the 'unhappy' group a significantly higher proportion of subjects scored >10 on the IBQ (4 out of 6, 66.67%), as compared to the happy/neutral group (2 out of 13, 15.38%). ($X^2=4.99671$; d.f=1; p=0.013). The 'unhappy' group also had a higher proportion of subjects exhibiting some PTS symptomatology (6 out of 6, 100%), as compared to the group who were happy/neutral (8 out of 13, 61.54%). ($X^2=3.13187$; d.f=1; p=0.038).

No other significant differences were found. (See Appendix 3.12 for non-significant results).

Analogue Scales

The analogue scales in the EBQ and OEQ were not used as outcome measures as it was believed that they would be more susceptible to the effects of time on subjects' responses and not give a true reflection of outcome. It is interesting to note however, that mothers' reports of their expected pain was more than what they reported to have actually experienced. ($T=-2.0944$; $p=.036$). No significant differences emerged with regard to overall quality of the birth experience. ($T=-.5132$; $p=.608$). (Wilcoxon Signed- Ranks).

Social Support

Every subject in the study had some form of social support, with 35 mothers, (70%), living with their partner. A higher proportion of mothers not living with their partner (9 out of 15, 60%), reported BBHOME as compared to (10 out of 35, 28.57%), who lived with their partner. ($\chi^2=4.40213$; d.f.=1; $p=0.036$; 2-tailed). It was found however, that more mothers living with their partner scored >10 on the IBQ (7 out of 34, 20.59%), as compared to the group who did not live with their partner, all scoring <10 . ($\chi^2=3.60294$; d.f.=1; $p=.058$; 2-tailed). (Nearing significance at 0.05 level) ($n=49$ - 1 case missing). No other significant differences were found. (See Appendix 3.13 for non-significant results).

Resourcefulness

Resourcefulness scores did not correlate with IMPBIRTOT, PHADANX, PHADDEP, or EWB scores. (See Appendix 3.14 for results). Therefore it appears that the measure of resourcefulness did not predict outcome of postnatal symptomatology. T-tests were performed to investigate if resourcefulness had an effect on the occurrence of 'Baby Blues'. It was found that mothers who reported BBHOSP had higher resourcefulness scores. This is not however in the predicted direction. ($t=1.86$; $d.f=48$; $p=0.0345$). Resourcefulness did not have an effect on BBHOME. ($t=.26$; $d.f=48$; $p=0.399$).

Follow-ups

Seven mothers exhibited high scores on the IBQ of which 4 returned follow-up questionnaires around 2 months after the completion of the Postnatal Questionnaires. No significant differences were found between postnatal and follow-up scores on the HADS or IBQ. (See Appendix 3.15 for results).

DISCUSSION

It was hypothesised that mothers who had undergone a birth experience which had violated their expectations would have higher levels of postnatal symptomatology as compared to those whose expectations were not

violated, and in particular would be more at risk of developing symptoms of post-traumatic stress. Menage (1993), reported that some women who described their birth experience as “out of the ordinary” went on to develop PTSD. The term “out of the ordinary” suggests that the birth experience was not as some mothers had expected and as Pierce (1994) reports, schemas are important with regard to anticipatory coping in order to predict and control an event. Therefore, if an individual's birth experience is far removed from their normal representation or expectations of the event, and is perceived as being out of their control or outwith what they had predicted, then it could be suggested that symptoms of post-traumatic stress may develop in the postnatal period. Indeed, giving birth has been described as ‘uniquely stressful among normal expected life experiences’ (Brown, 1979).

Main Analysis

Mothers who perceived the quality of their birth experience as ‘negative’ reported higher levels of PTS symptomatology and had a significantly higher degree of violation, as measured across individual violation variables, as compared to mothers in the ‘neutral’ or ‘positive’ groups. It was also found that those mothers who reported their overall birth experience to be a violation of their expectations exhibited significantly higher scores on the IBQ; had higher levels of depression and reported a higher occurrence of BBHOSP than those who did not report a violation.

VIOSCORE did not have a significant effect on outcome measures, although subjects scoring >10 on the IBQ appeared to have a greater degree of

violation. It appeared therefore, that the cumulative effect of violation was not a good predictor of postnatal symptomatology, whereas individual violation variables could predict more. The variables which had significant effects on postnatal symptomatology were 'outcome of length of labour'; 'outcome of method of pain control', and 'outcome of method of delivery'. Those mothers whose length of labour was violated had significantly higher levels of depression than the 'non-violated' group and those whose method of pain control was violated had lower EWB scores and higher scores on the IBQ, although these differences were not significant.

With regard to 'outcome of method of delivery' subjects whose delivery was not as expected were more likely to have some PTS symptomatology; have significantly higher scores on the IBQ and report a significantly higher occurrence of BBHOSP as compared to those who reported their delivery to be 'as expected'. Mothers who reported their delivery as being 'not as expected' did not necessarily have a different method of delivery but appeared to be thinking of other aspects of the delivery when answering this question. It was highlighted however, that mothers who had a different method of delivery than expected also had significantly higher levels of PTS and a higher occurrence of BBHOSP than those who had the same method as expected. Of those mothers who had a different delivery, each experienced a more invasive delivery procedure than expected. These results are similar to those found by Ballinger (1982), who reported that women delivered by caesarean section had higher ratings for anxiety and depression in the early postpartum days as compared to those who had spontaneous vaginal deliveries.

It was also found that mothers who were 'unhappy' with a different delivery were significantly more likely to experience some PTS symptoms and have higher scores on the IBQ compared to those who were happy/neutral. This is not surprising as the delivery is probably the most significant part of the birth process for the mother. This is highlighted in Ballard's study, (1995), who reported that mothers who had symptom profiles suggestive of PTSD 48 hours after a difficult delivery developed these symptoms in response to the delivery itself.

No significant differences were found between 'violation/non-violation' groups and the outcome measures PHADANX and BBHOME. As the PHADANX Scale does not measure anxiety symptoms directly related to a birth experience then perhaps this was not as sensitive an outcome measure as compared to the IBQ. BBHOME was also not affected by violation as compared to BBHOSP. This could be due to the fact that the duration of 'Baby Blues' is often short-lived and mothers only associate the term 'Baby Blues' with being in hospital. Pitt (1973), described the 'Baby Blues' as a "trivial fleeting phenomenon".

It was also found that violation of experience of pain or relief from pain control did not have an effect on postnatal symptomatology. The fact that violation of the method of pain control did have an effect could be due to mothers' perceived control over their labour and birth. In a paper by Thune-Larsen (1988), it was found that loss of control and dissatisfaction with coping in the delivery process was related to postnatal emotional disturbance.

Social Support

The effects of social support on postnatal symptomatology were unclear, although mothers who lived with their partner had a lower incidence of BBHOME, perhaps due to their partner providing more help and support compared to those who did not live with their partner.

Resourcefulness

This trait did not appear to be a protecting factor against the development of postnatal symptomatology in general. However, the SCS - A may not have assessed areas of resourcefulness directly related to the experience of giving birth.

Follow-ups

These mothers all reported a negative birth experience and had deliveries which involved more invasive procedures than they had expected eg. caesarean sections or forceps deliveries, which were viewed as a violation of expectations. Their method of pain control was also different from that expected. Two mothers' IBQ and HADANX scores had increased at follow-up. One mother who is a nurse reported that she now becomes upset when working in the operating theatre as this reminds her most of her delivery. Another mother, whose IMPBIRTOT score had decreased at follow-up, described her birth as "horrible". Her symptoms, however, appeared to be short-lived.

From the follow-ups it is not possible to say whether these individuals had developed, or could be given a diagnosis of PTSD. The assessment measure used was not standardised and did not have cut-off scores, and the sample of mothers investigated in this study did not experience births which were significantly 'abnormal' to be able to state that they were exhibiting symptoms of post-traumatic-stress. It can only be said that those mothers who were followed-up reported features which would normally be associated with post-traumatic stress and that their score on the IBQ fell within the group who exhibited the highest scores on this questionnaire. It is also impossible to say from this study if the symptoms reported on the IBQ were acute or chronic in nature as mothers were followed up within a relatively short time period following the birth.

Conclusions

In summary it can be tentatively concluded that violation, in particular with regard to method of delivery and perceived quality of the overall birth experience, can affect levels of postnatal psychological symptomatology especially with regard to features of avoidance and intrusion normally associated with post-traumatic stress. However, due to the absence of severe birth complications within this group of mothers, it cannot be said that any experienced an event so traumatic that it could be stated that they had developed symptoms of post-traumatic stress.

It should also be kept in mind that subjects' psychiatric and psychological histories as well as their mood antenatally may have had an effect on

observed psychological symptomatology in the postnatal period. Green (1990), found antenatal mood to be an important predictor of postnatal mood in a large prospective study of 825 women. Therefore, observed postnatal symptomatology may not have been directly related to the birth experience and may have been affected by antenatal mood.

Mothers' attitudes towards childbirth and motherhood was also not taken into account. If mothers did not want to have a baby or they perceived the role of being a mother as negative then this may have had an effect on the reported levels of psychological symptomatology. Indeed, this may also have resulted in responses to the IBQ being similar to what may be expected in light of violated expectations, eg. 'trying to remove the birth from memory'; 'having waves of strong negative feelings about the birth'. Responses like this may therefore reflect a general negativity about having a baby and being a mother rather than as a result of violated expectations and the development of PTS symptoms. It is also the case that those mothers who perceived their birth experience to be a violation of their expectations may have experienced more intrusive recollections of the event and avoided thinking about the event as a consequence of perceiving their experience as unpleasant and not due to the development of PTS symptoms.

The time period in which mothers completed the postnatal questionnaires may also have affected their subjective reports of postnatal symptomatology, eg. 2-64 days after the birth. The longer the time period between the birth and completing the postnatal questionnaires, the less reliable mothers' memories of the event would be which in turn would affect their overall

perception of the event. It is also possible that other life events may have occurred before completing the questionnaires which may have affected reports of postnatal psychological symptomatology.

It is also the case that if mothers completed the postnatal questionnaires too soon after the birth then hormonal changes related to the birth may have had an effect on their overall perception of their birth experience and their reports of postnatal symptomatology. It has been noted by Cox (1982), that postnatal blues in the first ten days after delivery is reported in up to 50% of subjects in some studies and Wilkie & Shapiro (1992), have highlighted that various possible biological determinants have been investigated and shown to be associated with the 'Baby Blues'.

It should also be noted that further differences may have been found on other outcome measures, eg. depression, if the stringencies applied to statistical testing due to the differing group numbers had been relaxed

From this study it is difficult to make a direct causal link between violated expectations and the occurrence of psychological symptomatology in the postnatal period in particular with regard to the development of PTS symptoms. It can be said however, that mothers whose expectations were violated did exhibit more features normally associated with PTS as compared to those whose expectations were not violated.

Further research

A larger prospective study is required to analyse the prevalence of PTS symptomatology in a population of first-time mothers. However, the initial model underlying the role of violated expectations and the development of PTS symptoms should be modified, taking into account the above factors. Aspects of the birth experience which may affect postnatal symptomatology should be investigated further and in more detail perhaps using semi-structured interviews with mothers in the postnatal period, as well as investigating the characteristics of women who experience violation but have no adverse psychological sequelae. Further measures of antenatal mood would also be advantageous. As Thune-Larsen & Moller-Pederson (1988) stated, it would be important in future research to take into account each mother's hormonal status following the birth; their attitudes to having a baby and to motherhood; previous psychological and psychiatric history and the influence of psychosocial factors such as life events. Finally, factor analysis of the IBQ is required to highlight what items are most highly related to violation of birth expectations and a longer follow-up is indicated to assess if reported symptoms are acute or chronic in nature.

Although further research is required, this preliminary study has highlighted the possible role violated expectations can play in the development of psychological disturbance postpartum and that this should be brought to the attention of midwives and health visitors. Investigating this within a model of post-traumatic stress may be more appropriate in a sample of mothers who have experienced more serious obstetric or gynaecological complications

than was observed in the present study, however, this research did highlight that mothers do experience features normally associated with post-traumatic stress in the postnatal period and that this is possibly as a result of violated expectations.

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CHAPTER THREE

APPENDICES 3.1 - 3.15

APPENDIX 3.1

COPY OF AUTHOR'S NOTES

Notes for Contributors

Journal of Reproductive and Infant Psychology welcomes reports of original research and creative or critical review articles which make an original contribution. Articles should not currently be submitted for publication elsewhere.

Topics of interest to the journal include medical, behavioural, cognitive, affective, dynamic, psychological, societal and social aspects of: fertility and infertility; menstruation and menopause; pregnancy and childbirth; antenatal preparation; motherhood and fatherhood; neonatology and early infancy; infant feeding; early parent-child relationships; postnatal psychological disturbance and psychiatric illness; obstetrics and gynaecology including preparation for medical procedures; psychology of women.

The journal also publishes brief reports, comment articles and special issues dealing with innovative and controversial topics. A review section reports on new books and training material.

Studies of both human and animal subjects are welcome.

Papers should be sent in the first instance to any one of the Editors:

Anne Walker, Department of Psychology, University of Leeds, Leeds LS2 9JT, UK;

David Messer, Psychology Division, University of Hertfordshire, Hatfield, Herts AL10 9AB, UK;

John Worobey, Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ 08903-0270, USA;

Dieter Wolke, Dr Von Haunersches Children's Hospital, University of Munich, D-8000 Munich 2, Germany.

Contributions should be as concise as possible and should not normally exceed 5000 words or the equivalent lineage including tables and figures. The title should be brief but precise. Each paper should be accompanied by an abstract of not more than 200 words.

Papers should be typed on A4 or equivalent paper, on one side, double spaced with margins of not less than 3.5 cm. Sheets should be numbered consecutively at the head. The top copy and two good copies should be submitted.

Papers are refereed anonymously. The author's name and address should therefore appear under the title on a separate page. The title and abstract should appear on the first page of text. Authors who wish to ascertain in advance the criteria on which submissions are judged may obtain a copy of the blank referee's form from the editors.

Tables should be typed double spaced on separate sheets, or spaced sufficiently to be distinct in the case of small tables. They should be numbered in sequence in arabic numerals and referred to in the text as 'Table 1' etc. Large tables of more than six lines should be titled in order to make the contents comprehensible independently of the text.

Diagrams, graphs, drawings and half-tone illustrations should be on a separate sheet labelled 'Fig. 1' and so forth. Each sheet should carry at the top the title of the article. Where possible they should be submitted as artwork ready for photographic reproduction, larger than the intended size. Where more than one figure is submitted, they should as far as possible be to the same scale. When submitting articles on disk (see below) figures should be supplied as separate TIFF or EPS files if possible.

References in the text should cite the author's name followed by the date of publication unless there are more than two authors where only the first author's name should be given followed by 'et al'. References should be listed at the end of the paper in alphabetical order by first author, but including all authors, in the following format with titles of articles, books and journals given in full.

Berryman, J. C. and Windridge, K. C. (1993) Pregnancy after 35: A preliminary report on maternal-fetal attachment. *Journal of Reproductive and Infant Psychology*, 11: 169-174.

Berryman, J. C., Thorpe, K. J. and Windridge, K. C. (1995) *Older Mothers: conception, pregnancy and birth after 35*. Pandora, London.

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SI units should be used for all measurements. Imperial measurements may be quoted in brackets. Where studies involve small numbers of subjects, both numbers and percentages of groups should be given.

Authors are advised to avoid sexist sentiments and language, except insofar as these form part of a study.

After notification of acceptance of a paper, authors should, if possible, send a copy of the final version in PC format as a word-processed document on a 3.5" or 5.25" floppy disk (Apple-Macintosh formats can be accepted, but not Amstrad's Locoscript on CF2 disks) to the accepting editor.

Manuscripts and correspondence concerning publication of articles will only be kept for 3 years by the Editors.

Page proofs will be sent to the author submitting each article. Correction of typographical and other minor errors only will be permitted at this stage. Textual alterations may be charged to authors in exceptional circumstances.

Fifty offprints of each paper are supplied free to the author nominated for correspondence, for further distribution, together with a copy of the issue concerned. Additional offprints may be purchased by returning to Carfax Publishing Company the order form enclosed with proofs. Offprints are sent about three weeks after publication.

For further guidance on general aspects of manuscript preparation authors should consult APA or BPS Manuals for Contributors.

APPENDIX 3.2

LIST OF OCCUPATIONS - PRESENT OR PREVIOUS **BASED ON STANDARD OCCUPATIONAL CLASSIFICATION** **(HMSO 1990)**

PRESENT OCCUPATION (n=49 - 1 case missing)

	<u>n</u>	<u>valid %</u>
MANAGERS/ADMINISTRATION	1	2
PROFESSIONAL	4	8.2
ASSOCIATE PROFESSIONAL/TECHNICAL	7	14.3
CLERICAL/SECRETARIAL	9	18.4
PERSONAL/PROTECTIVE	2	4.1
SALES	4	8.2
OTHER	1	2.0
UNEMPLOYED	21	42.9

PREVIOUS OCCUPATION OF THOSE UNEMPLOYED AT TIME OF STUDY

(n=21)

	<u>n</u>	<u>valid %</u>
ASSOCIATE PROFESSIONAL/TECHNICAL	1	4.8
CLERICAL/SECRETARIAL	2	9.5
CRAFT/RELATED OCCUPATIONS	1	4.8
PERSONAL/PROTECTIVE	4	19.0
SALES	3	14.3
PLANT/MACHINE OPERATIVES	2	9.5
OTHER	4	19.0
UNEMPLOYED	4	19.0

APPENDIX 3.3

COPIES OF QUESTIONNAIRES

ROSENBAUM SCS (SHORT FORM)

I.D. NUMBER: _____

UNIT NUMBER: _____

DATE: _____

DIRECTIONS: Indicate how characteristic or descriptive each of the following statements is of you by using the code given below.

- +3** very characteristic of me, extremely descriptive
- +2** rather characteristic of me, quite descriptive
- +1** somewhat characteristic of me, slightly descriptive

- 1** somewhat uncharacteristic of me, slightly undescriptive
- 2** rather uncharacteristic of me, quite undescriptive
- 3** very uncharacteristic of me, extremely nondescriptive

1. When I am faced with a difficult problem ,
I try to approach its solution in a systematic way. ☐
2. When I am depressed, I try to keep myself
busy with things that I like. ☐
3. My self-esteem increases once I am able
to overcome a bad habit. ☐
4. When I feel I am too impulsive, I tell myself
"stop and think before you do anything". ☐
5. Facing the need to make a difficult decision,
I usually find out all the possible alternatives
instead of deciding quickly and spontaneously. ☐
6. I usually plan my work when faced with a
number of things to do. ☐

EXPECTATIONS OF THE BIRTH
QUESTIONNAIRE

UNIT NUMBER: _____

IDENTIFICATION NUMBER: _____

This questionnaire has been devised to record your expectations of your future birth.

Please read each statement carefully and follow the instructions in brackets.

Do not take too long thinking about your answer as your first response is more important.

There are no right or wrong answers.

Please fill in the date you are completing the questionnaire: __/__/__

Please turn over.

QUESTIONNAIRE

1.

The length of your labour:

(please state below how many hours you expect to be in labour.)

_____ (hours)

2.

Experience of pain:

(please place a vertical line on the scale below to indicate the level of pain you expect to experience during your labour and delivery.)

|_____|
No Average Worst
Pain Pain Pain

3.

Pain Control:

(please tick a box below to indicate which method of pain control you expect to require during your labour and delivery.)

No pain control_____ ☐

Gas and air_____ ☐

Pethidine_____ ☐

Epidural_____ ☐

Combination_____ ☐

(please specify)_____

Other_____ ☐

(please specify)_____

4.

Relief of pain:

(please tick the box below which is closest to your expectation of the relief you will experience from pain control.)

No relief_____ ☐

A little relief_____ ☐

A lot of relief_____ ☐

Total relief_____ ☐

5.

Type of delivery:

(please tick a box below to indicate which type of delivery you expect to have.)

Normal_____ ☐

Breech_____ ☐

Forceps_____ ☐

Caesarean_____ ☐

Other_____ ☐

(please specify)_____

6(a).

Overall quality of experience:

(please tick the box below which is closest to your expectation of the overall quality of the birth experience for you.)

Negative experience_____ ☐

Neutral experience_____ ☐
(neither negative or positive)

Positive experience_____ ☐

6(b).

Overall quality of the experience:

(please place a vertical line on the scale below to indicate your expectation of the overall quality of the birth experience for you.)



THANK YOU FOR COMPLETING THIS
QUESTIONNAIRE

OUTCOME OF EXPECTATIONS

QUESTIONNAIRE

UNIT NUMBER: _____

IDENTIFICATION NUMBER: _____

This questionnaire has been devised to record the outcome of your expectations of your birth.

Please read each statement/question carefully and follow the instructions in brackets.

When answering the questions please think about what your expectations were before you gave birth and then what the actual birth was like for you.

There are no right or wrong answers.

Please make sure you answer every question on every page.

Please put date you are completing questionnaire:

___/___/___

Please turn over.

QUESTIONNAIRE

1.

The length of my labour was:

(please tick the box below which is closest to your experience.)

Much shorter than I expected_____ ☐

A little shorter than I expected_____ ☐

As I expected_____ ☐

A little longer than I expected_____ ☐

Much longer than I expected_____ ☐

2(a).

My experience of pain was:

(please tick the box below which is closest to your experience.)

Much less than I expected_____ ☐

A little less than I expected_____ ☐

As I expected_____ ☐

A little more than I expected_____ ☐

Much more than I expected_____ ☐

My experience of pain was:

(please tick the box below which is closest to your experience.)

Not as I expected_____ ☐

(eg. none;gas and air;pethidine;epidural;combination or other. - please specify.)

3(b).

Were you happy with the pain control method that you were given?

(please tick the box below which is closest to your feelings regarding the pain control you were given.)

Yes, I was happy with this_____ ☐

I was neither happy or unhappy with this_____ ☐

I was unhappy with this_____ ☐

4.

The relief of pain I experienced from pain control was:

(please tick the box below which is closest to your experience.)

Much more than I expected_____ ☐

A little more than I expected_____ ☐

As I expected_____ ☐

A little less than I expected_____ ☐

Much less than I expected_____ ☐

5(a).

The type of delivery I had was:

(eg.normal,breech,caesarean etc.)

(please tick the box below which is closest to your experience.)

Not as I expected_____ ☐

As I expected_____ ☐

Please state below the type of delivery you had: (eg. normal; breech;forceps;caesarean;other - please specify.)

5(b).

Were you happy with the type of delivery you had?

(please tick the box below which is closest to your feelings regarding the type of delivery you had.)

Yes, I was happy with this_____ ☐

I was neither happy or unhappy with this_____ ☐

I was unhappy with this_____ ☐

6(a).

The overall quality of my experience of giving birth was:

(please tick the box below which is closest to your experience.)

Much better than I expected_____ ☐

A little better than I expected_____ ☐

As I expected_____ ☐

A little worse than I expected_____ ☐

Much worse than I expected_____ ☐

6(b).

What was the overall quality of your birth experience?

(please tick the below which is closest to your feelings with regard to your overall birth experience.)

Positive experience_____ ☐

Neutral experience_____ ☐
(neither negative or positive)

Negative experience_____ ☐

6(c).

What was the overall quality of your birth experience?

(please place a vertical line on the scale below to indicate the overall quality of your birth experience.)

|-----|-----|
Negative Neutral Positive
Experience Experience Experience

7(a).

Did you have the 'baby blues', (ie. feeling low in mood, weepy), after your birth while still in hospital?

(Please tick the box below which is closest to your experience.)

Yes ☐

No ☐

7(b).

Do you still feel like this since returning home?

(Please tick the box below which is closest to your experience.)

Yes ☐

No ☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

PLEASE RETURN FOLLOWING YOUR MIDWIFE'S VISIT IN THE PREPAID ENVELOPE PROVIDED

PLEASE PUT DATE YOU ARE COMPLETING
QUESTIONNAIRE: ____ / ____ / ____

*Emotional well-being, satisfaction with motherhood and
family support questionnaire*

THESE STATEMENTS ARE ABOUT HOW YOU FEEL NOW

There are no right or wrong answers to these statements.
Please tick the square which is nearest to how you feel now.

	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	
1. Most of the time, I feel happy and cheerful.						7
2. I feel confident about the way I cope.						8
3. I worry a lot.						9
4. Sometimes I feel I am a machine not a person.						10
5. I feel weepy at night.						11
6. I sleep well when the baby will let me.						12
7. I easily get upset if things go wrong.						13
8. The time I spend with my baby is the best part of the day.						14
9. I wish someone would tell me I'm doing a good job.						15
10. My family and friends are helpful.						16
11. I blame myself for problems with the baby.						17
12. I find it hard to make up my mind.						18
13. I talk to my baby quite a lot.						19
14. I don't enjoy food the way I used to.						20
15. I lose my temper more than I used to.						21
16. Sex doesn't interest me as much as before.						22
17. I feel full of energy these days.						23
18. I don't like to be left alone.						24
19. I've felt in low spirits since my baby was born.						25

Continued.....

Reactions to Motherhood

	STRONGLY AGREE	AGREE	NEITHER AGREE nor DISAGREE	DISAGREE	STRONGLY DISAGREE	
20. Sometimes I feel as if the baby doesn't belong to me.						26
21. If I had more help I would manage better than I do.						27
22. I feel tired and weary.						28
23. I feel that my baby knows that I love him/her.						29
24. Sometimes I feel overwhelmed by all that I have to do.						30
25. Being a mother is satisfying.						31
26. Sometimes I wish I could go away on my own.						32
27. My husband/partner gives me all the help I need him to give.						33
28. Getting my figure back is important to me.						34
29. If I need help, there is always someone I can turn to.						35
30. Caring for a small baby makes me feel nervous.						36
31. I enjoy stroking my baby's skin.						37
32. Sometimes I feel lonely and isolated.						38

Babies vary a great deal in the way they settle down to a routine. Now that your baby is a few weeks old, how do you feel that your baby compares with the average baby?

	BETTER THAN AVERAGE	ABOUT AVERAGE	WORSE THAN AVERAGE	
1. Number of crying spells.				39
2. Feeding difficulties.				
3. Sleeping pattern.				
4. Settling down to a predictable pattern of sleeping and feeding.				

Any further comments about how you feel now would be welcome. Please use the back of the form.

THANK YOU SO MUCH FOR YOUR HELP IN THIS PROJECT. I DO HOPE THAT YOU HAVE ENJOYED TAKING PART. PLEASE POST THE QUESTIONNAIRE BACK TO ME AS SOON AS POSSIBLE.

80
8

IMPACT OF THE BIRTH QUESTIONNAIRE

UNIT NUMBER: _____

IDENTIFICATION NUMBER: _____

Please read each statement over the page carefully and indicate how much you have experienced each of these statements since returning home after having had your baby.

Please tick the box closest to your experience.

If a certain statement has not happened to you since returning home then please tick the box under the 'not at all' column.

There are no right or wrong answers.

Please make sure you answer every statement.

Please put date you are completing questionnaire: _/_/_

Please turn over.

QUESTIONNAIRE

NOT AT ALL RARELY SOMETIMES OFTEN

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Having unpleasant thoughts about the birth when you do not mean to. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Avoiding letting yourself get upset when you think about the birth or are reminded of it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Trying to remove the birth from your memory. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Having trouble falling asleep or staying asleep because of unpleasant thoughts of the birth that come into your mind | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Having waves of strong negative feelings about the birth. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Having bad dreams about the birth. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

	<u>NOT AT ALL</u>	<u>RARELY</u>	<u>SOMETIMES</u>	<u>OFTEN</u>
7. Feeling as if the birth has not really happened or is not real.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Trying not to talk about the birth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Unpleasant pictures of the birth popping into your mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Knowing that you still have a lot of negative feelings about the birth but not dealing with them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Trying not to think about the birth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Feeling numb about the birth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

PLEASE RETURN FOLLOWING YOUR MIDWIFE'S VISIT
IN THE PREPAID ENVELOPE PROVIDED

APPENDIX 3.4

FREQUENCIES OF METHOD OF DELIVERY AND PAIN CONTROL

Method of delivery and pain control.

<u>Method of delivery</u>	<u>n</u>	<u>%</u>
Normal (spontaneous vaginal delivery)	30	60
Forceps	5	10
Caesarean	11	22
Other (episiotomy;forceps/ ventouse suction;ventouse suction only)	4	8
(n=50)		
<u>Method of pain control</u>	<u>n</u>	<u>valid %</u>
None	2	4.1
Gas and Air	31	63.3
Epidural	24	49.0
Pethidine/Diamorphine	26	53.1
TENS (transcutaneous electrical nerve stimulation)	3	6.1

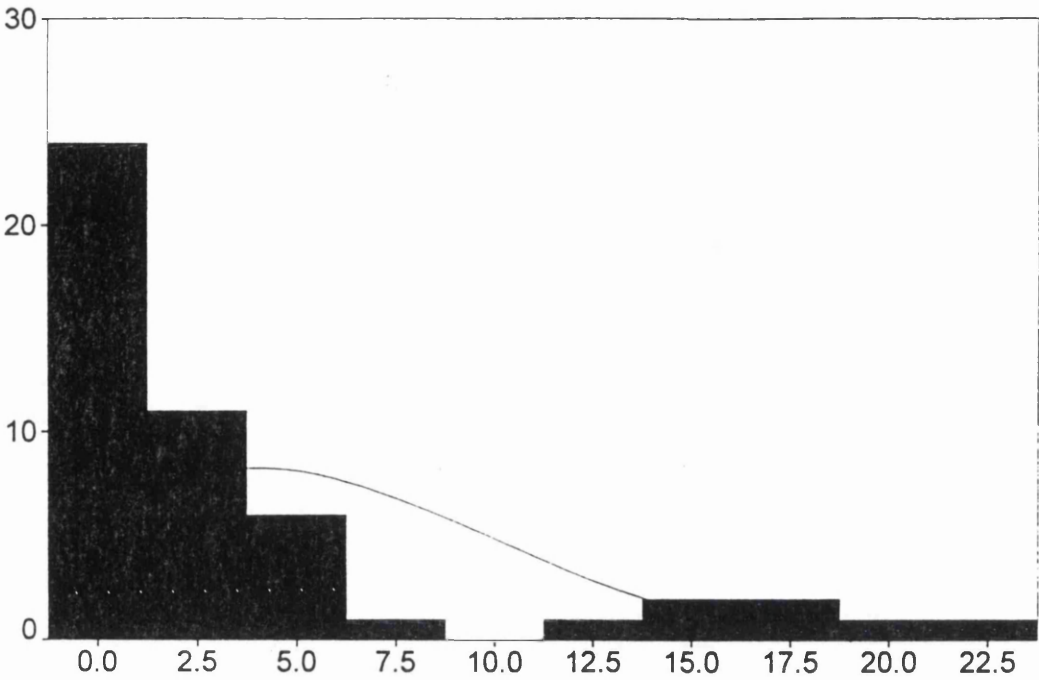
(n=49. One subject did not report their method of pain control)

Note: 65.3% of subjects had a combination of the above.

APPENDIX 3.5

DISTRIBUTION OF IMPBIRTOT; PHADANX; PHADDEP AND EWB SCORES

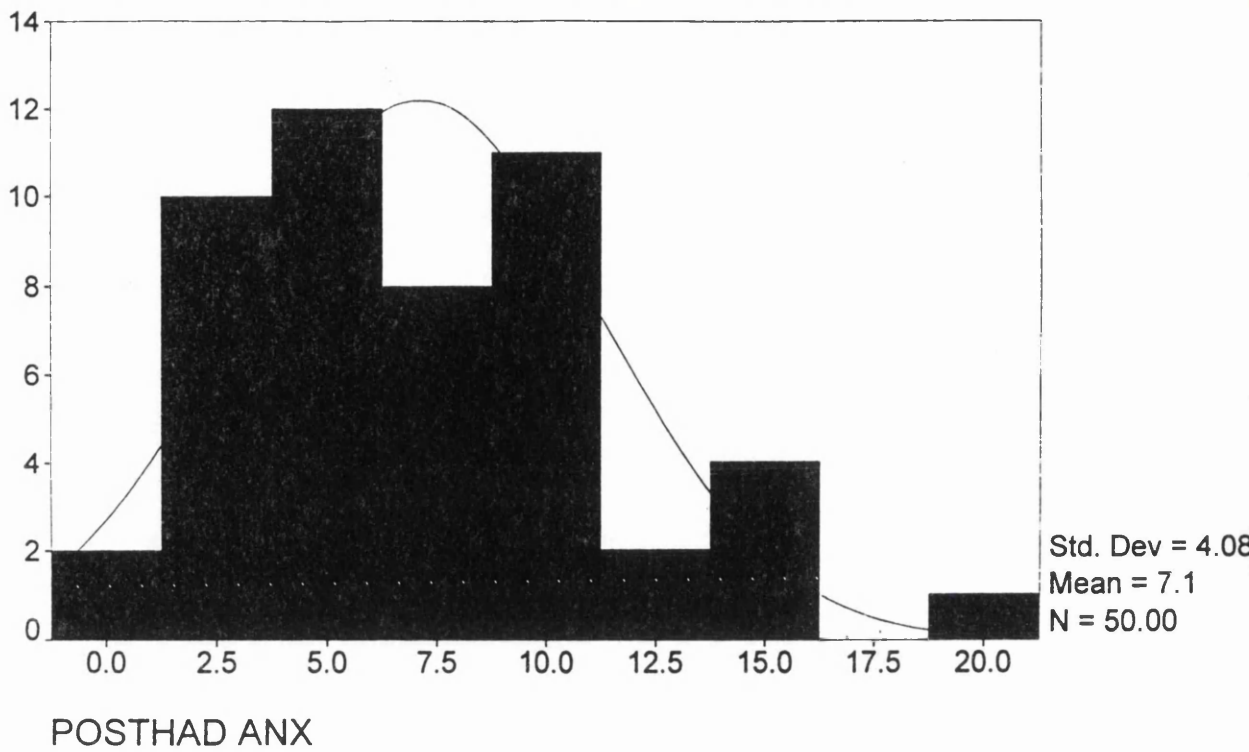
DISTRIBUTION OF IMPBIRTOT SCORES



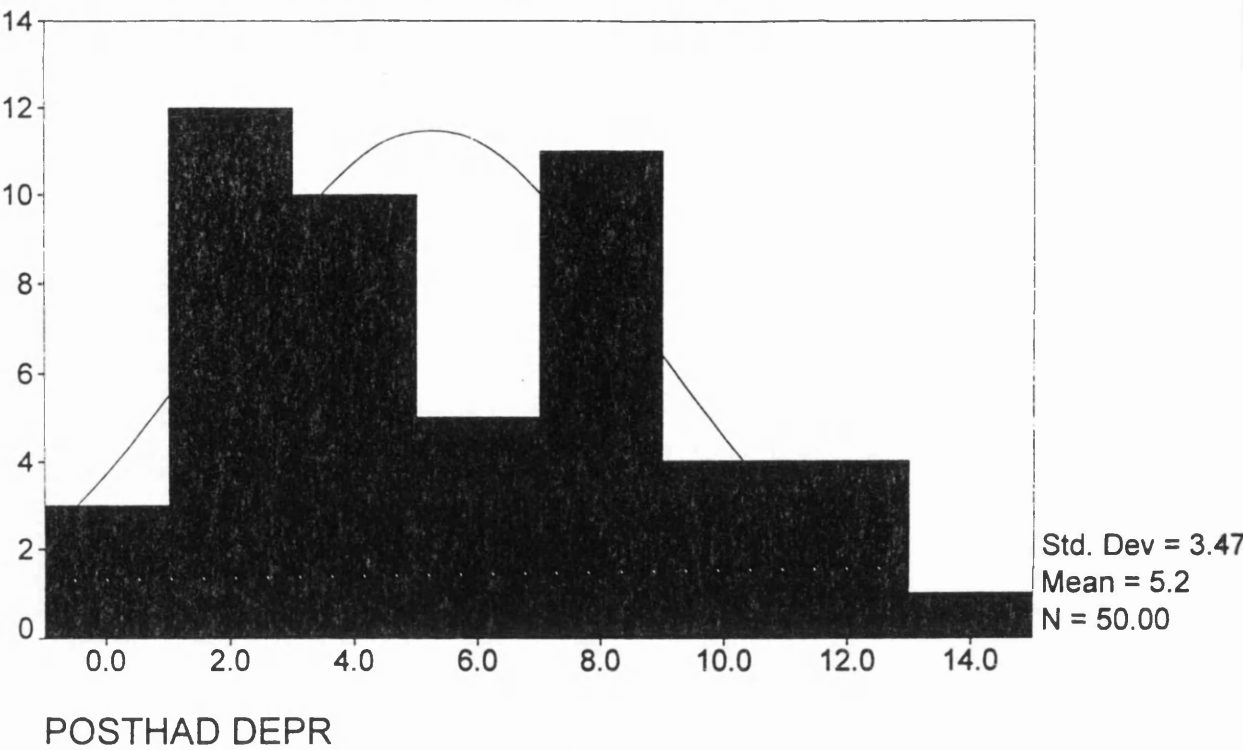
Std. Dev = 5.88
Mean = 3.9
N = 49.00

IB TOTAL

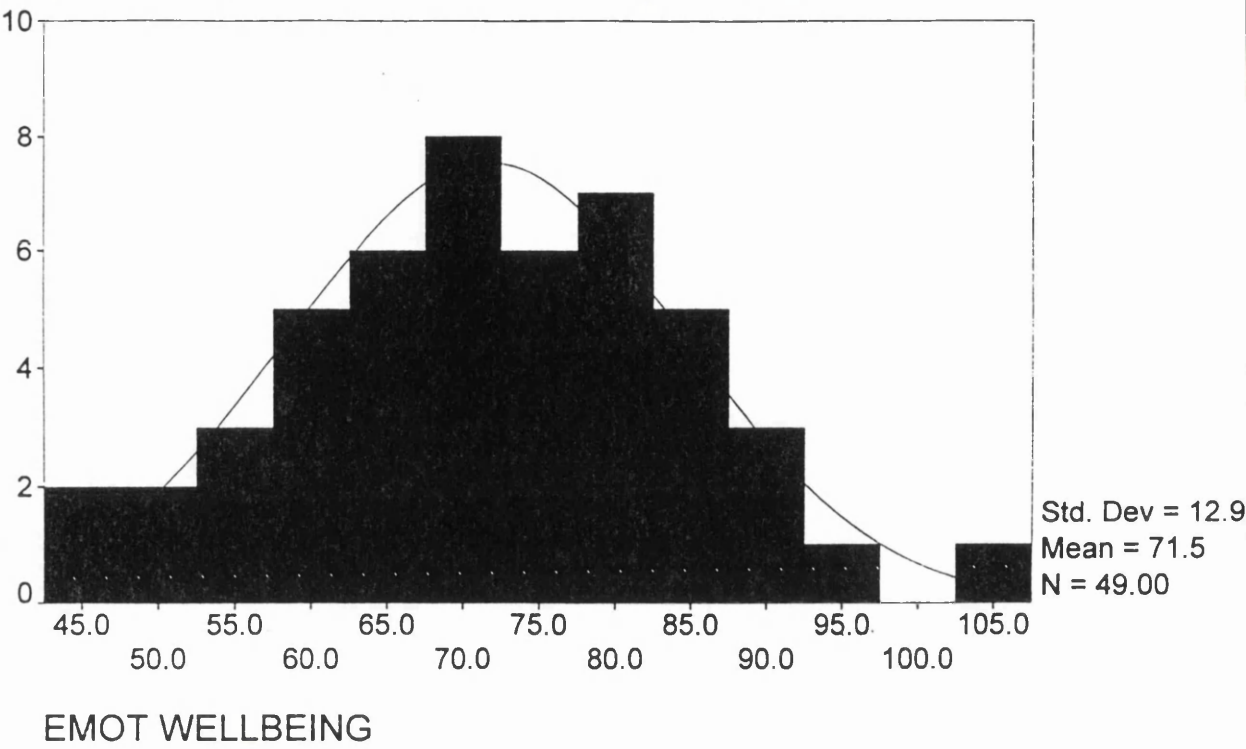
DISTRIBUTION OF PHADANX SCORES



DISTRIBUTION OF PHADDEP SCORES



DISTRIBUTION OF EWB SCORES



APPENDIX 3.6

ANTENATAL VERSUS POSTNATAL HAD SCORES

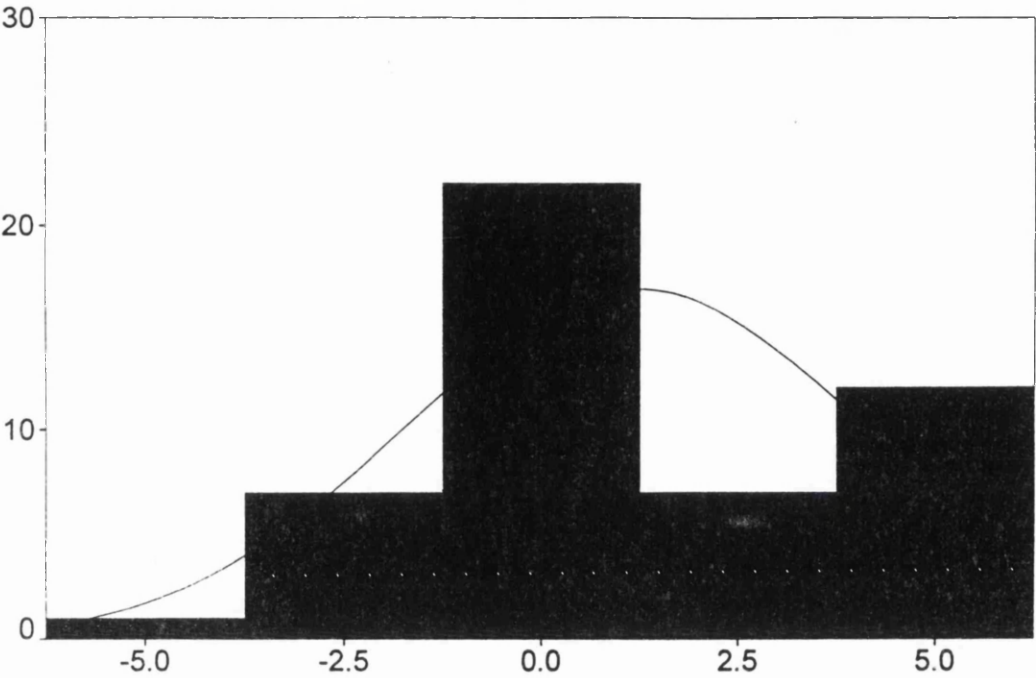
T-TESTS FOR PAIRED SAMPLES (n=50)(2-tailed).

	<u>means</u>	<u>t</u>	<u>d.f.</u>	<u>p</u>
ANTENATAL HADANX	7.28			
		0.28	49	.780
POSTNATAL HADANX	7.12			
ANTENATAL HADDEP	4.96			
		-0.66	49	.512
POSTNATAL HADDEP	5.24			

APPENDIX 3.7

DISTRIBUTION OF VIOLATION SCORES (VIOSCORE)

DISTRIBUTION OF VIOLATION SCORES



VIOSCORE

APPENDIX 3.8

**CORRELATIONS BETWEEN VIOSCORE AND IMPBIRTOT;
PHADANX; PHADDEP AND EWB SCORES**

ANALYSIS OF VIOSCORE AND IMPBIR2/3; BBHOSP/BBHOME

**SPEARMAN RANK CORRELATIONS BETWEEN VIOSCORE AND
IMPBIRTOT;PHADANX;PHADDEP AND EWB SCORES**

	VIOSCORE
IMPBIRTOT	$r_s=-.1717$ $p=.122$ (n=48 - 2 cases missing)
PHADANX	$r_s=-.0413$ $p=.389$ (n=49 - 1 case missing)
PHADDEP	$r_s=-.1670$ $p=.126$ (n=49 - 1 case missing)
EWB	$r_s=.1306$ $p=.188$ (n=48 - 2 cases missing)

**MANN-WHITNEY ANALYSIS OF VIOSCORE WITH IMPBIR2/3;
BBHOSP/BBHOME**

	<u>U</u>	<u>p</u>	<u>n</u>
IMPBIR2	94.0	.069	48 (1 case missing)
IMPBIR3	209.5	.117	48 (1 case missing)
BBHOSP	285.0	.402	49 (1 case missing)
BBHOME	266.5	.349	49 (1 case missing)

APPENDIX 3.9

ANALYSIS OF INDIVIDUAL VIOLATION VARIABLES ACROSS PRINCIPAL OUTCOME MEASURES

(NON-SIGNIFICANT RESULTS)

Q1. OUTCOME OF LENGTH OF LABOUR

VARIABLE	⁺ n	Test	Effect	d.f	p
IMPBIRTOT	49	M-W	U=244		.407
IMPBIR2	49	CHISQ	$\chi^2=.01601$	1	.450
IMPBIR3	49	CHISQ	$\chi^2=.10761$	1	.371
PHADANX	50	M-W	U=211.5		.139
EWB	49	M-W	U=219.0		.217
BBHOSP	50	CHISQ	$\chi^2=.00383$	1	.475
BBHOME	50	CHISQ	$\chi^2=.03638$	1	.424

Q2a. OUTCOME OF EXPERIENCE OF PAIN

IMPBIRTOT	49	M-W	U=271		.275
IMPBIR2	49	CHISQ	$\chi^2=.21778$	1	.320
IMPBIR3	49	CHISQ	$\chi^2=.23417$	1	.314
PHADANX	50	T-TEST	t=-.76	48	.226
PHADDEP	50	T-TEST	t=.73	48	.234
EWB	49	T-TEST	t=.16	47	.437
BBHOSP	50	CHISQ	$\chi^2=2.01288$	1	.078
BBHOME	50	CHISQ	$\chi^2=2.12224$	1	.072

+ (cases missing)

Q3a. OUTCOME OF METHOD OF PAIN CONTROL

VARIABLE	⁺ n	Test	Effect	d.f.	p
IMPBIRTOT	49	M-W	U=264		.248
IMPBIR3	49	CHISQ	$\chi^2=.41527$	1	.260
PHADANX	50	T-TEST	t=.09	48	.466
PHADDEP	50	T-TEST	t=-.45	48	.328
BBHOSP	50	CHISQ	$\chi^2=.10904$	1	.371
BBHOME	50	CHISQ	$\chi^2=1.74550$	1	.093

Q4a. OUTCOME OF RELIEF EXPERIENCED FROM PAIN CONTROL

IMPBIRTOT	48	M-W	U=200		.348
IMPBIR2	48	CHISQ	$\chi^2=.05575$	1	.407
IMPBIR3	48	CHISQ	$\chi^2=.75901$	1	.192
PHADANX	49	M-W	U=186		.138
PHADDEP	49	M-W	U=192		.169
EWB	48	M-W	U=192.5		.208
BBHOSP	49	CHISQ	$\chi^2=.57268$	1	.225
BBHOME	49	CHISQ	$\chi^2=.47777$	1	.245

⁺(Some cases missing)

APPENDIX 3.10

FREQUENCIES OF VIOLATION AND NON-VIOLATION IN INDIVIDUAL VIOLATION VARIABLES

<u>VARIABLES</u>	<u>VIOLATION</u>			<u>NON-VIOLATION</u>		
	<u>n</u>	<u>valid%</u>	<u>tot.n</u>	<u>n</u>	<u>valid%</u>	<u>tot.n</u>
Q.1. Outcome of length of labour	15	30	50	35	70	50
Q.2. Outcome of experience of pain	25	50	50	25	50	50
Q3. Outcome of method of pain control	23	46	50	27	54	50
Q4. Outcome of relief experienced from pain control (1 case missing)	13	26.5	49	36	73.5	49
Q5. Outcome of method of delivery	26	52	50	24	48	50

APPENDIX 3.11

**COMPARISONS BETWEEN 'DIFFERENT DELIVERY' GROUP AND
'SAME DELIVERY' GROUP ACROSS PRINCIPAL OUTCOME
MEASURES**

(NON-SIGNIFICANT RESULTS)

DIFFERENT VERSUS SAME DELIVERY

VARIABLE	<u>n</u>	<u>Test</u>	<u>Effect</u>	<u>d.f.</u>	<u>p</u>
IMPBIR3	49	CHISQ	$\chi^2=1.44954$	1	.114
PHADANX	50	M-W	U=263		.264
PHADDEP	50	M-W	U=275		.347
EWB	49	M-W	U=261		.354
BBHOME	50	CHISQ	$\chi^2=.53629$	1	.232

+(Some cases missing)

APPENDIX 3.12

**COMPARISONS BETWEEN 'UNHAPPY WITH DELIVERY' GROUP
AND 'HAPPY/NEUTRAL WITH DELIVERY' GROUP**

(NON-SIGNIFICANT RESULTS)

UNHAPPY VERSUS HAPPY/NEUTRAL WITH DELIVERY

VARIABLE	<u>n</u>	<u>Test</u>	<u>Effect</u>	<u>d.f.</u>	<u>p</u>
PHADANX	19	M-W	U=31.5		.254
PHADDEP	19	M-W	U=25.5		.117
EWB	18	M-W	U=26		.261
(1 case missing)					
BBHOSP	19	CHISQ	$\chi^2=.79573$	1	.186
BBHOME	19	CHISQ	$\chi^2=.90253$	1	.171

APPENDIX 3.13

LIVING WITH PARTNER/NOT ACROSS PRINCIPAL OUTCOME MEASURES

(NON-SIGNIFICANT RESULTS - 2 TAILED)

LIVING WITH PARTNER VERSUS NOT LIVING WITH PARTNER

VARIABLE	<u>+n</u>	<u>Test</u>	<u>Effect</u>	<u>d.f</u>	<u>p</u>
IMPBIRTOT	49	M-W	U=179		.09
IMPBIR3	49	CHISQ	$\chi^2=.91757$	1	.338
PHADANX	50	M-W	U=201		.191
PHADDEP	50	M-W	U=239.5		.624
EWB	49	M-W	U=223		.626
BBHOSP	50	CHISQ	$\chi^2=1.69082$	1	.193

+(Some cases missing)

APPENDIX 3.14

**CORRELATIONS OF RESOURCEFULNESS WITH OUTCOME
MEASURES IE. IMPBIRTOT; PHADANX;PHADDEP; & EWB**

PEARSONS R AND SPEARMAN RANK-ORDER CORRELATIONS

RESOURCEFULNESS (n=50)		
IMPBIRTOT (n=49)	$r_s=.070$	$p=.317$
PHADANX (n=50)	$r=.083$	$p=.282$
PHADDEP (n=50)	$r=-.0137$	$p=.462$
EWB (n=49)	$r=-.075$	$p=.305$

APPENDIX 3.15

FOLLOW-UP RESULTS

WILCOXON MATCHED-PAIRS SIGNED RANKS TEST (n=4)

IMPBIRTOT VS. IMPBIRTOT (FOLLOW-UP)

T= -.7303 p=.465 (2-tailed)

PHADANX VS. PHADANX (FOLLOW-UP)

T= -.5345 p=.593 (2-tailed)

PHADDEP VS. PHADDEP (FOLLOW-UP)

T= -.5477 p=.584 (2-tailed)

CHAPTER 4

SINGLE CASE RESEARCH (I)

**THE DIFFERENTIAL DIAGNOSIS OF DEPRESSION AND
DEMENTIA: A SINGLE CASE STUDY**

TARGET JOURNAL:

THE BRITISH JOURNAL OF CLINICAL PSYCHOLOGY

The majority of studies investigating the differential diagnosis of dementia and depression have tried to distinguish between those individuals who have dementia and those who have an underlying functional disorder such as depression which mimics dementia, ie. 'depressive pseudodementia' Kiloh (1961). Fewer studies have investigated whether these two syndromes may co-exist. It is also the case that few studies have reported information from clinical interviews with patients which could be vital in the diagnosis. In this single case study a 51 year old woman was assessed using clinical interviews and observations, as well as a battery of neuropsychological tests, to establish whether the reported decline in her cognitive abilities was as the result of a dementing process or depression. From analysis of the psychometric results and on the basis of her background and psychiatric history it was concluded that this patient had co-existent syndromes of dementia and depression. It was also inferred from the evidence that the depression preceded the dementia and was now exacerbating her cognitive difficulties.

The differential diagnosis of dementia versus depression is an important but often difficult problem which clinicians are asked to solve. In the course of assessment the question which is frequently raised is whether an individual showing signs of a dementing process is suffering from the early stages of an organic condition such as dementia, or whether these signs are more indicative of an underlying functional disorder eg. depression.

The term 'pseudodementia' has been used to describe conditions with reversible cognitive dysfunction (Koskinen, 1992). The term was first used by Madden (1952), to describe patients who presented with disorientation and deficits in recent memory, retention, calculation and judgement. These symptoms were said to 'mimic' dementia and would reverse once the 'psychosis' was treated. Rabins (1981), reported that the condition of 'pseudodementia' or 'reversible dementia' was most commonly associated

with depression in the elderly, therefore, 'pseudodementia' is sometimes referred to as 'depressive pseudodementia'. Kiloh (1961), introduced this term to describe individuals whose deficits reversed once their depression alleviated following treatment.

As Chaves et al (1992) stated, the discrimination between early and/or mild dementia and 'pseudodementia' is important due to the implications the diagnosis has for therapy and prognosis. Lamberty et al (1993), stressed that the recognition of a depressive illness in the elderly can save an individual from the hopelessness resulting from a diagnosis of a primary dementing disease. Formulating the correct diagnosis however, is a challenging task.

Addonizio and Shamoian (1986), reported that especially in older adults, a major depressive disorder can be accompanied by impairments in cognitive functioning in areas such as memory, attention, concentration and processing speed. These deficits however, can also be found in an individual suffering from a dementing process. As Nelson et al (1993) highlighted, the cognitive deficits associated with depression and dementia overlap to a certain degree which can cause difficulties in the differential diagnosis of these two disorders.

A further important factor to consider in the differential diagnosis of dementia and depression is that the functional condition of depression and the organic condition of dementia can co-exist (Rabins 1981; Kaszniak, 1987). As cited by Rabins (1989), Liston (1977) and Shraberg (1978) described patients who presented with prominent symptoms of depression who were then found after treatment or at follow-up to have irreversible dementia.

Due to the complexities involved in differentiating between dementia and depression, it can be the case that people suffering from dementia are misdiagnosed as having depression, or more commonly, that people suffering from a depressive illness are misdiagnosed as having a primary dementia. As noted earlier, a misdiagnosis of this nature can have serious implications for the individual involved. If depression is misdiagnosed as dementia then the depression may remain untreated. In the less common case where dementia is misdiagnosed as depression, it has been found that pharmacotherapy can induce cognitive impairment (Rabins, 1989).

In the present study a single case will be discussed. A battery of neuropsychological tests were administered to a 51 year old woman in order to assess whether a reported decline in her cognitive abilities was due to the beginning of a dementing process or whether the symptoms were more likely to be associated with depression ie. a depressive pseudodementia.

CASE STUDY (M.P.)

PRESENTING PROBLEM; BACKGROUND INFORMATION; AND HISTORY

Presenting problem

M.P. reported concern regarding memory difficulties which she had experienced for approximately five years. She stated that she constantly forgot dates; birthdays; items on her shopping list; to pay bills and to attend appointments. She also reported that she had occasionally left pots on the cooker as she had forgotten about them. She said she had difficulty 'placing faces' and found that she repeated what she had said to people. She described her memory as "patchy", saying that some days were better than others, and that she could remember past events. Indeed, during interviews M.P. recalled past events in detail, however, she had some difficulty recalling what she had done the previous day.

With regard to concentration ability, M.P. reported that she could only hold her concentration for a few minutes and had difficulty taking in a lot of information at the one time. She stated that she was unable to read a book or newspaper and had difficulty concentrating on the television, however, could do so adequately when it was a programme she enjoyed.

M.P. reported that she felt "very depressed". She said she always felt tired and exhausted and that it was an effort to do anything. With regard to her

sleep pattern she did not report a disturbed sleep during the night, early morning waking or sleeping during the day. She stated that she had a poor appetite which had been like this for years, saying that she did not feel hungry. She appeared to look after her appearance and enjoyed socialising with her friend whom she saw regularly.

Background Information and History - (Family; Employment; and Psychiatric.)

M.P. is a 51 year old divorcee. M P. was unemployed at the time of the present assessment . She left school at the age of fifteen after which she worked for 4-5 years in a grocers shop and then for 3 years in a factory. M.P stopped work when her first child was born.

M.P. has two sons, one of whom is married and lives nearby and the other who has a mild learning disability and stays at home.

In 1965 M.P's second son died of a cot death when he was six weeks old. She was divorced from her husband following her son's death, shortly after which her husband died of alcohol poisoning. M.P's mother also died following her son's death. During interview, M.P. stated that the death of her son was always in the back of her mind. She reported that she had contracted Venereal Disease during her pregnancy and said she believed this had contributed to his death. She stated that following this incident she felt anxious going out of the house and as a result was "stuck in the house for a long time". In 1966 M.P. was seen by the psychiatric services following an overdose of Amitriptyline.

In 1984, M.P. was referred to psychology services for treatment with regard to anxiety, lethargy and a lack of energy. It was concluded at this time that these symptoms were in part due to her poor life situation but also as a consequence of her personality. M.P. was re-referred to psychology services by her G.P. in 1992 as a result of M.P. complaining of impairment in her short-term memory. Following a neuropsychological assessment it was concluded that she was suffering from a depressive illness and that her memory problems were more akin to this than to an organic deficit. However, these findings were disputed by a further psychological assessment in which it was concluded that the results indicated organic impairment. At a later date in 1992, M.P. underwent neurological examinations from which no significant abnormality was found. The neurologist concluded that the test results in isolation would have indicated an advanced degree of dementia, however due to a differential diagnosis of depression being made M.P. was thought to be suffering from a 'pseudodementia'.

At the time of the present assessment, M.P. was on anti-depressant medication, however, due to her memory problems her compliance with this was doubtful.

ASSESSMENT

Test and General Behaviour

During testing M.P. was motivated, however, she appeared low in mood and to struggle during testing, finding it very much an effort. She complained of feeling tired and said she felt exhausted following an assessment session. She had a problem retaining her concentration and on occasions appeared to give up, especially when she experienced difficulties.

M.P. failed to attend her first two appointments as she did not remember them and when she did attend for the first time she came by bus, forgetting that a Community Psychiatric Nurse had arranged to escort her to the clinic.

M.P. conversed competently and did not lose track of our conversations, however, if she had to visit the toilet during our sessions she was unable to recall what we had previously discussed when she returned.

Measures

1. Wechsler Adult Intelligence Scale - Revised (WAIS-R) (Wechsler, 1981).

This test was administered to give an indication of M.P.'s current intellectual functioning.

2. National Adult Reading Test - Revised (NART-R) (Nelson and Willison, 1991).

This assessment was used in conjunction with the WAIS-R to give an indication of M.P's pre-morbid intellectual functioning. It is known that vocabulary correlates best with general intellectual ability and is less susceptible to dementing processes than any other intellectual abilities (Lezak, 1983).

3. Wechsler Memory Scale - Revised (WMS-R) (The Psychological Cooperation, 1987).

The WMS-R was administered in 1992 and was repeated in order to directly compare M.P's current level of functioning with that found three years previously.

4. Rivermead Behavioural Memory Test (RBMT) (Wilson, Cockburn and Baddely, 1991).

This test assesses memory abilities related to routine daily living. This was administered in 1992 and was repeated in order to provide a direct comparison.

5. Benton Visual Retention Test (Form C. Admin. A.) (BVRT) (Benton, 1974).

This test required the subject to recall 10 separately presented geometric

designs following a 10 second delay. This test is sensitive to organic impairment and focuses on the nature of errors made. Research has also shown that it is better than many tests for distinguishing people with cerebral brain damage from those with psychiatric disorders (Benton, 1974). This test was also administered in 1992.

6. Controlled Oral Word Association Test (Benton and Hamsher, 1976; Benton et al, 1983).

This is a test of verbal fluency and was administered to screen for frontal 'executive' dysfunction. Word fluency measures have been shown to be sensitive indicators of brain dysfunction, Lezak (1983). Nelson et al (1993), reported from various studies that measures of word-finding or verbal fluency are typically impaired in subjects with dementia and spontaneous word generation is less efficient in individuals with depression as compared to normal controls.

7. Beck Depression Inventory (BDI) (Beck, 1978).

This was administered as M.P. exhibited signs of clinical depression and had been diagnosed as suffering from a depressive illness in the past.

8. State-Trait Anxiety Inventory (STAI) (Spielberger et al, 1968).

This inventory is well validated and was administered as M.P. had a history of chronic anxiety. It was also important to measure M.P.'s state anxiety as well as her trait anxiety as this could have affected her performance during

testing.

RESULTS

1. WAIS-R & NART-R (See Summary Table 1 at end of Results Section)

These results indicated that M.P. was functioning at a lower level with regard to her verbal and performance abilities than would be expected from her pre-morbid intellectual ability as measured by the NART-R. The difference of 14 points between her Verbal and Performance I.Qs was significant at <0.05 level of significance and indicated signs of intellectual impairment. M.P.'s scores on the performance sub-tests, 'block design', which assesses visual constructional and visuospatial organisational skills, and 'digit symbol', which involves matching numbers to symbols, may reflect a deficit in M.P.'s visuomotor co-ordination, visuospatial skills and psychomotor speed, as well as a deficit in her short-term visual memory and an inability to switch attention between stimuli.

2. WMS-R (See Summary Table 2 at end of Results Section)

The WMS-R results indicated that M.P.'s memory was uniformly poor. Her ability to learn and retain both verbal and visually presented material appeared 'severely impaired'. Her attention/concentration score would perhaps have indicated higher scores on the other sub-tests and this therefore may be further indication of an organic deficit.

M.P's scores on the 'logical memory' sub-tests which involve immediate and delayed recall of two short stories were exceptionally low. This was also found to be the case in the 'visual reproduction' sub-test which involves immediate and delayed recall of geometric designs. She was found to be orientated in place but not in time.

In comparison with M.P's performance in 1992, it was found that her visual short-term memory had deteriorated significantly. This was also found with regard to her delayed recall of verbal material. Her ability to attend and concentrate had also deteriorated.

3 Rivermead Behavioural Memory Test (RBMT) (See Summary Table 2)

M.P's scores on this assessment fell within the 'severely impaired' category. She had difficulty recalling a person's name and remembering what she had to do following certain cues. She also experienced difficulty recalling a route and recognising pictures following a delay. In comparison with her performance in 1992, M.P's performance on this test had significantly deteriorated.

4. Benton Visual Retention Test (BVRT) (See Summary Table 2)

The discrepancies found between M.P's actual and expected performance with respect to number of designs correctly reproduced and number of errors made are consistent with 'severe impairment' of visual memory. Amongst the errors made, M.P. showed perseveration and poor structure which may be indicative of a perceptual difficulty and organic impairment. The nature of

errors on current testing and their frequency would suggest a significant deterioration in her performance on this test.

5. Controlled Oral Word Association Test

M.P's score of 40 on this test, with her age and number of years in education taken into account, was within the 'normal range' and therefore not indicative of frontal lesions.

6. BDI

M.P's score of 22 on this inventory suggested a 'moderate' degree of depression.

7. STAI

M.P's score of 50 on the 'state' inventory and 44 on the 'trait' inventory suggested a 'moderate' degree of both 'state' and 'trait' anxiety.

SUMMARY TABLE 1

WAIS R SCALED SCORES AND I.Q.S

VERBAL

INFORMATION	6 (BETWEEN 1 & 2 SD BELOW MEAN)
DIGIT SPAN	10 (AVERAGE)
VOCABULARY	7 (1 SD BELOW MEAN)
ARITHMETIC	8 (BETWEEN 1 SD AND MEAN)
COMPREHENSION	6 (BETWEEN 1 & 2 SD BELOW THE MEAN)
SIMILARITIES	6 (BETWEEN 1 & 2 SD BELOW THE MEAN)

PERFORMANCE

PICTURE COMPLETION	6 (BETWEEN 1 & 2 SD BELOW MEAN)
PICTURE ARRANGEMENT	5 (BETWEEN 1 & 2 SD BELOW MEAN)
BLOCK DESIGN	3 (BETWEEN 2 & 3 SD BELOW MEAN)
OBJECT ASSEMBLY	6 (BETWEEN 2 & 3 SD BELOW MEAN)
DIGIT SYMBOL	3 (BETWEEN 2 & 3 SD BELOW MEAN)

PREDICTED I.Q.S (NART-R) COMPARED TO OBTAINED I.Q.S
(WAIS-R)

<u>PREDICTED I.Q</u>		<u>OBTAINED I.Q.</u>		<u>PRED.-OBT. I.Q.</u>	<u>DISCREPANCY (SD)</u>
					<u>BELOW PREDICTED</u>
FULL SCALE	102		77	25	BETWEEN 1 & 2 SD
VERBAL	101		84	17	BETWEEN 1 & 2 SD
PERFORMANCE	102		70	32	BETWEEN 2 & 3 SD

KEY

WAIS R = Wechsler Adult Intelligence Scale-Revised. **NART-R** = National Adult Reading Test - Revised. **SD** = Standard Deviation.

SUMMARY TABLE 2

MEMORY ASSESSMENT RESULTS

WMS-R ADMIN. 1995 (INDEXES)

VERBAL MEMORY = 63 (BETWEEN 2 & 3 SD BELOW MEAN)
VISUAL MEMORY = <50 (BETWEEN 3 & 4 SD BELOW MEAN)
GENERAL MEMORY = <50 (BETWEEN 3 & 4 SD BELOW MEAN)
ATTENTION/CONC = 75 (BETWEEN 1 & 2 SD BELOW MEAN)
DELAYED RECALL = <50 (BETWEEN 3 & 4 SD BELOW MEAN)

WMS-R ADMIN. 1992 (INDEXES)

VERBAL MEMORY = 56 (BETWEEN 2 & 3 SD BELOW MEAN)
VISUAL MEMORY = 64 (BETWEEN 2 & 3 SD BELOW MEAN)
GENERAL MEMORY = <50 (BETWEEN 3 & 4 SD BELOW MEAN)
ATTENTION/CONC = 93 (BETWEEN 1 SD & MEAN)
DELAYED RECALL = 60 (BETWEEN 2 & 3 SD BELOW MEAN)

RBMT

	<u>STANDARDISED PROFILE SCORE</u>	<u>SCREENING SCORE</u>
1995	6.5 (OUT OF 24)	1 (OUT OF 12)
	'SEVERELY IMPAIRED'	
1992	10 (OUT OF 24)	4 (OUT OF 12)
	'MODERATELY IMPAIRED'	

SUMMARY TABLE 2 (CONT.)

BVRT

	<u>ACTUAL NO. CORRECT</u>	<u>EXPECTED NO. CORRECT</u>
1995	1	7
	'SEVERELY IMPAIRED'	
1992	2	6
	'MODERATELY IMPAIRED'	

	<u>ACTUAL NO. ERRORS</u>	<u>EXPECTED NO. ERRORS</u>
1995	37	4
	'SEVERELY IMPAIRED'	
1992	14	5
	'MODERATELY IMPAIRED'	

KEY

WMS-R = Wechsler Memory Scale-Revised. **SD** = Standard Deviation. **RBMT** = Rivermead Behavioural Memory Test. **BVRT** = Benton Visual Retention Test.

DISCUSSION

The results indicated that M.P. was functioning at a significantly lower level intellectually than would be expected from her estimated pre-morbid intellectual level.

There are several studies in the literature which report that in dementia of the Alzheimer type there is usually a large discrepancy found between premorbid intellectual level as estimated by the NART and current intellectual ability (O'Carroll et al, 1994). This is most evident with regard to M.P's Performance I.Q.

M.P's performance on the WAIS-R indicated severe deficits in her visuomotor co-ordination; visuospatial skills and psychomotor speed and it is interesting to note that according to Lezak (1993), the 'block design' and 'digit symbol' sub-tests are the most sensitive of the WAIS-R sub-tests to organic impairment. The significant difference found between her Verbal and Performance I.Q's would also indicate an organic deficit.

In 1994, O'Carroll et al carried out research investigating the discrepancy between the NART estimated premorbid I.Q. and current memory functioning as measured by the WMS-R with Alzheimer's Disease patients; patients with major depression and healthy controls. The results showed that the best differentiation of patients with Alzheimer's Disease was achieved when the WMS-R 'general memory' or 'delayed recall' index was subtracted from the NART IQ, resulting in a mean difference of over 40 points in Alzheimer's

subjects as compared to small differences in patients with major depression and healthy controls. In the present study, M.P's mean difference was over 50 points. However, when O'Carroll et al looked at the percentage of each group who met specific discrepancies it was found that there was considerable overlap between the Alzheimer and Major Depression groups, therefore, these differences should be treated with some caution.

M.P. showed impairment on a variety of memory functions which Hart and Semple (1990) report is indicative of a dementing process. M.P's verbal and visual short term memory both with regard to immediate and delayed recall showed severe impairment and could not be explained by attention and concentration problems alone. The nature of M.P's errors on the B.V.R.T and 'visual reproduction' sub-test of the WMS-R indicated organic impairment. Lezak (1993) stated that early in the dementing process patients can show severe impairment in constructional tasks, showing fragmented responses which may be distorted by perseverations. Harper et al (1992) studied the efficacy of the BVRT measures among others in differentiating between depressed patients with mild or moderate dementias and those with dementia without depression. The results of the study showed that the BVRT tests 'appeared relatively immune to cognitive impairment from the effects of depression alone.'

In a study by desRosiers et al (1995), it was found that retention on the 'Logical Memory' and 'Visual Reproduction' sub-tests of the WMS-R helped decrease the ambiguity when distinguishing between depressed patients with Alzheimer's Disease from those without. In M.P's case, her performance on the 'Logical Memory' sub-test, (immediate and delayed recall), fell within

the second and first percentiles respectively, with her score on the 'Visual Reproduction' sub-test falling within the first percentile, again indicating an underlying organic deficit rather than solely a functional disorder.

In research carried out by Nelson et al (1993), the Controlled Oral Word Association Test, BVRT and Temporal Orientation were investigated to examine their efficacy in differentiating dementia from depression in a hospitalised sample comprising of depressed only patients; mixed dementia/depression syndrome patients and demented only patients. The results showed that demented patients performed consistently more poorly than depressed patients on each of the three measures. This was also found to be the case when comparisons were made across all three groups. The results also indicated that scores within the impaired range were more strongly associated with dementia. Nelson (1993) stated that "an impaired performance on any one of the three tests should raise the index of suspicion clinically regarding the presence of dementia". Nelson goes on to say that if an individual is suffering from dementia then "an impaired performance is much more likely to be present on Visual Retention and Temporal Orientation than for Word Fluency." It should be kept in mind however, that there could be overlap in the cognitive deficits manifested by individuals with depression and dementia.

Lachner et al (1994) looked at the differential diagnosis between depressed, demented and healthy subjects and found that subjects with dementia showed lower performance than depressed patients in tasks involving recognition after long and short delays, and delayed recall. Lachner et al reported that depressed patients could best be distinguished from demented

patients by tasks involving retrieval after a long delay. Indeed on RBMT M.P showed impairment in her ability to recognise drawings of objects and photographs of faces after a delay.

Sahakian (1991) reported studies by Weingarter et al (1981; 1983), and Cohen et al (1982), which suggested that individuals with 'Alzheimer type' dementia would have further deficits in semantic encoding and retrieval as well as in automatic processing which was not seen in subjects with depression.

Following M.P's psychological assessment she was seen by Neurology in 1995 for a cranial CT scan. This showed 'atrophy but no focal abnormality'. An EEG suggested a 'mild diffuse disturbance of cerebral function and features compatible with a degenerative/dementing cerebral disorder if all other metabolic or other causes had been excluded'. In a psychogeriatric consultation based survey, Koskinen (1992), reported that the majority of demented patients studied had diffusely abnormal EEG's while most depressed patients had normal recordings. He went on to say that moderate generalised abnormalities only occurred in demented patients.

With regard to a differential diagnosis of depression it can be inferred from M.P's history that she has suffered from episodes of major depression in the past. The results from the BDI indicated a 'Moderate' degree of depression at the time of testing although this would not be diagnosed as a major depression. M.P. appeared low in mood during testing and was fatigued and lethargic, however, she did not report a disturbed sleep pattern nor a recent change in her appetite. M.P also enjoyed going out with her friend and she

kept a neat physical appearance. It was believed M.P.'s depressed mood, although having some affect on her performance, could not wholly account for the deficits highlighted from the neuropsychological assessment due to the severity of these deficits, their nature and the fact that these appeared to have worsened since 1992. With regard to M.P.'s 'state' anxiety the STAI indicated a 'moderate' level, however she did not appear anxious during testing.

From analysis of the evidence it was concluded that M.P. appeared to be presenting with mild to moderate symptoms of early onset dementia with a co-existing depressed mood and did not exhibit features of a 'depressive pseudodementia'. desRosiers (1992) reported that recent research regularly finds a sizeable number of Alzheimer's Disease patients who can be given a secondary diagnosis of major depression. In M.P.'s case it was proposed that the depression was present before the onset of dementia and was currently exacerbating her apparent cognitive deficits. M.P. met the DSM-IV (1994) criteria for the diagnosis of dementia in that she had severe memory impairment; praxic difficulties and some difficulties in executive functioning which did cause significant impairment in her everyday functioning and represented a significant decline from her previous level of functioning. Her present difficulties also appeared to have emerged over several years and she has shown continuing cognitive decline. Her EEG recordings were also indicative of diffuse abnormalities.

Any formulation of this nature should be treated with caution due to the affect a wrong diagnosis could have on an individual's life. Ideally M.P. should be re-assessed to ascertain if any further cognitive decline has occurred and

undergo extensive medical investigations to eliminate any other possible causes. Her anti-depressant medication should also be monitored carefully in order to assess if this has an effect on her mood and subsequent cognitive abilities. Further interviews are also required with family members.

As Lezak (1983) stated, differentiating between dementia and depression is “probably the knottiest problem of differential diagnosis”. However, an informed conclusion can be reached based on thorough clinical interviews, behavioural observations and neuropsychological assessment with the individual’s background and history being just as important in the formulation as the psychometric results.

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CHAPTER FOUR

APPENDICES

APPENDIX 4.1

AUTHOR'S NOTES

NOTES TO CONTRIBUTORS

1. The *British Journal of Clinical Psychology* publishes original contributions to scientific knowledge in clinical and health psychology. Topics covered reflect the broad role of clinical and health psychologists and include descriptive studies as well as studies of the aetiology, assessment and amelioration of disorders of all kinds, in all settings and amongst all age groups. Empirical investigations from any theoretical perspective of the relation of intrapersonal and interpersonal processes to disorder are welcome, as are studies of the delivery of health care in hospital or community settings. Relevant populations include people with psychiatric and neuropsychological disorders, and people with learning difficulties. Studies with samples not currently experiencing any disorder may be considered if they bear directly on clinical theory or practice.

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- (d) Brief Reports and Comments (see paragraph 6). Case studies are normally published only as Brief Reports. Papers are evaluated in terms of their theoretical importance, contributions to knowledge, relevance to the concerns of practising clinical psychologists, and readability. Papers generally appear in order of acceptance, except for the priority given to Brief Reports and Comments.
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CHAPTER FIVE

SINGLE CASE RESEARCH (II)

**THE SUCCESS OF A BEHAVIOUR MANAGEMENT PROGRAMME
ON AN OUT-PATIENT BASIS FOR A 5 YEAR OLD CHILD WITH
NON-ORGANIC FAILURE TO THRIVE**

TARGET JOURNAL:

**JOURNAL OF THE AMERICAN ACADEMY OF CHILD AND
ADOLESCENT PSYCHIATRY**

ABSTRACT

A five year old child with a history of poor eating and vomiting was referred to the Clinical Psychology Service. Following extensive medical investigations no organic cause was found to explain her presentation and she was diagnosed as suffering from non-organic failure to thrive. Treatment was based on a behaviour management programme for parents of children with eating difficulties by Harris (1994), and involved seeing the mother only on an out-patient basis. Over a period of eleven weeks the child began to make a significant improvement with regard to her food intake and motivation to eat.

Key words: non-organic failure to thrive, behaviour management.

The term 'failure to thrive' typically refers to infants and young children who weigh less than 80% of ideal weight for age or whose rate of weight gain is below the third or fifth percentile for age on standardised growth charts (Bithoney & Rathbun, 1983).

Failure to thrive accounts for three to five percent of paediatric admissions to hospital (Berwick, 1980), and therefore is of great concern to primary health care teams.

The traditional diagnostic sub-types of failure to thrive used by researchers and clinicians are organic failure to thrive, (OFTT), and non-organic failure to thrive, (NOFTT). OFTT has been defined as failure to thrive in which the cause is a known physical problem (Polan et al, 1991). NOFTT is characterised by poor weight gain in infants and young children without an apparent physical cause (Wolke et al, 1990).

Traditionally, the aetiology of NOFTT has been discussed in terms of maternal rejection and neglect (Wittenberg, 1990). However amongst

Paediatricians it is now realised that undernutrition is the main 'biological insult' in NOFTT and that the cause of inadequate growth is caloric rather than emotional deprivation (Skuse, 1992).

It is now the widely accepted view that the aetiology of NOFTT is multifactorial and interactional. The parent-child relationship can be adversely affected by the influence of several factors which in turn can lead to feeding difficulties in the child. The caregiver's characteristics and the child's characteristics interact to produce insufficient caloric intake by the child.

Douglas et al (1991) focused treatment on the parent-child relationship and one of her aims was to help parents deal with their anxieties; take away the pressure from eating and to help the child perceive eating as pleasurable and rewarding. Similarly Harris (1994), produced a behaviour management programme for parents who have a child who is difficult to feed. Harris (1994) stated that it is usually the parents who have a problem with the child's eating behaviour and that the child is normally unconcerned by their small appetite. Parental anxieties which surround mealtimes can make eating very tense and unpleasant for the child which in turn reduces the child's appetite

In this paper a case study will be reported which describes the successful treatment of NOFTT in a five year old child by working on an out-patient basis with the child's caregiver. Treatment was based on a behaviour management programme for parents of children with eating difficulties (Harris, 1994).

CASE STUDY

A.M. , a five year old girl, presented with a long history of eating difficulties. At the time of referral her weight was well below the third percentile for her age as measured by standardised growth charts.

A.M was admitted to hospital on two occasions when she was two years old due to severe episodes of coughing and vomiting. Intensive medical investigations were carried out from which no abnormalities could be found. Her caloric intake however, was below that recommended for her age and her intake of solids was very poor. She was then seen again by the Paediatrician at the age of four. At this time she was experiencing episodes of coughing and vomiting once a day and was treated for asthma after which her height and weight increased. Further investigations were undertaken one year later due to complaints of vomiting and stomach pains after eating, however no reflux or infectious cause could be found. At the time of the present study A.M had not vomited for the last seven months.

A.M lived with her mother, Mrs M., and two brothers, aged two and seven years. Mrs M. reported no eating difficulties with her eldest son but said her youngest son was a little below his ideal weight when he was younger. Mrs M. had separated from A.M's father two years previously although he still visited on a weekly basis.

During my initial assessment with A.M's mother she reported that A.M suffered from double pneumonia following her birth and was in intensive care

for twelve days. Mrs M. reported that A.M had always been a poor eater. She stated that she was very slow at bottle feeding and never drank a lot of milk. Solids were introduced at four months and A.M. was given a variety of tinned baby foods and Milupas. Mrs M. did not report any other developmental or psychological problems.

At the time of the present study A.M had just started primary school and had settled in well. Mrs M. described A.M as “chatty” and said she interacted well with her friends. During the initial session A.M. was very quiet. She played with toys for a short while after which she appeared to get bored and wanted her mother’s attention. A.M appeared to be healthy although somewhat underweight.

Mrs M.’s description of her child’s eating pattern indicated that A.M was not a fussy eater but had a small appetite. This also appeared to apply to her intake of fluids. Mrs M. reported that A.M never said she was hungry or asked for food and would only eat a couple of mouthfuls at mealtimes.

With regard to Mrs M.’s management of her daughter’s eating, she stated that if A.M did not eat the first meal made for her then she would make another. She reported that mealtimes could last for one and a half hours. Mrs M. said she did not scold A.M for not eating or forced her to eat but would coax her. Mrs M. appeared very concerned regarding the possible repercussions of her daughter not eating and said she sometimes cried at mealtimes if A.M did not eat an adequate amount. (As part of the assessment Mrs M. was asked for her consent to video the interaction between herself and A.M. during a meal, however Mrs M. was not comfortable with this idea and decided against it.)

From my assessment it was concluded that A.M's poor appetite may have originated from the frequent episodes of vomiting she had experienced in the past, following which she may have developed a classically conditioned aversion to food. As Rozin (1986) highlighted, avoidance of food can occur whether the food caused the vomiting or not. It is the paired association that is important. A.M had also been described as a "fussy" eater as a baby and was never motivated to eat, this therefore could have led to difficulties at an early stage in the feeding interaction between A.M and her mother. It may also be the case that there could have been periods of marital discord within the family which may have interfered with Mrs M.'s ability to interact effectively with her daughter at mealtimes and at other times of reciprocal interaction. Douglas (1991) highlighted that discord within the family unit can affect the parents' abilities to manage their child's needs.

A.M's feeding difficulties appeared to be maintained by Mrs M.'s anxieties around mealtimes. This anxiety would then be transferred onto A.M which in turn led A.M to associate eating with further feelings of tension and unpleasantness. It is also probable that A.M learned that she received attention from her mother by not eating.

A behavioural management programme was initiated with Mrs M. The aims of this were to increase A.M's caloric intake and to improve her interest in food and her motivation to eat. This was based on Harris's (1994) behaviour management programme for parents of children who have eating difficulties.

During the sessions Mrs M. was asked to keep a 'food diary' in which the type

and quantity of food eaten at each meal and snack time was recorded on a daily basis.

In the first instance, Mrs M. was reassured that A.M would not become ill because she only ate small amounts of food. Mrs M. was asked to think of other areas of A.M's life in which she was a normal, healthy child in order to help her rationally reappraise her daughter's eating difficulties. The role of Mrs M.'s anxiety in the maintenance of these difficulties was discussed and Mrs M. was encouraged to view mealtimes as pleasant and enjoyable and as an opportunity for the family to be together. Mrs M. was asked to give A.M positive reinforcement when she was eating and not to give reinforcement in the form of coaxing; making more meals or pleading if A.M refused to eat. If A.M was not eating then mealtimes were to be ended after half an hour. This behavioural approach was used to help A.M learn that eating could be a time for positive interaction with her mother and that she gained more interaction and attention from eating than she did from not eating.

As A.M had a small appetite Mrs M. was advised to offer A.M small frequent meals, ie. her day was divided into three main meals and three snack times. If A.M was offered small quantities at regular intervals then she would be more likely to ingest more calories. Mrs M. was also advised to give A.M a balance between 'basic' and 'treat' foods to maintain A.M's interest in eating and to begin with A.M's favourite foods at mealtimes, after which new foods could be gradually introduced.

As sessions progressed Mrs M. was encouraged to introduce A.M to new eating settings to help A.M associate eating with pleasurable experiences

and enjoyment, eg. a trip to McDonalds, and to allow A.M to attend school dinners on occasions during which time she would be likely to imitate the eating behaviours of other children.

Over a period of eleven weeks Mrs M. reported a steady and gradual improvement in A.M's intake of food and interest in eating. She stated that A.M. often finished what she was given to eat and on occasions asked for food. She was beginning to eat 'medium' sized portions and the length of mealtimes had reduced. A.M's food diaries also indicated an improvement. (see Appendices 5.2 (week 1) & 5.3 (week 11)). In week 1 Mrs M. did not report quantities A.M had consumed, however she reported that A.M. only ate a couple of mouthfuls on most occasions. At week 11 A.M's intake appeared to have improved and she was eating a larger variety of foods. At this time A.M's progress was reviewed by a Consultant Paediatrician and it was found that her weight had significantly increased. At a two-month follow-up at Clinical Psychology A.M.'s progress had been maintained and she appeared to be in good health.

DISCUSSION

The most recent model to emerge from the literature explaining the aetiology and maintenance of NOFTT is that of a multi-factorial and interactional model. In A.M's case it appeared that her poor appetite was related in the first instance to a classically conditioned response to food which was then maintained by operantly conditioned responses to her mother's management

of her food intake, eg. she had learned that not eating enabled her to keep her mother's attention.

The success of working solely with the caregiver on a behaviour management programme highlights that, in some cases, NOFTT can be effectively managed by empowering the caregiver to take control of the problem. This involves providing advice with regard to managing their child's behaviour at mealtimes in a more effective and appropriate way, as well as giving advice with regard to the type and quantity of food given. The timing and situation of meals is also important. Anxiety management should be addressed with caregivers, and support and reassurance is required when behavioural management techniques are put into practice for the first time.

Douglas (1991), reported that behavioural management programmes of childrens' eating problems should be aimed at increasing parents' self-confidence and self-esteem in their management of their child's eating problem. She also noted that it is important to contain the caregiver's anxieties and to relieve the pressure surrounding eating.

A comprehensive assessment of each individual case of NOFTT is required in order to develop the most appropriate and effective intervention strategy for the child and the family. Skuse (1992), reported that observations and interviews in the home environment are important as well as seeing the family in the clinic. Skuse stated that the context in which feeding difficulties occur should be investigated as well as observing the actual feeding routine. If Mrs M. had given her consent, home observations would have been advantageous in the present study as this may have highlighted further

difficulties in the mother-child interaction at mealtimes as well as in other contexts which could have been addressed in sessions.

This study highlights, that although NOFTT is a complex condition, it's treatment can be straightforward and successful with certain individuals whose eating difficulties are not severe or life threatening, by working solely with the child's caregiver on an out-patient basis.

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CHAPTER FIVE

APPENDICES 5.1 - 5.3

APPENDIX 5.1

AUTHOR'S NOTES

Journal of the American Academy of
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PSYCHIATRY**

Instructions for Authors

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1. *Cover sheet.* On an unnumbered page, provide an abbreviated form of the main title to be used as a running head, not to exceed 40 characters and spaces. Give the name, address, telephone number, and fax number of the corresponding author. A word count, including references and tables, must also be included on this page.

2. *Title page.* On the first numbered page state the title. It should be informative and brief (less than 10 words is ideal; 15 words is maximum; titles of case studies should be limited to 10 words or less) and should state the major variables rather than details of the study. The full names of authors and their academic degrees follow the title on a separate line. Include a paragraph giving the authors' affiliations, any necessary credit lines, and the name and address for reprint requests. This paragraph should not exceed 120 words.

3. *Abstract.* A structured abstract (maximum 200 words) must be submitted with the manuscript. The abstract must stand on its own and should not include general statements that refer the reader to the text. References are not to be cited in the abstract. The abstract must be followed by 3 to 5 key words to be used for indexing. Research articles should contain the following information under the headings indicated: **Objective:** the primary purpose of the study; **Method:** design of the study and main outcome measures; **Results:** key findings; and **Conclusions:** including clinical significance. Special review articles: **Objective:** the primary purpose of the review; **Method:** data sources, study selection (number of articles reviewed and how they were selected); **Results:** methods of data synthesis and key findings; and **Conclusions:** summary

statement of what is known including potential applications and research needs. Case studies should contain an unstructured abstract of not more than 100 words.

4. *Text.* Begin text on the third numbered page. Spell out all abbreviations (other than units of measure) the first time they are used. Footnotes to the text may not be used. If there are more than two authors in a citation, use "et al." after the first author's name. If more than one citation appears together, arrange them in alphabetical order. Authors should use the diagnostic classifications from *DSM-IV*.

The generic term for a drug should be used. When it is necessary to refer to the proprietary name, list the name in parentheses, with a registered mark ® attached, after the generic term.

5. *References.* Arrange the reference list in alphabetical order by author names; do not number. Use initials and surnames of authors. List all authors' names for each publication. If several papers by one author are cited, list them in chronological order. When an author has published several papers in the same year, the date is followed by a, b, c, d, etc. Refer to *Index Medicus* for the appropriate abbreviations of journals. Unpublished manuscripts, submitted manuscripts, and personal communications should not appear in the reference list but may be noted in the text. "In press" manuscripts may be cited in the reference list.

Sample References

Achenbach TM, Edelbrock C (1983), *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington: University of Vermont Department of Psychiatry

Achenbach TM, Verhulst RC, Baron GD, Akkerhuis GW (1987), Epidemiological comparisons of American and Dutch children: 1. Behavioral/emotional problems and competencies reported by parents for ages 4 to 16. *J Am Acad Child Adolesc Psychiatry* 26:317-325

Bell AC (1930), *The Child and His World*. New York: Macmillan, 1975 (If the year of original publication does not coincide with the edition referred to, add the year of publication of the edition used after the publisher's name.)

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US Department of Health and Human Services (1987), *Report of the Surgeon General's Workshop on Children with HIV Infection and Their Families* (DHHS Publication HRS-D-MC 87-1). Washington, DC: US Government Printing Office

6. *Tables.* Type each table on a separate page with a title and legend included. Tables are numbered in arabic numerals, consecutively in order of appearance. In typing tables, omit all underlining and double-space. Make sure that numbers are properly aligned, both horizontally and vertically. Use brief headings for columns and, if necessary, use abbreviations and explain them in a key to abbreviations in a footnote. If there are footnotes, use superior letters, ^a, ^b. Keep footnotes to a minimum; avoid repeating the same information in the text and in tables. Cite each table in the text in order as Table 1, Table 2, etc.

Note. The *Journal* does not publish tables or figures that have appeared in other publications. Previously published materials should be cited as references only.

7. *Figures.* Submit figures camera-ready, suitable for reproduction, preferably as velox or glossy prints or laser copy on high quality paper. Dot-matrix printing is not acceptable. Do not mount artwork. Place a label on the back of each piece with the figure number, last name(s) of author(s), and "top." Figures should be prepared with the size of the *Journal* page (one column or page width) in mind. List captions together on a separate sheet of paper. Cite each figure in the text in order as Figure 1, Figure 2, etc.

APPENDIX 5.2

FOOD DIARY

(WEEK 1)

FOOD DIARY

DATE: 25.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	milk HALF GLASS	home	mum
MORNING SNACKS	sweets	school	—
LUNCH	cheese and tomato PIZZA Five Live Juice Drink	home	mum
AFTERNOON SNACKS	milk only	home	mum
DINNER	rice with with meat yogurt	home	mum
EVENING SNACKS	milk Biscuits	home	mum

FOOD DIARY

DATE: 26.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	one Sliced Bread and milk	home	mum
MORNING SNACKS	Nothing /		
LUNCH	chips and Juice	home	mum
AFTERNOON SNACKS	CRISPS	home	mum
DINNER	Fish Fingers and Peas sweet corn Pure Juice	home	mum
EVENING SNACKS	milk	home	mum

FOOD DIARY

DATE: 27.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	Sliced Bread egg and milk	home.	mum
MORNING SNACKS	^{the} Pancakes and Juice	home	mum
LUNCH	Chappati and Carrots Curry	home	mum
AFTERNOON SNACKS	Chocolate	home	mum
DINNER	Baked Potatoes cheese	home	mum
EVENING SNACKS	one Apples	home	mum

FOOD DIARY

DATE: 28.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	milk one Sliced Bread	home	mum
MORNING SNACKS	CRISPS	school	-
LUNCH	meat rice with chicken Pure Juice	mum home	mum
AFTERNOON SNACKS	rice Krispies half apple	home	mum
DINNER	chappati with Currys Drink water	home	mum
EVENING SNACKS	milk and Biscuit	home	mum

FOOD DIARY

DATE: 29.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	one Sliced Bread and egg egg milk	home.	mum
MORNING SNACKS	Sweets	School	—
LUNCH	Semolina	home	mum
AFTERNOON SNACKS	Banana milk	home	mum
DINNER	Chips or Juice	home	mum
EVENING SNACKS	Semolina	home	mum

FOOD DIARY

DATE: 30.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	milk	home	mum
MORNING SNACKS	chocolate	SCHOOL STREET	—
LUNCH	Two Fish Fingers One Full Pomegranate	home	mum
AFTERNOON SNACKS	chocolate chocolate Orange Apples chocolate	home	mum
DINNER	Chappati and Courgettes Currys	home	Mum
EVENING SNACKS	Crisps milk	home	mum

FOOD DIARY

DATE: 31.10.96

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	rice krispies	home	mum
MORNING SNACKS	Potato waffles Sweets	home school	mum
LUNCH	potato waffles Pure Juice	home	mum
AFTERNOON SNACKS	Fresh Fruit	home	mum
DINNER	Vegetable Curry with rice	home	mum
EVENING SNACKS	Sand wich	home	mum

APPENDIX 5.3

FOOD DIARY

(WEEK11)

FOOD DIARY

DATE: 1. 1. 97

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	One Slice Bread One egg half Glass milk	home	Family
MORNING SNACKS	One Coconut Bun Glass milk	home	With brother
LUNCH	half Chappati With Curry Glass Water	home	Family
AFTERNOON SNACKS	Two Slice Bread Peanut Butter	home	With mum
DINNER	One Boiled Potato With Cheese half apple half Glass Juice	home	Family
EVENING SNACKS	Two mini Roll	home	With brother

FOOD DIARY

DATE: 2.1.97

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	One Slice Bread one egg Glass milk	home	Family
MORNING SNACKS	Crisp half whole nut	home	Family
LUNCH	Five pokora half bowl custard	home	Family
AFTERNOON SNACKS	One Banana half apple	home	with brothers
DINNER	two Fish Fingers Peas some Sweet Corn half glass water	home	family
EVENING SNACKS	Glass milk	home	her self

FOOD DIARY

DATE: 3.1.97

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	One Bread one egg Glass milk	home	family
MORNING SNACKS	Sweets	home	her self
LUNCH	Chips with cheese In Bru	Garage aunt house	aunt family
AFTERNOON SNACKS	Cakes Glass juices	aunties house	with brothers
DINNER	Some Roast Glass milk	home	family
EVENING SNACKS	Fresh Fruit	home	her self

FOOD DIARY

DATE: 4.1.97

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	rice krispies	home	family
MORNING SNACKS	Two mini Roll Some Sweets	home	with brothers
LUNCH	half PIZZAS chees tomato half glass water	home aunties house	with family
AFTERNOON SNACKS	Two slices Bread with glass milk Jams	home	with brothers
DINNER	half Pitta Bread with vegetable curry half glass fruit juice	home	family
EVENING SNACKS	Two Pancake glass milk	home	brothers

FOOD DIARY

DATE: 5. 1979

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	One Bread one egg Glass milk	home	family
MORNING SNACKS	Two chocolate eclairs	home	with mum
LUNCH	one samosa half bowl custard with cake half glass milk	home	family
AFTERNOON SNACKS	One Banana half apple	home	her self
DINNER	half mixed B Kabab half Glass Juice	home	family
EVENING SNACKS	yoghurt	home	brothers

FOOD DIARY

DATE: 6.1.97.

	WHAT EATEN AND QUANTITY	WHERE EATEN	WHO WITH
BREAKFAST	Rice Krispies	home	Family
MORNING SNACKS	Crisps Sweets	to School	—
LUNCH	half chappati with chicken Curry half glass Juice	home	Family
AFTERNOON SNACKS	One Banana one cake half apple	home	with brothers
DINNER	Two Fish Finger Peas sweet corn half glass Juice	home	Family
EVENING SNACKS	Two Kiwi fruit one Pear glass milk	home	with mum

CHAPTER SIX

SINGLE CASE RESEARCH (III)

**THE EFFICACY OF A PILOT SEX EDUCATION PROGRAMME FOR
A GROUP OF WOMEN WITH LEARNING DISABILITIES**

TARGET JOURNAL:

BRITISH JOURNAL OF LEARNING DISABILITIES

This paper assesses the efficacy of a pilot sex education programme for a small group of women based on the the sex education resource package for people with learning difficulties, Sex and the 3R's (McCarthy & Thompson, 1994). Base-line and mid-group measures were taken to assess changes in sexual knowledge and attitudes. It was found that each participant had acquired and retained new information, and their understanding appeared to have increased with regard to sexual and relationship issues. The groups' attitudes as a whole remained quite conservative which may reflect constraints put on them by their carers with regard to expression of sexuality. It was noted that the level of base-line knowledge on areas of 'Sexual Touching'; 'Contraception' and 'STD and Safe Sex' was poor.

INTRODUCTION

Sex education for people with learning disabilities is an essential area which has been given more attention in recent years. Through sex education, people with learning disabilities are given the information to allow them to make informed choices regarding sexual behaviour as well as protecting themselves against possible abuse. As Craft (1994) states, "access to sex education and where necessary, individual counselling, is an essential part of the enablement process".

Although sex education programmes are widely accepted as useful in

teaching people with learning disabilities (Lindsay et al, 1992), it is important to assess how much information is acquired and retained by participants.

Research carried out by Penny & Chataway (1982), evaluated the efficacy of a sex education programme with a group of 44 adults with mild to moderate learning disabilities. They assessed progress by looking at group scores on a sex vocabulary test just after completion of the programme and at a 2 month follow-up. Ninety-six percent of individuals showed an increase in scores at the first interval, with 76% showing an improvement at follow-up.

In a paper by Haight & Fachting (1986), the outcome of a programme for teaching sexuality, love and maturity to high school students with learning disabilities was discussed. Within a group of six students, scores on criterion referenced pre and post tests improved from 58-84% to 90-100%.

Lindsay et al (1992), assessed sexual knowledge in a group of 48 adults with mild to moderate learning disabilities following a 9 month sex education programme. Significant and substantial increases were found in all areas of sexual knowledge as compared to a control group at a 3 month follow-up.

In a further paper by Lindsay et al (1994), the change in attitudes of participants following a sex education course was discussed. As Lindsay (1994) states, "this aspect of sex education is equally important as an increase in sexual knowledge." From the results it was found that before the programme, participant's views of sexual and social relationships were quite conservative, however, after the course there was a shift towards more balanced attitudes.

In the present paper the efficacy of an on-going pilot sex education programme, run for a small group of women with mild to moderate learning disabilities, will be discussed.

METHOD

Participants

Four women, three of whom attended a Day Centre, agreed to participate in the group. Their ages ranged from 28-32 years. These women were selected to participate based on the benefits it was thought they would gain from a sex education programme; their needs, and their ability to cope with a group situation. Decisions were based on individual interviews with women identified as requiring sex education input, as well as behavioural observations and interviews with their carers. Not all women who were interviewed wanted to attend.

Assessment

Pre-group measures

Women identified to be in the group were interviewed by one of the facilitators. Their base-line knowledge of sexual and relationship issues was assessed using a questionnaire devised by one of the facilitators based on the content of the 'Sex and the 3R's' package. The women were also asked

how they would feel about being in a group; if they would have any difficulties in a group situation and what they would like to learn.

Mid-group measures

Following the completion of six topics, the draft questionnaire was re-administered to assess changes in sexual and relationship knowledge and attitudes at this time. (See appendix 6.2 for copy of draft sexual knowledge questionnaire and scoring procedure).

Procedure

The sex education programme undertaken is based on 'Sex and the 3R's': Rights, Responsibilities and Risks (McCarthy & Thompson, 1994). This programme comprises of 12 weekly sessions of one hour duration with half an hour for 'wind-down' at the end of each session. The course covers the terminology used for parts of mens' and womens' bodies; body changes and development in men and women; menstruation and the menopause; reproduction; contraception; sexually transmitted diseases (STD) and safe sex; (sexual touching - masturbation; sexual touching - appropriate and inappropriate; and relationships and friendships). The topics in brackets had not yet been covered at the time of the present study. The group is run by two facilitators in a Resource Centre outwith the Day Centre. This provides privacy for the group.

Sessions 1 and 2 of the course involved an introduction to the programme as well as warm-up exercises to help the group feel more comfortable and

relaxed talking to each other. Ground-rules were also discussed with regard to respecting each others contributions and views, as well as their privacy.

RESULTS

Table 1, (see at end of Results Section), highlights the number of correct responses given by each group participant across several areas of sexual and relationship knowledge before the course began, (pre-measure), and following the completion of six topics, (mid-measure).

From Table 1 it can be seen that for each participant there was an increase in sexual knowledge between pre and mid-group measures. Most participants' total scores had substantially increased, apart from participant 3 who had one of the higher base-line scores.

On inspection of base-line knowledge it can be seen from the mean number of correct responses (see Table 2 at end of Results Section), that the areas of 'Sexual Touching' , 'Contraception' and 'STD and Safe Sex' had the poorest base-line knowledge. At mid-assessment it can be seen that those areas not yet covered, eg. 'Sexual Touching', showed the least improvements in knowledge, although a slight improvement was made. Knowledge in 'STD and Safe Sex' improved but not to a large extent, whereas there was a greater improvement in the area of 'Contraception.'

Sexual Attitudes

Notes were taken with regard to participants sexual attitudes at mid-group assessment. All participants retained the attitude that it was not okay to have sexual intercourse if you did not want a baby. A couple of participants were very unsure in their sexual attitudes as a whole.

Table. 1 The number of correct responses in the draft sexual knowledge questionnaire, pre and mid measures, for each participant

	<u>1</u>		<u>2</u>		<u>3</u>		<u>4</u>	
	<u>pre</u>	<u>mid</u>	<u>pre</u>	<u>mid</u>	<u>pre</u>	<u>mid</u>	<u>pre</u>	<u>mid</u>
<u>Terminology</u>	3	3	3	7.5	3	5.5	1	1
<u>Check</u>								
<u>Body</u>	2	8	5	13	5	5	0	5
<u>Development</u>								
<u>Menstruation</u>	5	5	4.5	8.5*	4	4	5	5.5
<u>Reproduction</u>	4	6	5	6	5	4	1	4*
<u>Sexual Touching</u> **								
-Masturbation	0	0	1	1	0	1	0	0
-Mutual Touching	1	2	2	2	1	2	2	3.5
-Sexual Intercourse	2	1	2	2	1	1	0	2
<u>Contraception</u>	0	4	3	6	4	3.5	0	2*
<u>STD and Safe Sex</u>	0	2	1	2	0	3	1	1
<u>TOTAL</u>	17	31	26.5	48	23	29	10	24

* = missed session ** = topics not covered ie. masturbation; approp./non-approp. sexual touching and sexual intercourse.

Table. 2 Mean number of correct responses in each area of sexual knowledge, pre and mid measures

	<u>means (pre measure)</u>	<u>means (mid-measure)</u>	<u>difference</u>
<u>Terminology Check</u>	2.5	4.25	1.75
<u>Body Development</u>	3	7.75	4.75
<u>Menstruation</u>	4.62	5.75	1.13
<u>Reproduction</u>	3.75	5	1.25
<u>Sexual Touching</u> **			
- <u>Masturbation</u>	.25	1	.75
- <u>Mutual Touching</u>	1.5	2.38	.88
- <u>Sexual Intercourse</u>	1.25	1.5	.25
<u>Contraception</u>	1.75	3.88	2.13
<u>STD and Safe Sex</u>	.5	2	1.5

** = topics not covered

DISCUSSION

The results of this study highlight that the sex education programme undertaken with this group of women was efficacious and produced increases in sexual and relationship knowledge. Those participants who missed some group sessions still showed an increase in knowledge of these topics compared to base-line. This could have been due to topics being briefly revised at following sessions as well as learning from peer discussion within the group.

It was found that although knowledge of sexual and relationship issues increased, some participants attitudes did not change or they were very unsure as to what was appropriate/inappropriate sexual behaviour. It could be the case that sexual attitudes are difficult to change in people with learning disabilities, perhaps due to their carers perceiving sexual relationships as a hazard and therefore not allowing the person with a learning disability to express themselves fully, or by portraying the message that it is wrong to do so. From a qualitative study, Heyman & Huckle (1995) found that informal carers viewed sexual relationships in people with learning disabilities to be 'unacceptably dangerous'. In a study by Rothenberg et al (1979), a sex education programme was undertaken with young adults. From a structured interview it was found that sexual knowledge at base-line was quite limited and the authors raised the question as to whether this was secondary to their learning disability or due to other factors such as a sheltered background.

Stevens et al (1988) stressed the importance of communication between parents, professionals and people with learning disabilities in order to bring sexual issues to the forefront.

It is concerning that the areas of 'Sexual Touching', 'Contraception' and 'STD and Safe Sex' had the lowest levels of base-line knowledge within the group. Lindsay et al (1994) also found poor baseline knowledge in these areas and a study by Bender et al (1983) produced the same findings. As people with learning disabilities can be subject to abuse it is concerning that they have least knowledge in these areas.

In the present study the group was quite heterogeneous with regard to cognitive ability. This made it difficult at times to include the whole group in the topic of discussion. However, the participant who had the lowest score on sexual knowledge at base-line did show a substantial increase in sexual knowledge at mid-assessment, although it appeared that she had some difficulty making sense of the information given and how it applied to her. This individual would therefore benefit from more intensive individual sessions.

With regard to the participants views about the programme, the main aspect they said they enjoyed was being able to talk to people in the group about sexual and relationship issues. As the group progressed the participants appeared to increase in self-confidence and to enjoy the discussions. They did not highlight any other areas which they felt were missing from the programme.

In summary, the on-going pilot sex education programme appears to be successful. The participants have learned and retained some information, however there are areas eg. 'STD and Safe Sex' which may require further input. Other participants may also benefit from individual education sessions.

To assess efficacy further, the sexual knowledge questionnaire will be re-administered at the end of the programme and at a follow-up to ascertain how much information has been learned and if the participants are able to retain this information. It will also be interesting to note if attitudes begin to change by the end of the programme.

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CHAPTER SIX

APPENDICES 6.1 - 6.2

APPENDIX 6.1

AUTHOR'S NOTES

EDITORIAL POLICY AND GUIDELINES FOR AUTHORS

These guidelines are provided to assist authors in the preparation of manuscripts which conform to the BILD Publications house style. Failure to conform with these guidelines will inevitably delay the process of review and involve authors in additional work. We would, therefore, urge you to read through these notes carefully before submitting materials to *The British Journal of Learning Disabilities*.

AIMS OF THE JOURNAL

BJLD is a multi-disciplinary professional journal publishing articles which will draw the attention of those who are working in the field of learning disabilities to innovations in professional practice, to new ideas emerging from research, and to evaluations and reviews of on-going work which has general, professional relevance. Material submitted to BJLD should be original and any opinions expressed should be either supported by data or by well-reasoned arguments.

Reports on practice and research papers should be supported by descriptions of methodology and evidence which permits readers to evaluate the conclusions drawn. Reviews (commissioned or otherwise) should be supported by argument, data from relevant references and should place the review topic within the context of other developments in the field.

Submissions which are divided into two or more linked papers will only be accepted in exceptional circumstances and when the subject matter clearly justifies this approach.

LAYOUT

Articles should be typed, double-spaced, on one side only of A4 paper, with a 1.5" margin on each side. Pages should be numbered consecutively in the top right-hand corner, commencing with the title page.

TEXT

The text should be written in the third person, in 'plain English', with an international, multi-disciplinary readership in mind. Descriptions should be clear and concise and terminology specific to a particular profession should be explained for the benefit of people in other professions.

Care should be taken to use non-sexist language and, when referring to disabilities etc., to emphasise the person rather than the disability, so descriptions such as *people with learning disabilities* should be used rather than *the learning disabled*. Clumsy expressions such as *he/she*, *he or she* or *s/he* should be avoided, for example, by using the plural verb. Use the term 'participants' to describe those involved in research rather than 'subjects'.

Full references to the sources of all statistical measures used must be supplied.

If any technical terms specific to a particular profession are unavoidable, they must be explained briefly in the text immediately following. Statistical information should be translated into simple statements of significance, but the source of the measures used **must** be fully referenced and the full statistical data should be available from the main corresponding author.

COPIES

Four copies should be submitted, one of which should be the original typescript. One copy should be retained by the author.

LENGTH

Articles should not exceed 2,000 words (approximately eight pages of a double-spaced A4 typescript).

ORDER OF CONTENTS

Title Page

The title page should contain a short main title to indicate content and a sub-title if it is necessary to clarify this further

Authors

On a separate page include the first name and surname of each author, with details of their respective professional occupations and addresses. Where there is more than one author, indicate who should receive correspondence.

Summary

A concise 150 word summary should precede the main text. It should indicate the content and findings of the article.

Main Text

The main text should be presented in a logical sequence and be divided by appropriate sub-headings.

Acknowledgements

The author(s) should acknowledge individuals and agencies who have assisted in the work and **must** acknowledge those from whom reprint or photographic reproduction permissions have been obtained. **It is the responsibility of the author(s)** to obtain all necessary permissions and to confirm in writing that such permissions have been granted.

Tables and Figures

Each Table and Figure should be presented on a separate sheet at the end of the work. Each one should be numbered in Arabic numerals and given an appropriate heading. The preferred position in the text should be indicated in the left-hand margin and the text should refer to each Table or Figure in turn.

Photographs

Glossy, sharply defined, black and white photographs are preferred. Each one should be lightly numbered in pencil on the reverse. A list of the photograph numbers and their respective relevant captions should be typed on a separate sheet. **The author(s) must seek** all relevant rights and permissions for using the photographs and must enclose a letter stating that these have been obtained.

References

The author(s) are responsible for the accuracy of references and for their correct presentation. References should be listed on a separate sheet, in alphabetical order, following the Harvard system, as follows:

- | | |
|-------------------------|--|
| Journal articles | Gardner, D. and Rose, J. (1994)
Stress in a social services day centre
<u>British Journal of Learning Disability</u> 22 (4), 130-33. |
| Books | Jones, R.S.P. and Eayrs, C. B. (eds) (1993)
<u>Challenging Behaviour and Intellectual Disability</u> . Clevedon: BILD Publications |
| Book chapters | Oliver, C. (1993) Self-injurious behaviour: from response to strategy.
In C. Kiernan. (ed)
<u>Research to Practice? Implications of Research on the Challenging Behaviour of People with Learning Disability</u> . Clevedon: BILD Publications |

All references listed must be cited appropriately within the text using one or other of the following styles:

"Kerins, Hickey & Haydock (1985) stated that ..."

or

"In an article about providing modern apartments for adults (Kerins, Hickey & Haydock, 1985) it was stated that ..."

Journal titles should **not** be abbreviated. The letters a, b, c, should be added after the date if more than one paper by the same author(s), published in the same year, is quoted.

Reference lists which are not of an acceptable standard will be returned to the author(s) for correction.

Letters

Letters which either provide or seek information on any aspect of research into learning disability and its associated conditions are welcome, as well as those which discuss the content of previous *British Journal of Learning Disabilities* articles. The first name, surname, professional occupation, and address of the correspondent(s) should be given at the end of the letter. Any references quoted should be listed on a separate sheet and prepared in accordance with the guidance given above for *Article References*

LENGTH

Letters should be restricted to no more than 500 words (approximately three pages of A4 double-spaced typescript). Two copies should be submitted.

REVIEWS

Reviews of books detailing research findings and advances in the field will usually be specifically requested by the Editor, but uncommissioned reviews will also be considered. Two copies should be submitted. Reviews should not exceed 500 words.

ASSESSMENT PROCEDURE

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APPENDIX 6.2

DRAFT SEXUAL KNOWLEDGE QUESTIONNAIRE AND SCORING PROCEDURE

Client Questionnaire - Draft

Preamble

We want to start a group soon for women. The group is about women's health. It will also talk about women's bodies, and how women's bodies change as we grow up. Later in the group we will talk about friendships with other women and men.

If you want to take part in the group, we would like to ask some questions so that we can see what things you already know about. If you do not want to answer any of the questions that is OK. Some of the questions might make some people feel embarrassed. Whatever you answer will be private and other people will not be told, unless you want someone else to know.

If you tell us something about you or somebody else being hurt, we might not be able to keep that private.

1. Terminology Check

Pictorial representation of male and female bodies. (Picture 1 - Sex & 3 R's)

2. Body Development

What happens to a girl when she grows up.

- Menarche.
- Breast growth.
- Body hair growth.
- Changes to body shape.
- Menopause.
- When these occur (approx.).

Using pictorial representation. (Picture 2 - Sex & 3 R's)

What happens to a boy when he grows up.

- Primary changes in sexual characteristics.
(testes descend, penis enlargement)
- Secondary changes in sexual characteristics.
(body hair growth, body shape, voice)

Using Pictorial Representation (Picture 6 - Sex & 3 R's)

3. Menstruation

- (a) What is it called when a woman finds blood in her pants?
- (b) When does this normally happen to women. (i.e. What age does it start?)
- (c) Where does the blood come from?
- (d) How often does it happen?
- (e) What do women do to keep their underclothes clean? (What is this protection called?)
- (f) Is there any other things that happen when a woman has her period? (or use person's terminology).
- (g) What is happening when a woman has her periods?
- (h) Is it okay for a woman to have periods?

4. Reproduction

(If this has not been mentioned above) - when a woman starts her periods (or person's terminology), it means she is ready to have children.

- (a) What do you know about how babies are formed/made?
- (b) How long does it take from when the baby is formed to when the baby is born?
- (c) How is the baby usually born?
- (d) Where is the baby usually born?
- (e) Is it okay for a woman to have a baby if she is married?
- (f) Is it okay for a woman to have a baby if she has a boyfriend?
- (g) Is it okay for a woman to have a baby is she is on her own?
- (h) Is it okay for a man to get a woman pregnant if he is married to her?

- (i) Is it okay for a man to get a woman pregnant if he is her boyfriend?
- (j) Is it okay for a man to get a woman pregnant if he does not know her?

5. Sexual touching & Intercourse

(using Pictorial representations)

- (a) What is this called? (male and female masturbation)
(Picture 8 & Picture 10 - Sex & 3 R's)
- (b) Is it OK for men and women to do this?
- (c) Where is it Okay for them to do this.
 - (i) When they are on their own.
 - (ii) When they are with other people.
 - (iii) When they are in a private place, like their own bedroom, or a locked bathroom that no-one can get into.
 - (iv) When they are in a place where they can not see anybody else - like a quiet park, or an empty public toilet.
- (d) What is this called? (mutual touching)
(Pictures 20, 24, 34 & 40 - Sex & 3 R's)
- (e) Is it okay to do this?
- (f) Where is it Okay for them to do this.
 - (i) In a private place where no-one else can see them (in their own bedroom, or a locked room).
 - (ii) In a place where they can not see anybody else, like a quiet park.
 - (iii) When they are with other people.
 - (iv) When they are in a public place (in a shop, at work).

- (g) What is this called? (Intercourse) **Picture 27 - Sex & 3 R's**
- (h) Is it Okay for men and women to do this?
- (i) Where is it Okay for them to do this?
 - (i) In a private place, where no-one can see them (bedroom, locked room).
 - (ii) In a place where they can't see anyone else, like a quiet park.
 - (iii) When they are with other people.
 - (iv) When they are in a public place (shop, work, etc).

6. Contraception

- (a) If a man and a woman want to have sex, but do not want a baby, can they stop this happening?
- (b) What is this called?
- (c) What are the ways to stop babies forming?
- (d) Is it okay for people to have sex when they do not want to have babies?

7. STD

When men and women have sex, there are types of diseases/illnesses which can be passed on, if one of them has one of the illnesses.

- (a) Do you know the names of any of these illnesses?
- (b) Do you know if there are any ways to stop spreading these illnesses?
- (c) Is it okay to have sex with someone if you have one of these illnesses?
 - (i) if you tell them.
 - (ii) if you do not tell them.
 - (iii) if you have sex in a safe way so that the illness will not pass on. (Describe what a "safe way" is)

8. Group membership

- (a) Would you like to be a part of a women's group?
- (b) How do you feel about talking about some of these subjects in front of other people?
- (c) Do you think you would be able to talk about these things?
- (d) Is there anyone you know who you would/would not like to be in this kind of group with you?
- (e) People show their feelings in different ways, how do you usually show your feelings in a group?
- (f) What would you like to learn from a group like this?
- (g) Do you think you need to be in a group like this?
- (h) If you do not want to be in a group like this, do you think you need to talk to someone on your own about some of the things we have talked about today?

Thank you very much for taking part.

Is there anything you would like to ask/say.

We will let you know as soon as possible whether you will be taking part in this group.

SCORING STRUCTURE FOR QUESTIONNAIRE

Terminology Check

1.

a) Female

Breasts (or colloquial)	-	1pt
Nipples	-	1pt
(function of e.g. "milk makers"		
or the like)	-	½pt
Vagina (or colloquial)	-	1pt
Pubic Hair (or colloquial)	-	1pt

Possible Score

4½

b) Male

Penis (or colloquial)	-	1pt
Testicles (colloquial)	-	1pt
Pubic Hair (or colloquial)	-	1pt

Possible Score

3

2.

(a) Female Changes

Menarche	-	1pt	approx. age	-	1pt
Breast growth	-	1pt	approx. age	-	1pt
Body hair	-	1pt	approx. age	-	1pt
Body shape changes - Face	-	1pt			
- Hips	-	1pt			
(or reference to curves etc.)					
Menopause	-	1pt	approx. age	-	1pt

Possible Score

10

(b) Male Changes

Primary					
Testes descend-	1pt	approx. age	-	1pt	
Penis					
enlargement	-	1pt	approx. age	-	1pt
Body hair					
growth	-	1pt	approx. age	-	1pt
Facial hair					
growth	-	1pt	approx. age	-	1pt
Body shape					
change	-	1pt			
Voice changes	-	1pt			

Possible Score

10

Any mention of "puberty" - 1 pt

Possible Score

1

3.

(a) Period/Menstruation (or colloquial) - 1pt

Possible Score

1

(b) If gives a range e.g. 10-17 - 2pts
If gives age when they started - 1pt
If gives indication of what would be "late" or "early". - pt
(e.g. I started when I was 8, but that's before people usually start").

Possible Score

2

(c) **Where does the blood come from?**

Any mention of womb/uterus - 2pts
Vagina (or colloquial) - 1pt

Possible Score

2

(d) **How often does it happen?**

Monthly - 1pt

Any indication that there can be irregularities in this - ½pt
(e.g. "Mine don't come as often as they should).

Possible Score

1

(e) **Naming of methods.**

Towels - 1pt
Tampons - 1pt

Possible Score

2

(f) **Reference to any of the usual symptoms - ½ each**
e.g.

stomach ache/cramps - ½pt
water retention (or description) - ½pt
mood changes - ½pt
tiredness - ½pt
other aches/pains - ½pt

Possible Score

4

(There may be other symptoms for individuals these should also be credited)

(g) The information being sought is:

The womb is lined / with blood / to prepare it for / a fertilised egg / when the egg / is released / and it is not fertilised / the lining of the womb breaks down / and this is when the blood appears to “cause” the period /

(possible score of 9) - 9 separate pieces of information

Would not expect respondents to be as technical as this but:

Any reference to reproduction (e.g. blood build up) - 1pt

Any reference to reproduction/pregnancy
 (“until you have babies etc.”) - 1pt

Any reference to breakdown
 (e.g. “old blood coming out”) - 1pt

Some discretion can be used in awarding scores) **Possible Score**
 9

(h) Not scored in overall scoring - Attitude question.

Simply note Y or N.

Obviously we hope that person believes that it is okay
 for women to have periods.

Positive - +1
 Neutral or Don’t Know - 0
 Negative - -1

4.

(a) Any reference to need for woman and man - 1pt

Any reference to sexual intercourse - 1pt

Any reference to sperm or eggs - 1pt

Any reference to growth in womb or
 woman’s stomach - 1pt **Possible Score**
 4

(b) 9 months/40 weeks - 1pt **Possible Score**
 1

(c) Looking for where baby emerges from →
 entrance to vagina (or colloquial) - 1pt

Mention of caesarian section or sometimes
need for operation

- ½pt

Possible Score

1

(d) In hospital

- 1pt

(recognition that choice can be made and
that some are born at home)

- 1pt

Possible Score

2

(e) **Attitude question - Not scored in overall scoring.**

Positive	-	+1
Neutral or Don't Know	-	0
Negative	-	-1

Some indication of the need for choice should also be taken into account.

(f) Positive	-	+1	}
Neutral or Don't Know	-	0	}
Negative	-	-1	}

(g) Positive	-	+1	}
Neutral or Don't Know	-	0	}
Negative	-	-1	}

for all these
questions,
indicators
of choice
and
responsibilities
are also
looked for.

(h) Positive	-	+1	}
Neutral or Don't Know	-	0	}
Negative	-	-1	}

(i) Positive	-	+1	}
Neutral or Don't Know	-	0	}
Negative	-	-1	}

(j) Positive	-	+1	}
Neutral or Don't Know	-	0	}
Negative	-	-1	}

5.

(a) Any reference to Masturbation
(or colloquial)

- 1pt

Possible Score

1

(b) **Attitude Question - not scored in knowledge total.**

Positive	-	+1
Neutral or Don't Know	-	0
Negative	-	-1

- (c) Is somewhere between attitude and fact.
e.g. it is not okay for it to happen in public places (even if no-one is there) so Score 1 for any reference to this.

However, if attitude to masturbation is negative it may be that attitude to it happening anywhere may also be negative - even if this is private.

Possible Score
1

- (d) Any reference to touching/petting/
heavy petting - 1pt
- Any reference to possible pleasure - 1pt
- Description of what is happening
in picture - ½pt
- Are four pictures possible score -

Possible Score
8

- (e) Attitude question
- Positive - +1
- Neutral or Don't Know - 0
- Negative - -1

- (f) Again realisation that it is not okay
for this to occur in public places
because of possible legal penalties. - 1pt

Possible Score
1

- (g) Sexual intercourse (or colloquial) - 1pt

Possible Score
1

- (h) Attitude question.
- Positive - +1
- Neutral or Don't Know - 0
- Negative - -1

- (i) Is somewhere between attitude and fact.
e.g. it is not okay for it to happen in public places (even if no-one is there) so Score 1 for any reference to this.

However, if attitude to sexual intercourse is negative it may be that attitude to it happening anywhere may also be negative - even if this is private. - 1pt

Possible Score
1

6.

(a) Yes - 1pt

Possible Score

1

(b) What is it called - Contraception - 1pt
description of a method - ½pt

Possible Score

1

(c) Injectable methods - 1pt
Oral Contraceptives - 1pt
Barrier methods - 1pt
Coil/IUD - 1pt
Morning after pill - 1pt
Using spermicide jellies/creams - 1pt
Rhythm method - 1pt
Sterilisation - 1pt

Possible Score

8

(d) Attitude question.

Positive - +1
Neutral or Don't Know - 0
Negative - -1

7.

(a) 1 point for every disease named
(or colloquial term) - 6pts (ish)

Possible Score

6

(b) Seek medical advice - 1pt

Use barrier method of contraception
(condom/femidom) - 1pt

Stop having sexual intercourse or
participating in high risk sexual
activity - 1pt

Possible Score

3

(c) Attitude question.

(i) Positive - +1
Neutral or Don't Know - 0
Negative - -1

(ii) Positive - +1
Neutral or Don't Know - 0
Negative - -1

(iii)	Positive	-	+1
	Neutral or Don't Know	-	0
	Negative	-	-1

8. Group membership - not to be included in main score - to help select group only.

Score 1 if wants to be in group.

Cross reference preferred/non-preferred co-members.

Indicate whether need for individual work.

Priority	-	3
Some Need	-	2
Low Priority	-	1

Total Possible Scoring

99½

CHAPTER SEVEN

SMALL SCALE RESEARCH

**PTSD REFERRALS AND THEIR MANAGEMENT IN THE NORTH
WEST SECTOR OF GLASGOW FOR THE PERIOD 1994 TO 1995**

TARGET JOURNAL:

CLINICAL PSYCHOLOGY FORUM

INTRODUCTION (SECTION 1)

Post-traumatic stress syndrome has been documented in the literature for over 100 years. This has come under several labels such as nervous shock (Page, 1885), traumatophobia (Rado, 1942), and war neurosis (Grinker & Spiegel, 1943).

With the publication of DSM-111 (APA, 1980), a specific diagnostic category called Post-Traumatic Stress Disorder (PTSD) was established which recognised the similarity of symptoms across various traumas.

Epidemiological studies of PTSD, (Breslau & Davis, 1992) (Breslau et al 1991), suggest that exposure to traumatic events is 39% within a lifetime and within this group of young adults living in an urban environment, 23% develop PTSD. In a community survey of 2985 subjects, (Davidson, Hughes et al, 1991), the life-time and six month prevalence figures were 1.36% and 0.44% respectively. PTSD was also found to be associated with greater psychiatric co-morbidity and chronic PTSD produced more avoidance symptoms than acute PTSD.

There is some indication that following civilian trauma (eg. R.T.A.) and criminal violence, treatment outcome has only yielded modest benefits, however, early detection and intervention could help prevent a chronic outcome (Davis & Breslau, 1994).

Few treatment studies have been undertaken (McFarlane, 1994), however cognitive-behavioural techniques have been shown to be effective in some

controlled trials in reducing PTSD symptomatology, (Keane et al, 1989), (Resick & Schnicke, 1992).

Imaginal exposure (Keane et al, 1989), has been demonstrated to be successful in the treatment of PTSD and cognitive therapy (Resick & Schnicke, 1992), produces marked reductions in PTSD symptomatology following sexual assault.

Few studies have investigated PTSD referrals within a routine health service setting and the present study was undertaken to investigate the patient and clinical characteristics of such a population.

AIMS OF PRESENT STUDY *(SECTION 2)*

The aim of the present study was to describe PTSD referrals to the Department of Clinical Psychology, Stobhill Hospital, in the North West Sector of Glasgow, Mental Health Service, NHS Trust.

More specifically, the objectives were:-

(1) To ascertain if differences exist between the three localities (ie. Maryhill(urban/deprived), Springburn/Possilpark (urban/deprived), Strathkelvin (rural/non-deprived) within the geographical area served by the department with regard to:-

- (a) Number of PTSD referrals
- (b) Nature of incident leading to PTSD
- (c) Default rates
- (d) Treatment outcome

(2) To ascertain if default rates differ according to nature of incident leading to PTSD.

(3) To investigate if treatment outcome differs with regard to nature of incident.

(4) To ascertain if litigation/compensation has an effect on default rates.

The above would provide a baseline for a planned treatment study within the Department and highlight any discrepancies within the geographical areas which may exist.

METHODOLOGY (SECTION 3)

All PTSD cases referred to the Department of Psychology, Stobhill Hospital, in the period from April 1994 to April 1995, were selected on the basis of the diagnosis obtained from initial referral letters.

Each locality has its own referral system in which each referral is logged along with its initial diagnosis. These localities are as described above (Maryhill, Springburn/Possilpark and Strathkelvin).

Each case entry of PTSD referred between April 1994 and April 1995 (inclusive) was investigated. If the diagnosis stated PTSD then this case was selected. However, if the diagnosis was not PTSD but strongly indicated that PTSD may be present eg. 'psychological sequelae to head injury', 'adjustment reaction' or 'life events' then these cases were screened for PTSD. If PTSD was not involved then these cases were excluded from the survey. Cases that did not have an initial diagnosis in the referral books were also screened for PTSD. Cases of anxiety, panic, sexual abuse and sexual assault were excluded.

The psychologist involved with each case was approached to determine whether these cases were on-going or had been discharged. If discharged then the corresponding files were retrieved and the relevant information from these files was extracted. (see Appendix 7.2 for copy of raw data form).

Within the raw data form 'nature of incident' and 'involvement of patient' in the incident was categorised. (see Appendix 7.2 for details). The categories 'reason for discharge' and 'psychologist's assessment of outcome' were taken from the departmental discharge data forms. The GAF ratings (Global Assessment of Functioning), are used by the department to rate client's severity of symptomatology and their improvement pre and post treatment.

The diagnosis from referral and after first assessment was based on the

psychologist's diagnosis from ICD-10 (WHO, 1992).

For cases which were on-going the clinician involved was asked for an assessment of severity of PTSD (pre- treatment GAF ratings) and an assessment of progress in therapy to date (post-treatment GAF ratings and psychologist's assessment of outcome). Psychologists were also approached for missing data from discharged cases however this was not always possible as a couple of psychologists had left the department.

The Occupational data was coded in accordance with the Standard Occupational Classification (Employment Department Group Office of Population Censuses and Surveys. HMSO. 1990).

Data was analysed using the statistical package SPSS/PC+ (VERSION 4).

RESULTS *(SECTION 4)*

Eighty cases of PTSD were included in the present study, 33 of which were still active, 46 which had been discharged and one case which had not been allocated. It should be noted that six of the on-going cases had been seen for an initial assessment only and two files could not be located although some information could be retrieved from other sources.

DEMOGRAPHIC DATA

The sample consisted of 57 males (71.3%) and 23 females (28.8%). The mean age of the sample was 33.34 years (range 17-56). The majority of cases (37.5%) fell within the 26-34 age group with the next highest percentage (25.0%) falling within the 35-44 age group. Only 2.5% fell within the 55-64 age group.

In terms of marital status, 52.4% were married or cohabiting, 36.5% were single, 9.5% were divorced or separated and 1.6% widowed. (17 cases - data missing/unobtainable). With regard to current or previous occupation the highest percentage of cases (28.3%) fell within the 'Other Occupations' category with the next highest percentage (17%) being employed within the 'Craft and Related Occupations' category. (27 cases - data missing/unobtainable).

(SECTION 2: NO.1(a))

Out of the sample of 80, 32 cases (40.1%) were referred within the Maryhill locality, 27 (33.8%) were referred from Springburn/Possilpark and 21 (26.3%) were referred from Strathkelvin. (see Appendix 7.3, Graph 1). Sixty-three cases (78.8%) were referred by their G.P., with 13 (16.3%) being referred by psychiatry. (see Appendix 7.3, Graph 2).

CLINICAL DATA - GENERAL DESCRIPTION

Seventy-six cases (95%) had a primary diagnosis of PTSD from the referral letters. Following clients' initial assessment interviews 73% were confirmed as having a primary diagnosis of PTSD. Of those cases which were given other diagnoses, each exhibited symptoms of PTSD (although not meeting the full criteria as stated in ICD-10) and were therefore included in the study. (see Appendix 7.4, Tables 1-2 for details). With regard to nature of incident 61.5% were involved in assault, and 19.2% in R.T.A. Across all incidents, 94.8% of clients were primary level victims. The main treatment approach was cognitive-behaviour therapy, (94%). The mean length of time in weeks from incident to referral and from referral to first appointment was 92.70 and 13.06 weeks respectively. Within the sample 29.1% did not attend their first appointment and 71% cancelled or did not attend appointments throughout treatment. Only 23.9% completed treatment. A significant difference was found between pre-treatment and post-treatment GAF ratings ($p < 0.001$) and 44% of cases were markedly or completely resolved following treatment. Litigation or compensation was involved in 32.5% of cases. (see Appendix 7.3, Graph 3 and 7.4, Table 3 for a fuller description of results).

LOCALITY

The three localities investigated initially were Maryhill, Springburn/Possilpark and Strathkelvin. For ease of interpretation data from the localities of Maryhill and Springburn/Possilpark were collapsed as they are both urban areas which are of low socioeconomic status. These areas were compared to Strathkelvin which is a rural area of higher socioeconomic status.

(SECTION 2: NO. 1b) Locality and nature of incident

Out of 78 cases, 37 (47.4%) of cases involving assault were within the Maryhill/Springburn/Possilpark localities with 12 (15.4%) falling within the Strathkelvin locality. The other types of incident eg. R.T.A.; Other man made accident; Natural accident etc. were collapsed into one group again for ease of interpretation and because it was believed that assault warranted investigation in its own right due to the hypothesis that more assaults occurred in socioeconomically deprived areas and that assaults would have an effect on treatment outcome.

Chi-square analysis revealed no significant difference ($X^2 = 0.08$, d.f. = 1, n.s.), concluding no difference in rate of assault between lower and higher socioeconomic status areas.

(SECTION 2:NO.1c) Locality and reason for discharge

Within the sample, 27 out of 36 cases (75%) in Maryhill/Springburn/Possilpark did not complete treatment (by either not attending their first appointment, defaulting during treatment or self-discharging) as compared to 7 out of 9 (77.7%) in the Strathkelvin locality. Therefore it appears that default rates are similar across localities. (34 cases - data missing/unobtainable. 1 case - moved address).

(SECTION 2: NO.1c) Locality and non- attendance to first appointment

Chi-square analysis revealed no significant difference between localities and failure to attend first appointments. ($X^2 = 0.38$, d.f. = 1, n.s.).

Out of 79 cases the default rate to first appointments in Maryhill/Springburn/Possilpark was 31% (18 out of 58 cases) and 23.8% (5 out of 21 cases) in Strathkelvin.

(SECTION 2: No.1(d)) Locality and pre and post- treatment GAF ratings (includes on-going and discharged cases)

There was no significant difference found between the 3 localities (not collapsed) with regard to pre-treatment GAF ratings. (ANOVA: $F = 2.25$, d.f. = 3, n.s.). Similarly with regard to post-treatment GAF ratings no significant difference was found. (ANOVA: $F = 0.40$, d.f. = 3, n.s.). It therefore appears that outcome in treatment is not affected by locality. (33 cases - data missing/unobtainable).

NATURE OF INCIDENT

The nature of incident categories were collapsed into 'assault' and 'other'.

(SECTION 2: NO. 2) Nature of incident and reason for discharge

Twenty-three out of 32 'assault' cases (71.9%) did not complete treatment (by either not attending first appointment, defaulting during treatment or self-

discharging), as compared to 9 out of 12 (75%) in the 'other' incident category. Eight out of 32 'assault' cases (25%) completed their treatment as compared to 3 out of 12 (25%) in the 'other' category. This indicates that nature of incident does not have an effect on default rates. (36 cases - data missing/unobtainable. One case - moved address (assault category)).

(SECTION 2: NO. 2) Nature of incident and non-attendance to first appointment

Chi-square analysis revealed no significant difference between nature of incident and non-attendance to first appointments. ($X^2 = 0.91$, d.f = 1, n.s.)

Fifteen 'assault' cases out of 46 (32.6%) did not attend their first appointment as compared to 7 out of 31 (22.6%) 'other' incident cases, indicating nature of incident does not have an effect on default rates to first appointments. (3 cases- data missing/unobtainable).

(SECTION 2: NO. 3)

Nature of incident and psychologist's assessment of outcome (includes on-going and discharged cases)

For ease of interpretation the 'assessment of outcome' categories were collapsed into two categories, ie. 'completely/markedly resolved' and 'slightly resolved/no change'.

Chi-square analysis revealed no significant difference between nature of incident and psychologist's assessment of outcome. ($X^2 = 0.01$, d.f = 1, n.s.)

Twelve out of 26 'assault' cases (46.1%) were completely or markedly resolved with 14 out of 26 (53.8%) being slightly resolved or showing no change. This was compared to 10 out of 21 (47.6%) and 11 out of 21 (52.4%) respectively in the 'other' incident category. (33 cases - data missing/unobtainable).

(SECTION 2: NO.3) Nature of incident and pre and post-treatment GAF ratings (includes on-going and discharged cases)

Independent t-tests revealed no significant difference between nature of incident and pre and post-treatment GAF ratings. (pre-treatment GAF ratings: $t = -.61$, d.f. = 58, n.s.) (post-treatment GAF ratings: $t = -.48$, d.f. = 44, n.s.).

Therefore nature of incident does not have an effect on outcome with regard to GAF ratings.

(SECTION 2: NO.4) Litigation/compensation and reason for discharge

A chi-square analysis revealed no significant difference between involvement of litigation/compensation and reason for discharge, indicating that this variable does not affect default rates. ($\chi^2 = 1.14$, d.f. = 1, n.s.)

Five out of 10 cases (50%) in which litigation/compensation was involved completed treatment as compared to 6 out of 20 (30%) in which it was not. (50 cases - data missing/unobtainable).

DISCUSSION (SECTION 5)

No differences were found in the majority of variables investigated between the urban, socioeconomically deprived as compared to the rural, less deprived geographical localities.

This indicates that there is no difference in the number of PTSD referrals, the nature of incident, the severity of impact of PTSD or in default rates and treatment outcome within the area covered by the clinical service.

Locality therefore on the whole would appear to have no bearing on the number of clients, the nature of PTSD or its response to treatment. It should be noted however that in the analysis the number of cases in some groups were small, (eg. the number of discharged clients in the Strathkelvin locality where $n=9$), and therefore the results should be interpreted with some caution, especially with regard to default rates in the Strathkelvin locality.

It is apparent however, that for clients who have completed or remain in treatment (albeit not yet complete) the outcome is favourable. Treatment in itself is therefore of benefit.

Regardless of the nature of the incident leading to PTSD there was no difference in default rates or treatment outcome. However, given that the majority of PTSD cases arose from assaults there may be a case for debriefing in these cases, perhaps in liaison with Accident and Emergency services.

Debriefing programmes have become more popular in clinical psychology practice as these programmes are seen as meeting the needs of those who have been the victims of violence, trauma and disasters. (Raphael, B; Meldrum, C; McFarlane, A.C. 1995).

It should also be taken into consideration that the number of cases obtained in this study (N = 80), may be an under-estimate as some clients may have been diagnosed as suffering from PTSD following their initial assessment even although this was not evident from the referral letter. Furthermore, cases of sexual abuse or assault were excluded. According to Courtoius (1988), survivors of childhood sexual abuse commonly present with PTSD and Resick (1995) states that many rape victims suffer from chronic PTSD and depression. Therefore, this would add strength to the argument for a PTSD specialist service in the North West Sector.

As reported earlier, default rates appeared high. This highlights a potential problem which may need to be addressed in planning future service provision. Clients may default as a consequence of the disorder itself eg. clients will often exhibit varying degrees of agoraphobia and subsequent avoidance rendering them unable to attend appointments. Also PTSD sufferers are thought to be more at risk of developing Major Depression or substance abuse (Breslau & Davis, 1992; Breslau et al, 1991) which may increase their sense of hopelessness and their avoidance of the problem. It may be necessary therefore for these problems to be fully addressed with clients early in therapy to help improve their motivation and for treatment to progress. Clients should be encouraged to attend as outcome would be improved.

This survey provides a baseline for a future treatment study within the department on PTSD and indicates that this could involve investigating the development of a specialist assault clinic to encompass the whole geographical area served by the department.

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CHAPTER SEVEN

APPENDICES 7.1 - 7.4

APPENDIX 7.1

AUTHOR'S NOTES

CLINICAL PSYCHOLOGY FORUM

Clinical Psychology Forum is produced by the Division of Clinical Psychology of The British Psychological Society. It is edited by Steve Baldwin, Lorraine Bell, Jonathan Calder, Lesley Cohen, Simon Gelsthorpe, Laura Golding, Craig Newnes, Mark Rapley and Arlene Vetere, and circulated to all members of the Division monthly. It is designed to serve as a discussion forum for any issues of relevance to clinical psychologists. The editorial collective welcomes brief articles, reports of events, correspondence, book reviews and announcements.

■ Notes for contributors

Articles of 1000-2000 words are welcomed. Shorter articles can be published sooner. Please check any references. Send two copies of your contribution, typed and double spaced. Contributors are asked to keep tables to a minimum; use text where possible.

News of Branches and Special Groups is especially welcome.

Language: contributors are asked to use language which is psychologically descriptive rather than medical and to avoid using devaluing terminology; i.e. avoid clustering terminology like "the elderly" or medical jargon like "schizophrenic".

Articles submitted to **Forum** will be sent to members of the Editorial Collective for refereeing. Readers will then communicate directly with authors.

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APPENDIX 7.2

RAW DATA FORM

P.T.S.D. SURVEY

RAW DATA

- 1. IDENTIFICATION NUMBER** _ _
- 2. NAME OF PATIENT**
- 3. REFERRED BY:**
- 4. PSYCHOLOGIST INVOLVED:**
- 5. SEX: MALE/FEMALE**
- 6. AGE: _ _ (YEARS) (AT REFERRAL)**
- 7. MARITAL STATUS:** SINGLE
MARRIED
CO-HABITING
DIVORCED
SEPARATED
WIDOWED
NOT KNOWN
- 8. WORKING AT TIME OF REFERRAL: YES/NO**
NOT KNOWN
- 9. CURRENT OCCUPATION:**
- 10. LAST OCCUPATION:**
- 11. LOCALITY:** MARYHILL
SPRINGBURN/POSSILPARK
STRATHKELVIN
OTHER
- 12. POST CODE:**

13. DIAGNOSIS: (a) FROM REFERRAL

(b) AFTER 1ST ASSESSMENT

NOT APPLICABLE

14. DATE OF REFERRAL: _/_/_

15. DATE OF FIRST APPOINTMENT: _/_/_

**16. LENGTH OF TIME SINCE REFERRAL AND 1ST APPT: _ _
(WEEKS)**

**17. LENGTH OF TIME SINCE REFERRAL AND WHEN SEEN: _ _
(WEEKS)**

18. DATE OF INCIDENT: _/_/_

**19. LENGTH OF TIME SINCE INCIDENT AND REFERRAL: _ _
(WEEKS)**

**20. LENGTH OF TIME SINCE INCIDENT AND 1ST APPT: _ _
(WEEKS)**

**21. LENGTH OF TIME SINCE INCIDENT AND WHEN SEEN: _ _
(WEEKS)**

22. D.N.A. 1ST APPT: YES/NO (INCL. CANCELLATIONS)

**23. D.N.A. SUBSEQUENT APPTS: YES/NO (INCL.
CANCELLATIONS)**

24. IF YES, HOW MANY: _ _

**25. NATURE OF INCIDENT: *R.T.A*
ASSAULT
OTHER MRN MADE ACCIDENT
*NATURAL ACCIDENT***

26. INVOLVEMENT OF PATIENT: PRIMARY LEVEL VICTIM
SECONDARY LEVEL VICTIM
TERTIARY LEVEL VICTIM
FOURTH LEVEL VICTIM
FIFTH LEVEL VICTIM
SIXTH LEVEL VICTIM

27. TREATMENT USED: COGNITIVE THERAPY(INCL.
BEHAVIOUR THERAPY)
COUNSELLING
PSYCHODYNAMIC PSYCHOTHERAPY
NOT APPLICABLE

28. INVOLVEMENT OF OTHER HEALTH SERVICE PERSONNEL
IN CARE OF PATIENT : YES/NO
UNKNOWN

29. IF YES, WHO WAS INVOLVED:PSYCHIATRIST
C.P.N.
O.T.
SOCIAL WORKER
MEDIC (EHCL. REF. AGENT)
OTHER
UNKNOWN

30. DISCHARGED: YES/NO

31. DATE OF DISCHARGE: _/_/_

32. DATE OF LAST APPOINTMENT: _/_/_ (WHEN SEEN)

33. REASON FOR DISCHARGE: TREATMENT COMPLETE
D.N.R. 1ST APPT
DEFAULT AFTER 1ST APPT
REFERRED ON
SELF DISCHARGE
MOVED FROM AREA

34. TOTAL NO. OF SESSIONS OFFERED: _ _

35. TOTAL NO. OF SESSIONS RECEIVED: _ _

**36. TOTAL LENGTH OF TREATMENT: _ _ (WEEKS)(FROM
FIRST-LAST APPOINTMENT)**

37. OUTCOME (G.A.F. RATINGS):-

PRE G.A.F. RATING: _ _

POST G.A.F. RATING: _ _

NOT APPLICABLE

38. PSYCHOLOGIST'S ASSESSMENT OF OUTCOME:-

COMPLETELY RESOLVED

MARKEDLY RESOLVED

SLIGHTLY RESOLVED

NO CHANGE

WORSE

NOT KNOWN

NOT APPLICABLE

39. LITIGATION/COMPENSATION INVOLVED:

YES

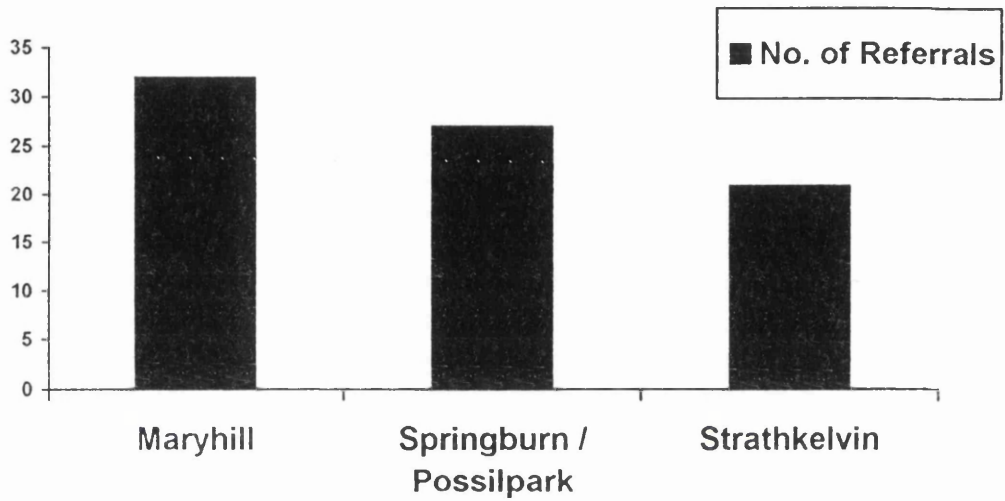
NO

NOT KNOWN

APPENDIX 7.3

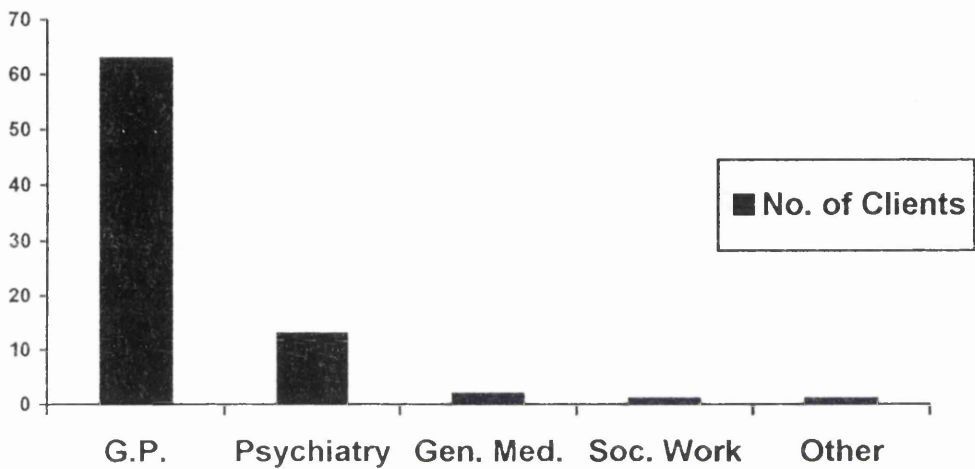
GRAPHS 1 - 3

Localities - No. of Referrals

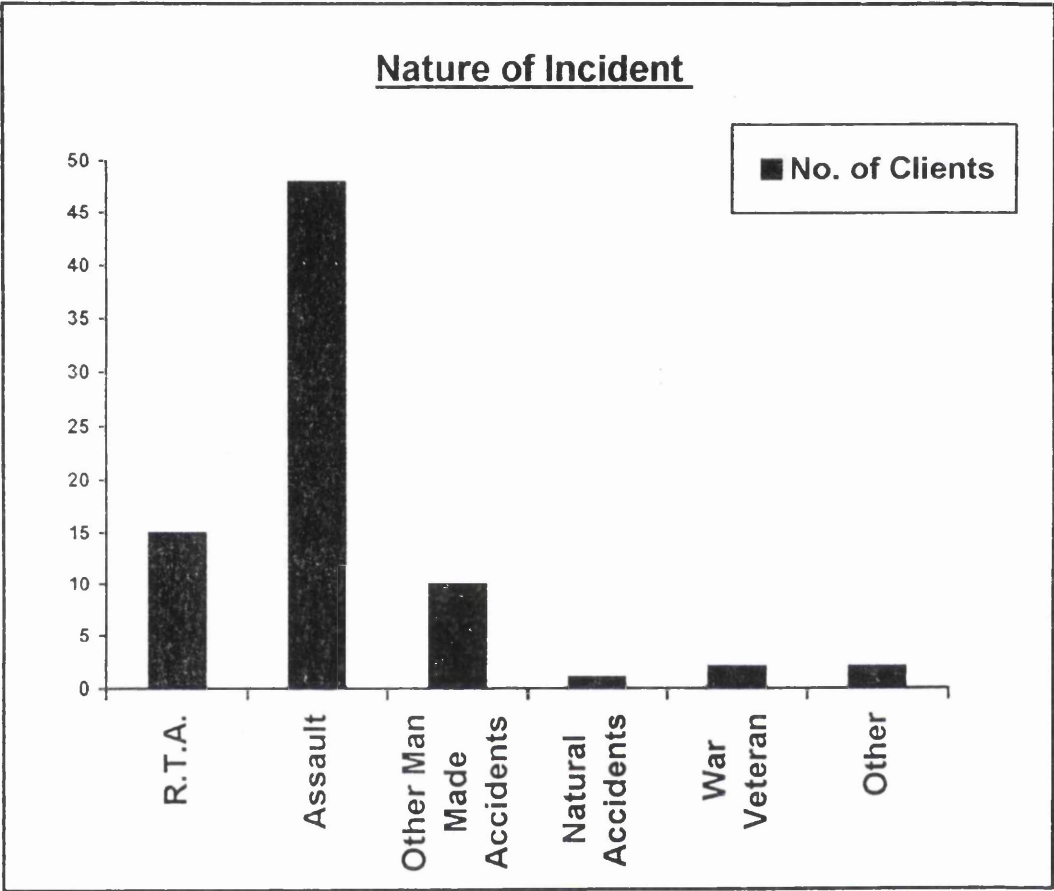


G1

Source of Referral



G2



APPENDIX 7.4

TABLES OF RESULTS 1-3

TABLE 1

PRIMARY DIAGNOSIS FROM REFERRAL

(N = 80)

ICD-10 DIAGNOSIS	ICD-10 CODE	(f)	%
PTSD	F43.1	76	95.00
POST-TRAUMATIC BRAIN SYNDROME (NON-PSYCHOTIC)	F07.2	2	2.50
PANIC DISORDER	F41.0	1	1.25
DISORDER OF ADJUSTMENT	F43.22	1	1.25

TABLE 2
PRIMARY DIAGNOSIS FROM INITIAL
ASSESSMENT
(N = 80)

ICD-10 DIAGNOSIS	ICD-10 CODE	(f)	VALID %
PTSD	F43.1	46	73.0
PANIC DISORDER	F41.0	5	7.9
AGORAPHOBIA WITH PANIC DISORDER	F40.01	1	1.6
AGORAPHOBIA WITHOUT PANIC DISORDER	F40.00	1	1.6
ANXIETY STATE	F40.1	3	4.8
DEPRESSION	F32.9	1	1.6
POST-TRAUMATIC BRAIN SYNDROME (NON-PSYCHOTIC)	F07.2	1	1.6
SEVERE STRESS REACTION	F43.9	1	1.6
DISORDER OF ADJUSTMENT	F43.22	3	4.8
SPECIFIC PHOBIA	F40.2	1	1.6

(17 cases- data missing/unobtainable)

TABLE 3
GENERAL DESCRIPTION OF SAMPLE
(CLINICAL DATA)
(N = 80)

<u>NATURE OF INCIDENT</u>	<u>(f)</u>	<u>VALID %</u>
R.T.A.	15	19.2
RSSRULT	48	61.5
OTHER MAN-MADE ACCIDENTS	10	12.8
NATURAL ACCIDENT	1	1.3
WAR VETERAN	2	2.6
OTHER	2	2.6
(2 cases - data missing/unobtainable)		
<u>INVOLVEMENT OF CLIENT</u>		
PRIMARY LEVEL VICTIM	73	94.8
SECONDARY LEVEL VICTIM	2	2.6
TERTIARY LEVEL VICTIM	2	2.6
(3 cases - data missing/unobtainable)		
<u>TREATMENT APPROACH</u>		
COGNITIVE-BEHAVIOURAL	47	94.0
COUNSELLING	2	4.0
PSYCHODYNAMIC	1	2.0
(30 cases - missing data/unobtainable)		

TABLE 3 (CONT.)

	<u>MEAN</u>	<u>SD</u>	<u>RANGE</u>
<u>TIME FROM INCIDENT TO REFERRAL (WEEKS)</u>	92.70	139.46	2-683
(6 cases - data missing/unobtainable)			
<u>TIME FROM REFERRAL TO FIRST APPOINTMENT (WEEKS)</u>	13.06	5.55	4-27
(17 cases - data missing/unobtainable)			
	<u>(f)</u>	<u>URLID %</u>	
<u>D.N.A. FIRST APPOINTMENT</u>	23	29.1	
(1 case - data missing/unobtainable)			
<u>D.N.A/CANCELLED SUBSEQUENT APPOINTMENTS THROUGHOUT TREATMENT</u>	44	71.0	
(18 cases - data missing/unobtainable)			
<u>REASON FOR DISCHARGE</u>			
TREATMENT COMPLETE	11	23.9	
NON-ATTENDANCE TO FIRST APPOINTMENT	13	28.3	
DEFAULTED (INCL. SELF-DISCHARGE)	21	45.7	
MOVED ADDRESS	1	2.2	
(34 cases - data missing/unobtainable)			

TABLE 3 (CONT.)

OUTCOME (ON-GOING & DISCHARGED CASES)

	<u>MEAN</u>	<u>SD</u>	<u>RANGE</u>
PRE-TREATMENT GAF RATING	53.10	8.76	35-76
POST-TREATMENT GAF RATING	66.49	11.63	35-85

$t = -9.43$, $d.f = 46$, $p = 0.000$, significant at $p < 0.001$

(19 cases - data missing/unobtainable)

<u>PSYCHOLOGIST'S ASSESSMENT OF OUTCOME</u>	<u>(f)</u>	<u>VALID %</u>
MARKEDLY/COMPLETELY RESOLVED	22	44.0
SLIGHTLY RESOLVED	16	32.0
NO CHANGE	9	18.0
NOT KNOWN	3	6.0

(30 cases - data missing/unobtainable)

<u>LITIGATION/COMPENSATION INVOLVED</u>	26	32.5
---	----	------

(17 cases - data missing or unobtainable)

