https://dspace.org/

Borderline personality disorder in the acute inpatient psychiatric assessment unit of Helen Joseph Hospital.

Paruk, Laila

2014-04-23
http://hdl.handle.net10539/14565

Downloaded from a DSpace repository. https://dspace.org/

CHAPTER 1 INTRODUCTION

According to Davison, *". . . the management of patients with personality disorder is one of the most challenging and sometimes controversial areas of psychiatry."*[1] They have many diverse needs, and often present repeatedly to psychiatric services. One possible reason for the difficulties often encountered when managing patients with a personality disorder is the common misconception that they are not bona fide mental disorders.

According to the tenth edition of the International Statistical Classification of Diseases and Related Health Problems (ICD10), the definition of a mental disorder is: *"the existence of a recognisable set of symptoms and behaviours in most cases associated with distress and interference with social function"*.[2] Personality disorders, according to criteria of the fourth edition (Text Revision) of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR), are defined as: *". . . an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture."* [3] This pattern is manifested in two or more of the following areas:

- cognition, i.e. ways of perceiving and interpreting self, other people and events;
- affectivity, i.e. the range, intensity, lability, and appropriateness of emotional responses;
- interpersonal functioning; and
- impulse control

The term “borderline” was first used by Stern in 1938 to denominate a group of syndromes placed on the border between neuroses and psychoses, and also included the current label of schizotypal personality disorder and a group of disorders currently labelled as psychotic disorders.[4] Only some decades later the concept “borderline” began to be understood as a disorder of character and was introduced as such in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III) as a personality disorder.[5] Borderline personality disorder (BPD) derives from, but is not fully equivalent to, the concept of borderline personality organisation as developed by Kernberg.[6] Kernberg regarded BPD as a stable permanent state, based on three criteria: diffuse identity; primitive defence mechanisms (e.g. splitting, denial and projective identification); and intact reality testing. The DSM IV-TR characterised BPD as:

> *“A pervasive pattern of instability of interpersonal relationships, self-image and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts”*[3]

It goes on to further describe nine specific criteria of which five must be fulfilled by a patient in order to be diagnosed with BPD:

(1) frantic efforts to avoid real or imagined abandonment;

(2) a pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation;

(3) identity disturbance markedly and persistently unstable self-image or sense of self;

(4) impulsivity in at least two areas that are potentially self-damaging (e.g. spending, sex, substance abuse, reckless driving, binge-eating);

(5) recurrent suicidal behaviour, gestures or threats, or self-mutilating behaviour;

(6) affective instability due to marked reactivity of mood (e.g. intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days);

(7) chronic feelings of emptiness;

(8) inappropriate, intense anger or difficulty controlling anger (e.g. frequent displays of temper, constant anger, recurrent physical fights); and

(9) transient, stress-related paranoid ideation or severe dissociative symptoms.

A person is considered to have borderline personality traits only if she or he exhibits some symptoms of borderline personality disorder, but not as many as are required to fulfil the criteria for the disorder. The determining principle in this regard is the DSM IV-TR "Criterion C" for a personality disorder, that: *". . .the (deviating) enduring pattern (of inner experience and behaviour) must lead to clinically significant distress or impairment in social, occupational, or other important areas of functioning."*[3]

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM V) was recently introduced in May 2013.[7] During the development of this edition, several proposed revisions were drafted that would have significantly changed the method by which individuals with personality disorders are diagnosed. Based on

feedback from a multilevel review of proposed revisions, the American Psychiatric Association Board of Trustees ultimately decided to retain the DSM IV-TR categorical approach with the same ten personality disorders. The proposed revisions that were not accepted for the main body of the manual were approved as an alternative hybrid dimensional-categorical model that will be included in a separate chapter of DSM V. This alternative model has been included to encourage further study on how this new methodology could be used to assess personality and diagnose personality disorders in clinical practice. DSM V, however, moved from the previously used multi-axial diagnostic system to a new assessment format that removes the arbitrary boundaries between personality disorders (previously documented on Axis II) and other mental disorders, by collapsing the different dimensional axes into one diagnostic statement.[8]

Until now, the DSM has organized clinical assessment into five areas or dimensions (axes), addressing the different aspects and impact of disorders separately. This multi-axial system, so it is argued, was introduced in part to solve a problem that no longer exists, referring to the situation that certain disorders like personality disorders previously received inadequate clinical and research focus. As a consequence, these disorders were designated to Axis II to ensure they received greater attention. However, the axis system was seen by some clinicians as burdensome and time consuming. Arguing that there is no fundamental difference between disorders described on DSM IV-TR's Axis I and II, DSM V has adopted a single axis system. This system now combines the first three axes outlined in past editions of DSM into one axis with all mental and other medical diagnoses. Doing so, it removes artificial distinctions among conditions, benefitting both clinical practice and research use.[7]

Recent research into the epidemiology of borderline personality has shown that it affects 0.7-2.7% of the general adult population, 9.3-22.5% of people receiving psychiatric outpatient treatment, and in some settings over 40% of inpatients.[9] BPD is frequently co-morbid with affective disorders, anxiety disorders, somatisation disorder, post-traumatic stress disorder and alcohol abuse, while a differential diagnosis of bipolar mood disorder (BMD) often has to be considered. BMD patients more often present with emotional lability, while BPD patients are characterised by intense and reactive affective instability and shifts rather than from sadness to tolerable dysphoria.[10]

BPD has also been shown to be associated with most other personality disorders, especially with those from the dramatic cluster (B). The high prevalence of co-morbid personality disorders may result from the overlapping of diagnostic criteria, or may reflect the confirmation of the underlying borderline personality organisation. However, some features, like chronic feelings of emptiness, self-mutilation, short-lived psychotic episodes, intense and episodic drug abuse, and intense ambivalent dependency in close relationships suggest a primary diagnosis of BPD.[9]

Borderline personality disordered patients often experience profound dysfunction in many important aspects of life including education, jobs, partner relationships and marriage.[11] According to Gunderson and Phillips, alcohol and psychosexual problems are also frequent, while repeated suicide attempts and premature death from suicide are frequent complications from borderline personality disorder.[11] Therefore, suicidal gestures and intentions should always be taken seriously. It has

been reported by Carrasco and Lecic-Tosevski that 8 to 10 percent of all persons with borderline personality disorder successfully commit suicide.[10]

Consequently, patients with personality disorders make frequent use of health services, in particular emergency services.[12] Crises related to depression and suicide account for approximately 30% of the crises that present to psychiatric crises services.[13] According to Links, these suicide threats and attempts are defining criteria for borderline personality disorder.[12] Another study, by Dowson and Grounds, also showed that patients with personality disorders, particularly the antisocial and borderline type, have higher rates of suicide and accidental deaths than the general population.[14] Tyrer et al. found that patients with personality disorders were more commonly from lower socio-economic classes and demonstrated smaller social networks with fewer attachment figures.[15]

Bateman and Tyrer noted subsequently that people presenting to emergency psychiatric clinics, or to services for the homeless mentally ill, who are frequent users of psychiatric services, and those with multiple admissions, all have a preponderance for (borderline) personality disorder, although this is often not recognised as early as it should be.[16] In a survey of community health services in the United Kingdom, it was found that people in the community with evidence of personality disorder also made more outpatient mental health visits and had more hospital admissions than people without features of a personality disorder:[17] According to Reich et al, *". . . the more severe the personality disorder pathology, the greater the utilisation of mental health services. . .".*[17]

Patients with personality disorder therefore have a significant impact on mental health services and patient management, even when they are not the primary focus of treatment. Davison noted that *". . . patients with personality disorders may well present for the first time for treatment of co-morbid Axis I disorders."*[1] They are also known to have more severe Axis I symptomatology,[18] while patients with major depression, panic disorder and obsessive compulsive disorder who also have a co-morbid personality disorder have been found to show a poorer response to a range of treatments.[19] Kent et al. noted that patients with personality disorders, who also have a co-morbid psychotic disorder, are some of the most frequent users of psychiatric services.[20] In primary care settings, about a third of people attending general practitioners (GPs) had a personality disorder.[21] For the vast majority, it was not recognised by these GPs as the primary reason for presenting.

Many patients present as problematic medical patients. Studies using research diagnostic instruments have found that 20-40% of psychiatric out-patients and about 50% of psychiatric in-patients fulfil criteria for a personality disorder.[22] [23] Recent American research, which evaluated 859 psychiatric outpatients, found that 45.5% had a personality disorder, and 9.3% specifically had BPD.[9] However, this is rarely the primary focus of treatment. The British National Health Service hospital in-patient data, over a one year period, showed that: *"personality disorder was the primary diagnosis in only 4% of over 240 000 completed inpatient admissions for the treatment of mental disorders."* [24] This attests to the fact that patients with personality disorders present with a myriad of other problems on admission, and are only found to have a personality disorder later on in the same admission.

In terms of the management of BPD, Bateman and Tyrer noted that *". . . a longstanding belief amongst those involved in hospital care, is that people with personality disorders should be kept out of hospital."*[16] When exploring outcome measures in patients with personality disorder, Paris considered whether it was useful for them to be admitted.[25] Silk et al. have commented on how difficult it is to hospitalise patients with borderline personality disorder.[26] This may be due to their chronic high risk of self-harm, commonly co-morbid substance use disorders, use of primitive defences and difficult interpersonal skills. He and his team developed a short-stay hospitalisation approach which attempts to counter the inherent difficulties with hospitalisation. The basic premise of the approach is to make hospitalisation a mutual endeavour with agreed-upon goals and with a quick return to the community. One randomised controlled trial which compared community-based intervention with standard hospital treatment, and included personality disorder as an independent variable, seemed to have shown greater improvement for the community-based group in social functioning and in depressive symptoms during early intervention.[27]

Although acute in-patient units are generally considered unsuitable for long-term work with people with personality disorders,[28] a school of thought as described by Norton and Hinshelwood believes that *"an admission . . ., although often problematic, can be conceived as an opportunity."*[29] In-patient admission to a general psychiatric ward should, however, be brief, time-limited, and goal determined, and a patient may be discharged if the goals of admission are not met, according to Bateman and Tyrer.[16] Fagin also supports this approach by saying: *". . . there is a role for the inpatient unit where patients are often taken in an emergency . . . These*

admissions should not be prolonged, mostly dealing with the emergent problems that have precipitated the crisis." [28]

Mentalisation-based treatment for borderline personality disorder, as developed by Anthony Bateman and Peter Fonagy, is considered as a practical approach to the management of patients with this condition.[30] One of the ways in which such a programme can be structured, is a day-programme which is adaptable to an acute inpatient setting. Inclusion to the program requires the patient to show some of a number of features such as: high risk to others or self; inadequate social support; repeated hospital admissions; unstable housing; substance misuse; and fragmented mentalising. The programme itself is a combination of individual and group psychotherapy focusing on implicit mentalising processes and expressive therapies promoting skills in explicit mentalising. Group work is an essential component of the programme because it addresses the reduced capacity of patients with borderline personality disorder to keep themselves in mind or recognise that others have kept them in mind. Group work attempts to correct this by the use of sharing stories through homework. Mentalisation-based therapy can be implemented by nurses and other health professionals, not necessarily formally-trained psychotherapists.

Bateman and Fonagy noted that mentalising is similar to the making of meaning, a cornerstone of psychodynamic therapy since its origins.[30] They have arrived at this position and honed this focus along with their understanding of attachment and the premise that mentalising problems are intrinsic to borderline patients. There are some specific components of their technique which are very important when

considering the acute admission of a borderline patient, who often presents in a crisis. For example, the goal is not to provide insight. The focus must rather be on the patient's affect in the current context. The therapist and the programme also has to avoid a judgmental attitude about self-harm and suicide by focusing on what is going on in the patient's mind at the time instead of adopting a confronting attitude. Bateman and Fonagy emphasised that the therapist should stay with the conscious content of the patient rather than exploring unconscious concerns, and they prefer process to content. According to them, therapists have to avoid activating the attachment system in their comments.[31]

Another systematised program, Dialectical Behavioural Therapy (DBT), has been developed for patients with borderline personality disorder by Marsha M. Linehan from Washington University. [32] DBT combines standard cognitive-behavioral techniques for emotional regulation and reality-testing with the concepts of distress tolerance, acceptance, and mindful awareness, as derived from Buddhist meditative practice. DBT may be the first therapy that has been experimentally demonstrated to be generally effective in treating BPD.

A recent meta-analysis of the literature by Kliem et al. found that DBT treatment outcomes reached moderate effects in terms of short-term outcomes.[33] The long-term outcome of borderline patients has, however, not been studied much, but the diagnosis is rarely made for the first time in patients over the age of 40. It is speculated that neural structures and defence mechanisms mature with age and that these changes, together with social learning, reduce symptomatology later on.[9]

Gabbard wrote in his foreword to Bateman and Fonagy's text that, twenty years ago, borderline patients were considered chronic in that they remained the same at follow-up over time.[31] Consequently, the course and treatment outcome of these patients was written about in decades, rather than months or years. In the past, analytically oriented therapy with these patients typically lasted 10 or 12 years, but without much progress. Long-term psycho-analytically oriented hospital treatment was also common, due to the high chronic suicide risk. However, the way we currently view the management, treatment and prognosis for borderline patients has had a complete turnaround. Systematic psychotherapeutic programs, now including dialectical behavioural and mentalization-based therapy, have been developed and randomised controlled trials have shown evidence of its efficacy. Improved outcomes of these treatment strategies are, as a result, now measured in months and years instead of decades.[31]

Helen Joseph Hospital (HJH) is a regional specialist referral state hospital in Auckland Park, Johannesburg. It is a teaching facility affiliated with the University of the Witwatersrand, and also provides undergraduate and postgraduate training. The psychiatric ward at HJH (Ward 2) is a 30-bed acute facility for adult users. It is designated to provide 72-hour assessment as well as emergency and short term psychiatric care in the inner south-west region of Johannesburg. According to the Mental Health Care Act, No.17 of 2002 (MHCA), the 72-hour designation refers to the time period for assessment of patients classified as 'involuntary', meaning those patients requiring psychiatric care who have lost to capacity to make an informed decision and also refuse such care. The ward also admits both 'assisted' patients, who do not refuse care, as well as 'voluntary' patients

who request care. Patients are generally referred from community-based primary health mental health care clinics, or by private practitioners within the hospital's catchment area. Patients present to the hospital's casualty department, where they are screened by a casualty medical officer and then referred for emergency assessment by the psychiatry registrar. A risk assessment is done, and depending on various factors, the patient is either admitted to the hospital's psychiatric ward, referred to a unit for more high-risk patients (e.g. Sterkfontein Hospital), or discharged home for outpatient follow up by the Departments of Psychiatry and Psychology.

The treatment protocol for BPD used by the members of the HJH multidisciplinary team in Ward 2, the acute inpatient adult admission unit, comprises of a set of guidelines within which patients are managed. (Annexure A) This protocol recognises that: *". . . the borderline patient in the ward may wreak havoc by acting violently, polarising the staff, refusing treatment, threatening suicide and refusing hospital treatment."* It goes on to guide staff members how to identify patients with borderline personality disorder, and highlights treatment principles that should be adhered to by staff. The protocol also makes use of a treatment contract where the patient is asked to sign undertakings regarding anger management, self-harm and substance abuse. The protocol highlights the "primitive ego defence mechanisms" used by patients with borderline personality disorder, including:

- Splitting - process of keeping apart perceptions and feelings of opposite quality. Staff members are divided into good and bad;

- Primitive idealisation - tendency to see some staff as totally good in order to protect the patient from bad staff and painful experiences;
- Projective identification - tendency to see some staff as bad as the patient feels. Projective identification is a term introduced by Melanie Klein to describe the process whereby - in a close relationship, as between mother/child, lovers, therapist/patient - parts of the self may in unconscious fantasy be thought of as being forced into the other person.
- Primitive denials - alternating expungement from consciousness of first one and then another perception of opposite quality or a wish so powerful that it obliterates crucial aspects of a reality contradicting it, e.g., fear may cause a patient to deny a serious illness and flee the hospital where it might be treated; and
- Omnipotence and devaluation - a shift between the need to establish a relationship with a magically powerful staff member and a conviction of omnipotence in the self, which makes all other impotent in comparison. The omnipotent caregivers are to deliver the patient from all pain. When it doesn't happen, the staff is seen as impotent and harmful.

The ward at HJH, while an acute containment facility, aims to provide a therapeutic milieu in which patients with BPD may be treated. On admission, patients are required to fill out self-reporting intake forms regarding substances and substance abuse, and to sign a contract regarding aggression, self-harm, use of substances and development of intimate relationships on the ward. Patients are also oriented to the following: an optimal length of admission period; conditions of treatment for inpatients and outpatients with substance abuse/dependence; therapy offered; and rules and regulations regarding weekend leave.

On discharge, patients may be discharged home to follow up either at their local community clinic or at HJH psychiatry outpatients department. The protocol advises, however, that the patient may not only intensify disruptive behaviour to a prolonged hospital stay, but simultaneously may try to leave prematurely. A specific discharge date should be set, and firmly adhered to while managed by providing a structured context and clear follow-up arrangements, despite a possible predictable worsening in the patient's psychological status just prior to the agreed on discharge.

Following discharge, the Department of Psychology at HJH offers out-patient groups at the hospital to assist patients with borderline personality disorder with life skills, as well as individual therapy. These groups are based on the principles of dialectical behavioural therapy (DBT) as well as mentalisation based therapy (MBT). Patients with borderline personality disorder may also be referred to Wards 4 and 5 at Tara, the H. Moross Centre, which is a public specialized psychiatric facility in the north of Johannesburg.

This unit runs an eight week psychotherapy inpatient program, as well as a quarterly outpatient program, also based on the structured programs of DBT and MBT, as well as some parenting skills groups and other interventions. These programs are on a voluntary basis and patients are accepted only following an initial assessment. Often patients are requested to begin outpatient therapy at Helen Joseph while awaiting their assessment interviews at Tara. In the event where a patient poses a high risk to self or others during their inpatient stay at HJH, he or she may be referred to Sterkfontein Hospital for containment and further involuntary mental health care,

treatment and rehabilitation. This may, for example, be due to acute suicidality, aggression, and substance misuse. Patients are reminded about this on admission to HJH, in the form of the contracts that they sign at the beginning of their stay.

Previous data, describing the clinical profile of mental health care users at HJH, showed that the average number of admissions per year over the five years from 2004 to 2008 was 535, and that the average length of stay was 15.4 days which ranged from 1-85 days. Twenty-four percent of patients admitted in 2003/2004 had a diagnosis of cluster B personality traits or disorder and in 2007/2008 this figure was 27.3% (n=119).[34] [35] These figures provided preliminary information regarding the number of inpatients with borderline personality disorder at HJH. However, little documented data on the profile, comprehensive care, management, and follow-up of specifically patients with borderline personality disorder in an acute setting and outpatient follow-up, is available in South Africa.

The purpose of this explorative study was therefore to review the frequency, management and the outcome of the acute inpatient treatment of personality disorder at HJH. The objectives for this study were, to:

- establish the percentage of patients with borderline personality disorder amongst the total number of patients managed at the acute psychiatric inpatient facility at HJH for a specified one-year period;
- describe the demographic and clinical profile of these users with BPD with regard to age, gender and race, number of previous admissions, reasons for

admission, clinical features, inpatient treatment, length of the stay, and follow-up plan upon discharge; and

- track and compare the number of psychiatric outpatient visits and the number of psychiatric emergency/consultation-liaison visits of these inpatient users with BPD.

CHAPTER 2 METHODS

The study was a retrospective descriptive clinical review of all the inpatients with BPD managed at the acute adult psychiatric assessment unit (Ward 2) at HJH over a period of one year. Data was sourced from the patients' clinical records, such as discharge summaries and clinical notes on inpatient care, consultations and outpatient visits from an existing database.

2.1 Study population

The clinical records of all patients admitted at Ward 2 at HJH between January and December 2010 were reviewed and those who were diagnosed with BPD were identified.

2.2 Data collection

The admission records of Ward 2 were reviewed to identify all users diagnosed during this period with "borderline personality disorder" or with "borderline personality traits." In addition, the routine discharge summaries and/or clinical notes for this group were reviewed, while the DSM IV-TR criteria for BPD were then referred to, to confirm the diagnosis. A data sheet was completed for each user (Annexure B), including:

- diagnostic criteria;
- demographic variables (age, gender and race);
- previous admissions;

- the reason for admission (e.g. because of suicide ideation or an attempt, including self-injurious behaviour; substance use/abuse and/or withdrawal; co-morbid psychiatric symptoms; for containment; and social reasons);
- clinical variables (pharmacological and psychological interventions); and
- outcome variables (e.g. out-patient visits and psychiatric emergency/ consultation-liaison visits, the length of inpatient stay and plan upon discharge)

2.3 Data analysis

Data was analysed after collation in an Excel spreadsheet. Confidence intervals were calculated at 95% for the prevalence of BPD. Categorical variables were presented as frequencies and percentages, while continuous variables were presented as a mean with standard deviations (SD) if normally distributed, or as a median (range) if not normally distributed. Significance was set at p=0.05. The association between the number of admissions and length of stay was calculated by using the Spearman correlation co-efficient for an ordinal or non-nominal distribution. The association between patients who have been given the diagnosis of BPD or traits and the actual fulfilment of diagnostic criteria was statistically analysed using a chi-square test to determine significance.

2.4 Ethics

Data was recorded anonymously, making use of codes instead of patient names or numbers, in order to protect confidentiality. Approval for this study was obtained from the head of health establishment at HJH and ethical clearance from the Human Research Ethics Committee of the University of the Witwatersrand. (Annexures C and D)

CHAPTER 3 RESULTS

The total number of patients admitted to Ward 2 during January to December 2010, was 653. Of this number, the total identified from the ward's admission records as diagnosed with "borderline personality disorder" or with "borderline personality traits", was 121 (18.5% of the total), Figure 1. The discharge summaries or clinical notes, where discharge summaries were not available, for this group of patients were reviewed. The clinical records of 24 patients with a diagnosis of borderline personality according to the ward's admission data were subsequently not found (n=24; 3.6%). The study sample therefore only included 97 patients, 14.8% of the total (n=653).

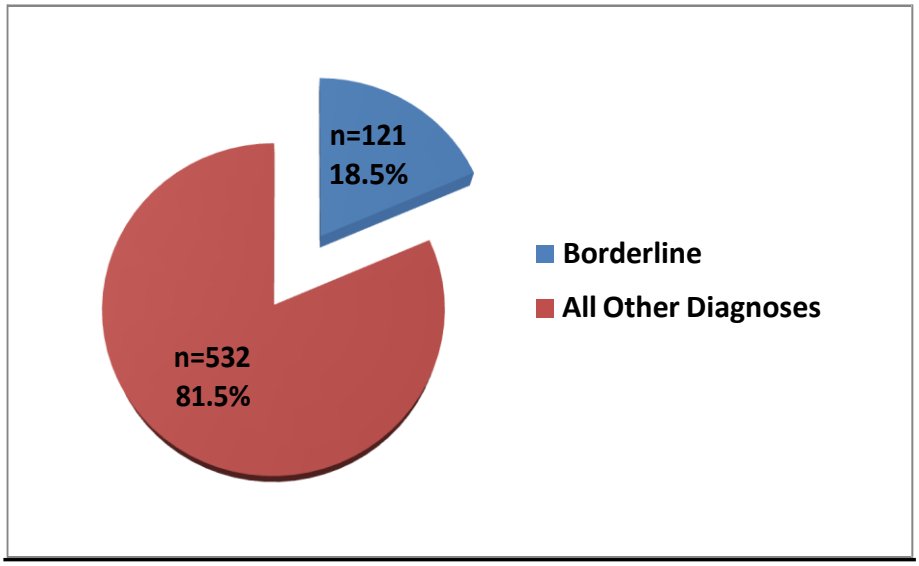

Figure 1. Proportion of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.1. **Age**

Most users identified with BPD were between the ages of 18 and 30 years (n=30, 31%). The same applied to the age group 31-40 years (n=30, 31%), while 28 patients were between the ages of 41 and 50 (29%), 6 were over the age of 50 years

(7%) and 2% of the data with regards to age was unknown (Figure 2). The average (mean) age for this group was 34.9 years with a standard deviation of 9.71years.

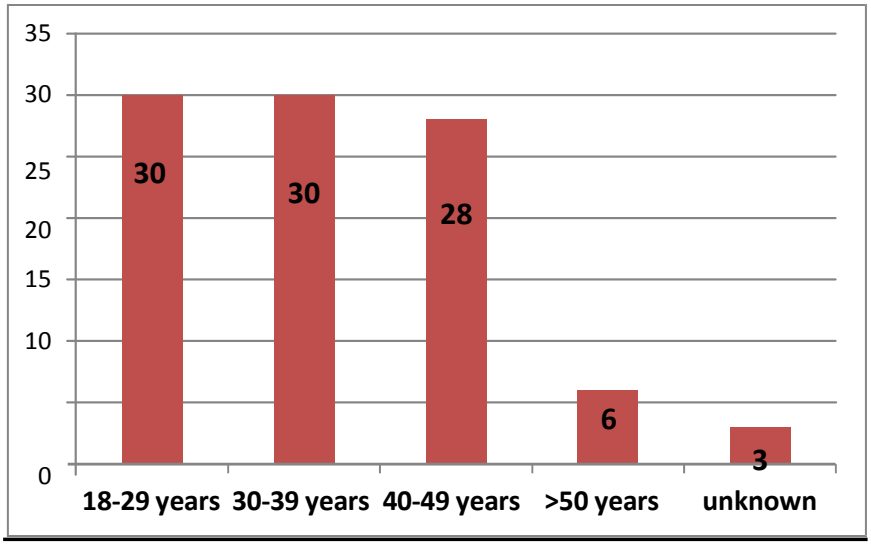

Figure 2. Age categories of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.2 Gender

The vast majority of patients with BPD or borderline traits admitted to the acute

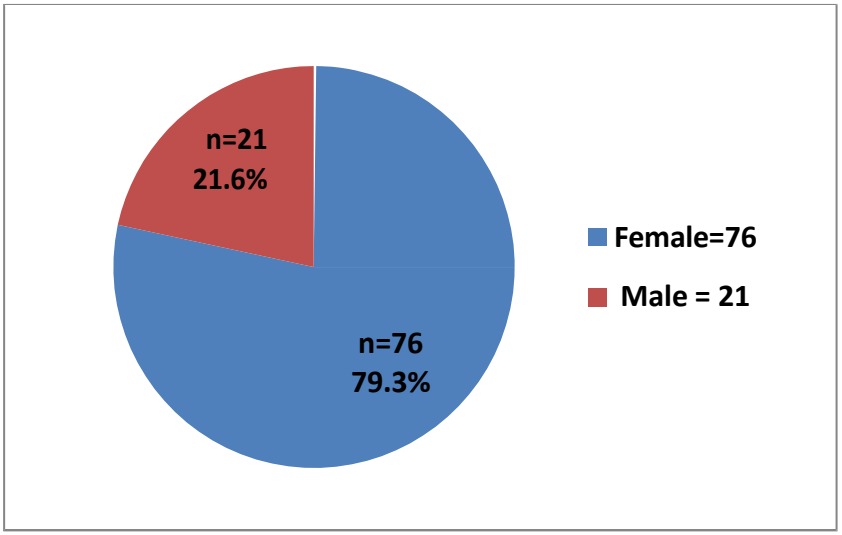

Figure 3. Gender of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

psychiatric assessment unit at HJH during 2010 were female (79.3%), while males comprised less than a quarter (21.6%), (Figure 3) .

3.3 **Race**

Whites with BPD comprised the largest majority (n=70, 72.1%), followed by Black (n=15, 15.4%), Coloured (n= 9, 9.2%), and lastly Asian users (n=3, 3%), (Figure 4).

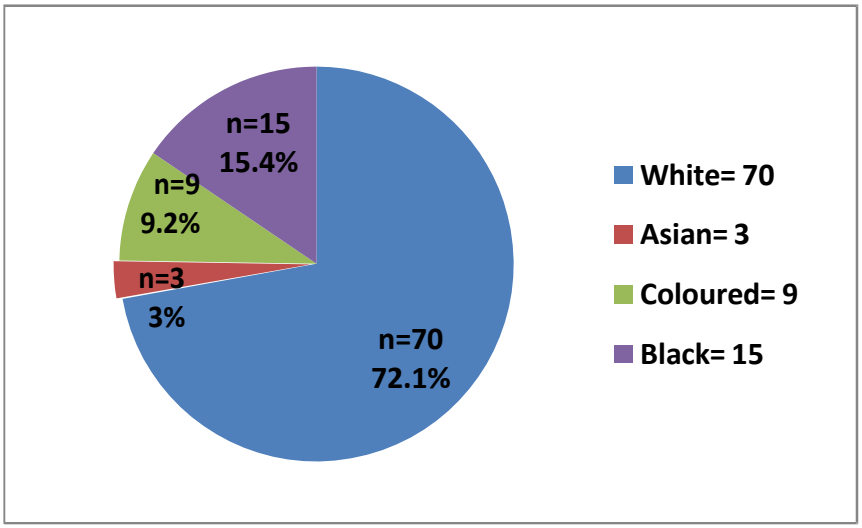

Figure 4. Race of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.4 **Previous admissions**

Patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010 (Figure 5), had on an average four previous admissions per patient (average = 4; median = 4; SD = 2.82). The range was 1 to 19 admissions and four patients were admitted more than 6 times.

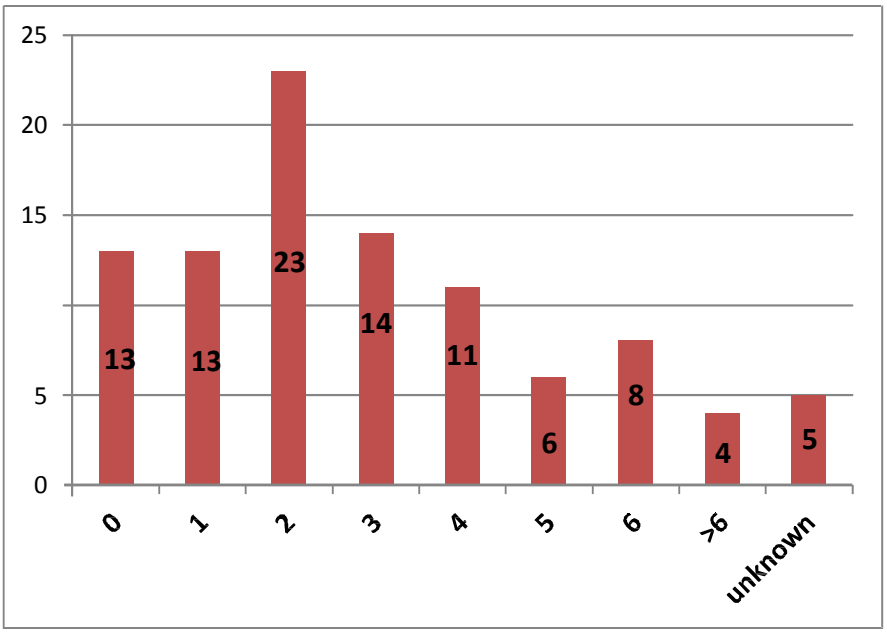

Figure 5. Number of previous admissions of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.5 Reasons for admission

The reason for admission for the majority of patients was suicidality. A term often used in this regard was “uncontained” and refers to those patients who were admitted as high risk to others due to aggression and violence. The category “other” incorporates, amongst others, those admitted with mood lability, substance withdrawal and psychotic features (Figure 6). Sixty-four patients presented with suicidal ideation, 21 were “uncontained” and 52 were admitted for “other” reasons. This number is in excess of the sample size (n=137), so it became apparent that there were some patients who were admitted with more than one reason for admission documented. The data was then further analysed to assess how many patients had multiple reasons for admission, and what the overlap was (Figure 7). Twenty-eight patients were admitted for suicidal ideation and other reasons, while 6 patients were admitted with the three-fold reasons of being suicidality, “uncontained” and “other”.

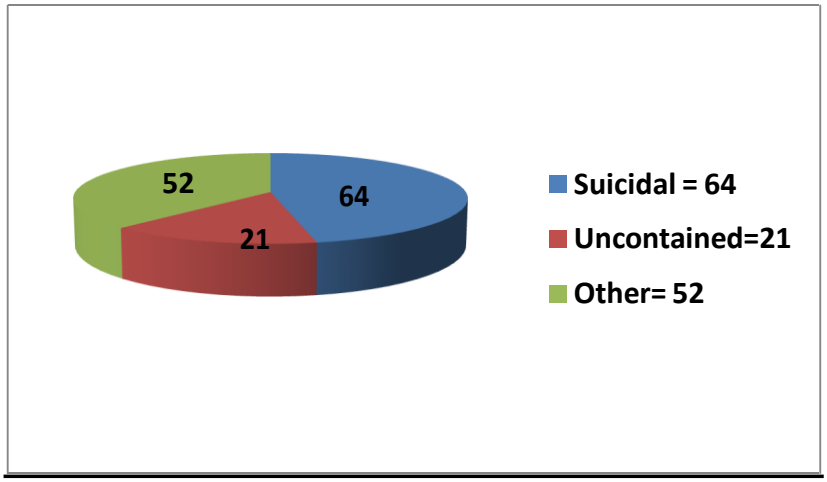

Figure 6. Reasons for admission of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

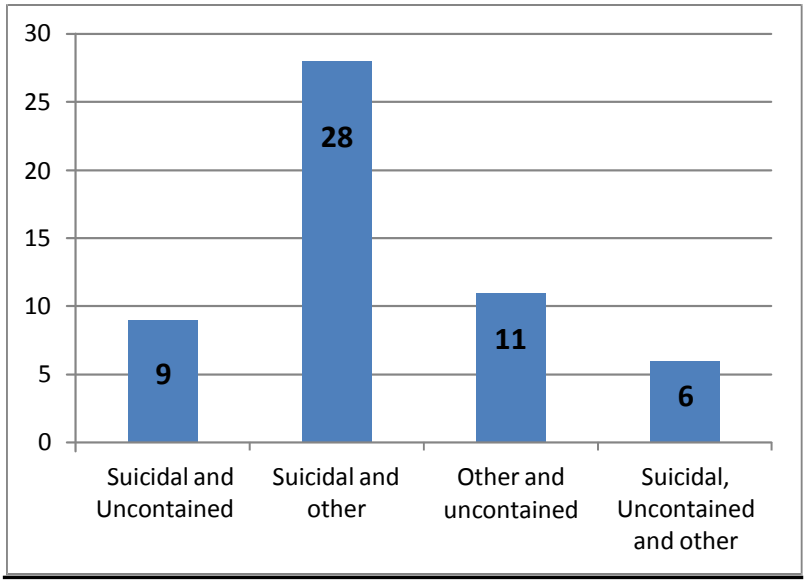

Figure 7. Multiple reasons for admission of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.6 **Clinical features - DSM IV-TR criteria**

The clinical data from patients' routine discharge summaries and their clinical notes (in cases where discharge summaries were not available) were reviewed for evidence, either explicit or implicit, of the nine diagnostic criteria that constitute the DSM IV-TR diagnosis of BPD (Figure 8). The four most common criteria of the diagnosis of BPD met by most patients in this group included: affective instability (n=93); impulsivity (n=85); suicidality (n=80) and relationship instability (n=65); followed by anger, paranoia, chronic emptiness and fear of abandonment.

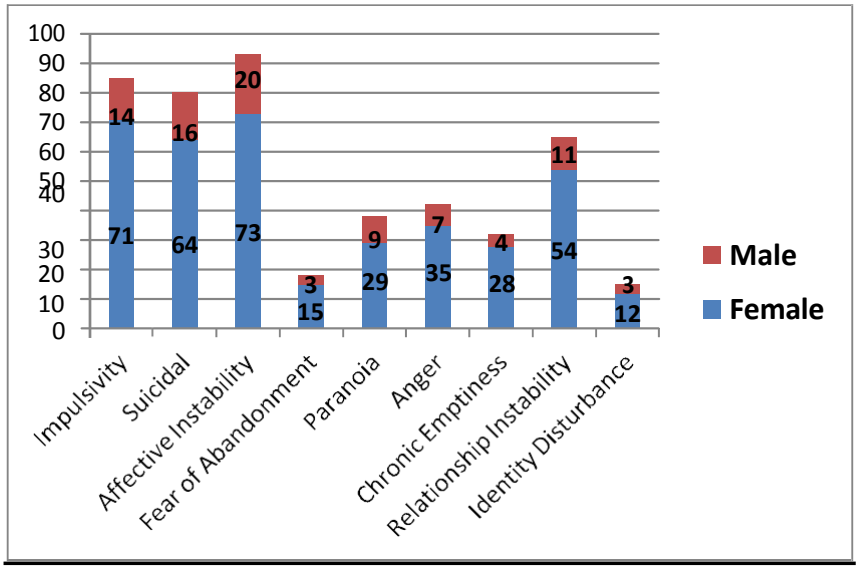

Figure 8. Number of patients fulfilling DSM IV-TR criteria for borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

Table 1 summarizes the different Axis II diagnoses made by the treating doctor on admission as per discharge summary or clinical notes of patients who were admitted to the acute psychiatric during the study period.

Table 1. Axis II diagnoses given by treating doctor to patients admitted to the acute psychiatric unit at HJH during 2010

AXIS II Diagnosis	Number
Borderline personality disorder	64
Borderline traits	26
Antisocial traits	3
Narcissistic traits	3
Cluster C traits	1
Unknown	1
TOTAL	98

Patients were then divided into two sets of two groups each (Table 2). The first group was divided into those patients who were considered by their treating doctor as per clinical records on discharge to have a diagnosis of borderline personality disorder and those who were only considered to have borderline personality traits. The second group of patients, from scrutiny of the data sheets, were those who actually fulfilled the DSM IV-TR criteria for borderline personality disorder (who met five or more out of nine criteria confirmed from the clinical records on discharge), and those who had less than five criteria (with only borderline traits). Comparing these two groups to establish if a significant difference was observed in their occurrence, a p-value of 0.14 was found.

Table 2. Comparing BPD diagnosis made per clinical data and per DSM IV-TR diagnostic criteria

p= 0.14	Diagnosis per clinical records on discharge	Diagnosis per DSM IV-TR diagnostic criteria
Borderline personality disorder	75	45
Borderline personality traits	22	15

The number of users with the diagnosis of BPD made as per clinical records was therefore found not to be statistically significantly different from the number with the diagnosis confirmed as per DSM IV-TR criteria.

3.7 **Co-morbidities**

While patients presented with many psychiatric co-morbidities, some patients were admitted purely with a diagnosis of borderline personality. Forty-two patients (n=42, 42%) had a co-morbid substance abuse or dependence problem. Bipolar disorder, including both types 1 and 2, accounted for 15% of the co-morbidities seen (n=15. 15%).

Table 3. Co-morbidities of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

Diagnosis	Number	Percentage
Substance abuse/dependence	42	43%
Bipolar disorder (1 and 2)	15	15%
Major depressive disorder	13	13%
Substance induced disorders	4	4%
Adjustment disorder	3	3%
Eating disorders	3	3%
Psychotic disorders	2	2%
Post-traumatic stress disorder	1	1%
Paraphilia	1	1%
Malingering	1	1%

Patients with both borderline personality disorder and major depressive disorder accounted for 13% of the cohort (n=13, 13%). Various other diagnoses made up a small proportion of the remainder, including substance-induced mood and psychotic disorders (n=4, 4%), adjustment disorder (n=3, 3%) and eating disorder (n=3, 3%).

(Table 3). There was one patient each (n=1, 1%) with a given diagnosis of post-traumatic stress disorder, malingering and paraphilias respectively.

3.8 **Treatment on discharge**

The data on the pharmacological agents with which users with BPD were treated during their admission to the acute psychiatric unit at HJH during 2010, was classified into how many classes of medication the patients in the sample were discharged on, Figure 9. Ten patients were discharged on one class of medication (n=10, 10.3%), 55 were discharged using 2 (n=55, 56.7%), twenty using three (n=20, 20.6%), and 10 were discharged on more than three classes of medication (n=10, 10.3%). Five patients were discharged on no pharmacology (n=5, 5.15%), and the data on two patients was incomplete with regards to pharmacology (n=2, 2.06%).

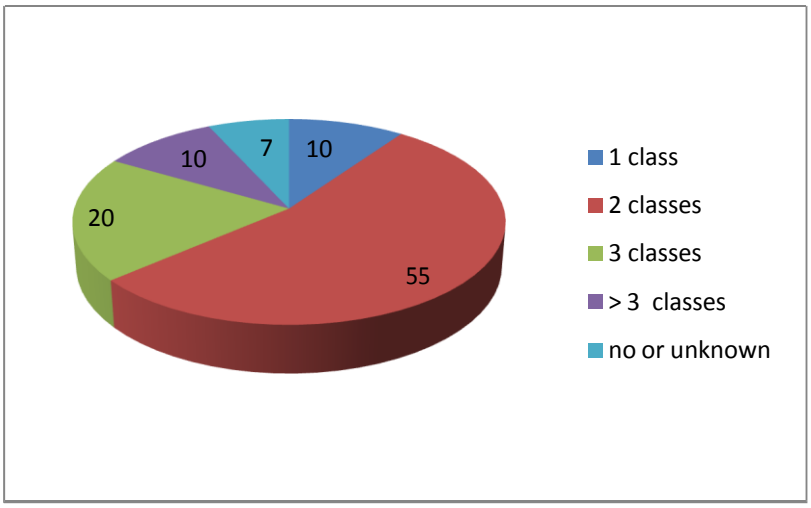

Figure 9. Number of classes of medication on discharge of patients with borderline personality disorder at HJH during 2010

Forty-five patients were being treated with antidepressants (n=45, 46.4%); while twenty-four were using benzodiazepines (n=24, 24.7%), 49 patients were prescribed an oral antipsychotic (n=49, 50.5%) and one was prescribed a depot antipsychotic (n=1, 1%), Figure 10. Thirty-six patients were discharged on a mood stabiliser and 18 patients on other medication, which included medication taken for other systemic illnesses.

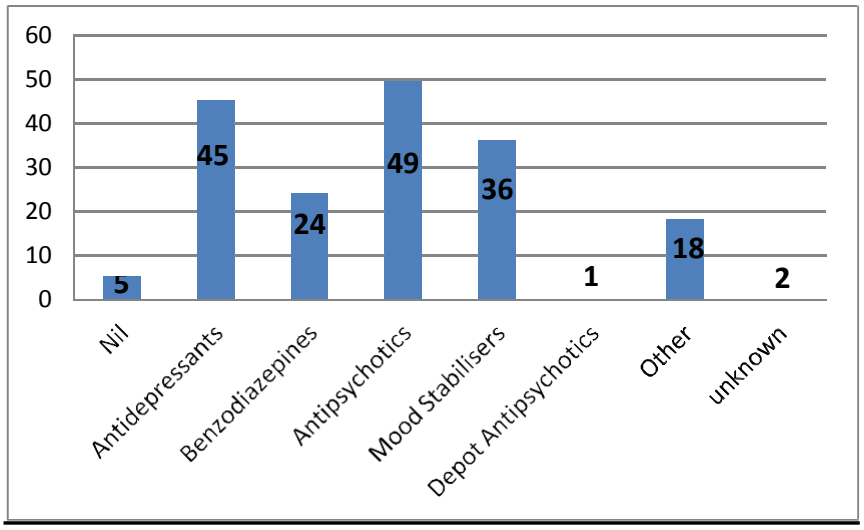

Figure 10. Type of medication on discharge of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

As noted above, most patients were on various combinations of the above classes of medication. Common combinations of medications included antidepressants and benzodiazepines, antidepressants and antipsychotics, antipsychotics and mood stabilisers and antipsychotics, benzodiazepines and mood stabilisers.

3.9 **Length of stay**

The average length of stay for users with BPD who were admitted to the acute psychiatric unit at HJH during 2010 was 16.5 days, with a SD of 13.44 days and a median was 6 days.

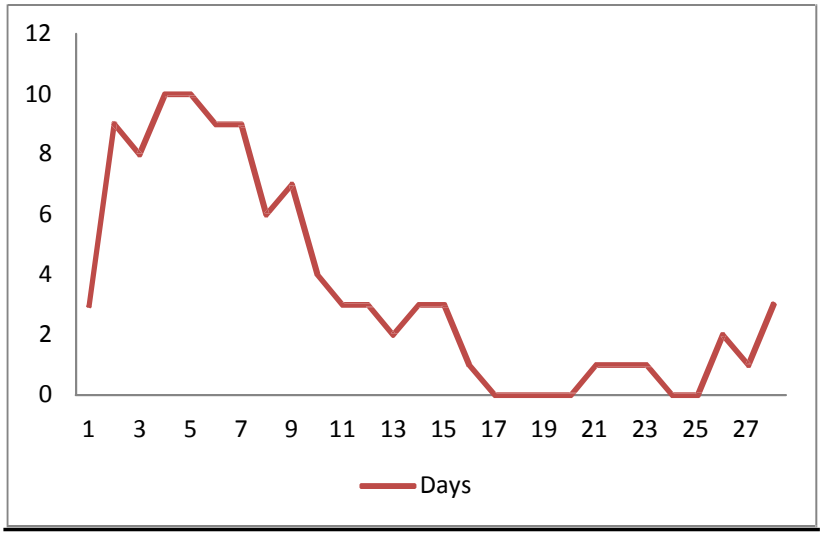

Figure 11. Length of stay of patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

3.10 **Discharge plan**

Patients were either discharged from the ward to continue care as outpatients or were transferred to other psychiatric facilities for continued care if indicated. Some patients, with social problems, were referred for long-term placement. Figure 12 below illustrates the plan for the patients in this sample, as indicated on their discharge summaries. The majority of patients were meant to follow up at the HJH outpatient department (n=49, 50%). Seventeen patients were referred to the Tara Hospital inpatient (Ward 4 and 5) psychotherapy programme (n=17, 17.7%), and 13

were referred to their local community clinics (n=13, 14%). No patients were sent to Sterkfontein Hospital during this period reviewed. Two patients were placed at a long-term residential facility. Twenty-three patients were sent either for follow-up in the private sector or to other facilities. This category also included patients who were referred for substance rehabilitation.

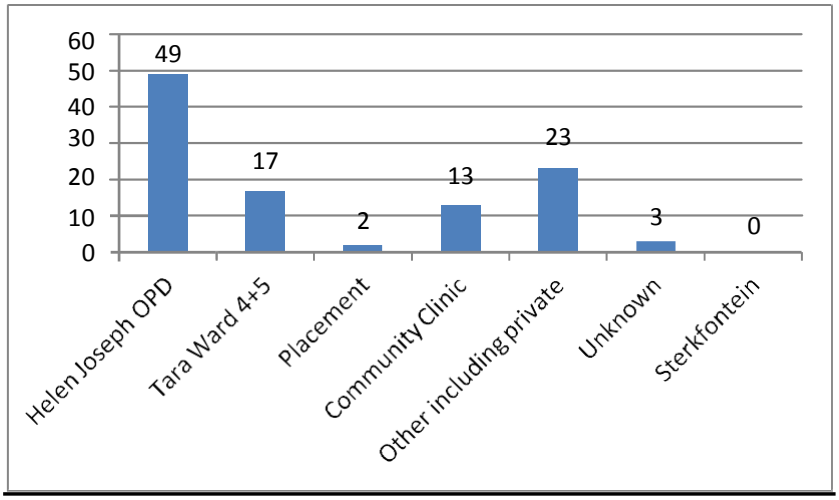

Figure 12. Discharge plans for patients with borderline personality disorder admitted to the acute psychiatric unit at HJH during 2010

An attempt was made to track the actual movements of patients after they had been discharged from HJH, and compared to their proposed plan on discharge. Patients were split into two groups, those that were meant to follow-up at the HJH Psychiatric Outpatient Department, and those who were meant to follow-up elsewhere. The outpatient database for 2010 was then scrutinised to track whether these patients did in fact, present as per schedule. Of the 49 patients meant to be seen as outpatients at Helen Joseph, 9 actually kept their appointments. Those who did attend seemed to have done so regularly as per scheduled booking. Forty-three were non-compliant to outpatient follow-up.

Of the 48 patients that were meant to follow-up elsewhere, one patient returned to HJH as an outpatient. The data was also cross-referenced against the emergency visits for 2010, while keeping the patients in the same two groups. The database on (emergency) consultations contains a record of unscheduled visits of patients to the hospital who were seen by the psychiatry registrar on consult-liaison service (during or after-hours). Seven of the nine patients who were compliant with their outpatient visits also presented as emergency cases during the study period. Thirty-three of the 43 that were non-adherent to their outpatient dates were seen as emergency cases. Of the 48 patients that were given a plan other than Helen Joseph on discharge, 30 presented to the HJH Emergency Department and were subsequently assessed and managed by the Psychiatry registrar on call (Figure 13).

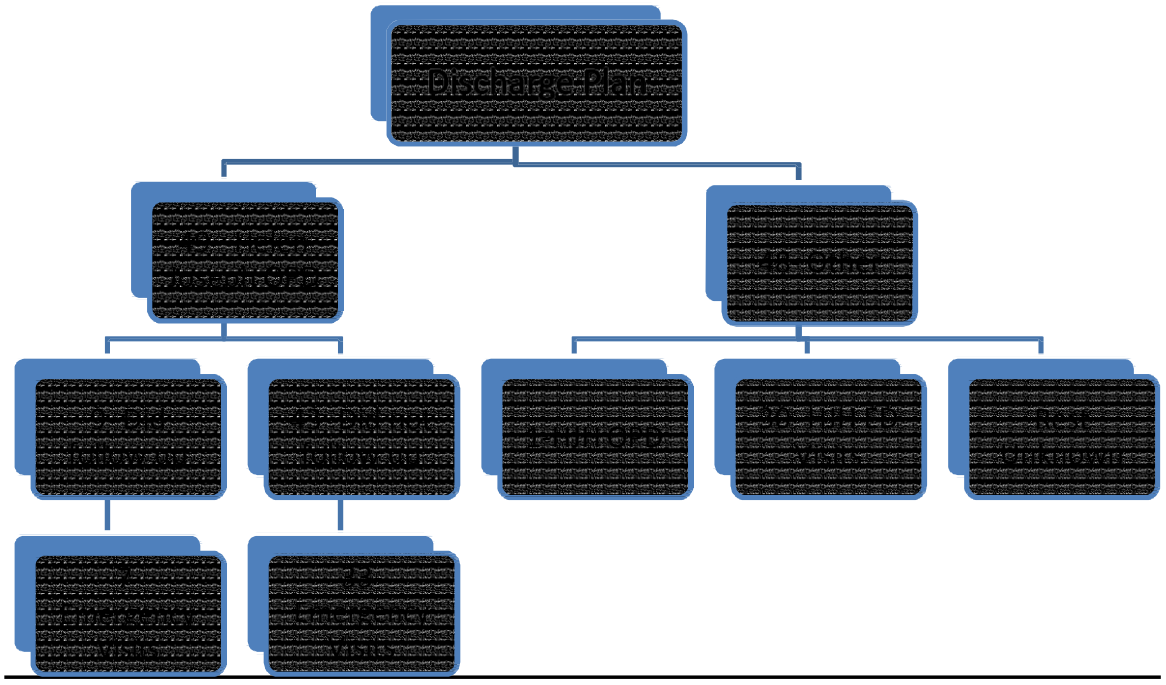

Figure 13. Tracking of patients after being discharged with a diagnosis of borderline personality

CHAPTER 4 DISCUSSION

With regard to limitations, Hess noted that: *". . . retrospective research often requires the analysis of data that was originally collected for reasons other than research."*[36] The limitations of retrospective research thus include incomplete documentation, missing charts, information that is unrecoverable or unrecorded, difficulty interpreting information found in the documents (e.g. jargon, acronyms, photocopies, and microfiches), problematic verification of information and difficulty establishing cause and effect, as well as variance in the quality of information recorded by medical professionals.[37] The majority of the data for this retrospective review was from clinical and nursing records which were often incomplete. Twenty-four files, about 20% of the sample size, were not found. Of the records that were accessible, discharge summaries were often completed by junior doctors with a poor grasp of personality pathology. Axis II diagnoses were often deferred, with no legitimate clinical reason for doing so.

Personality disorders are often difficult to pinpoint to a specific clinical (DSM IV-TR) diagnosis, and clinicians may often describe symptoms more broadly within a personality cluster or as traits, but omit to use the diagnosis of a specific disorder. This posed a challenge when trying to identify patients with borderline personality disorder specifically, rather than just "Cluster B traits", a term which is commonly used in clinical practice, and was also commonly used in the records reviewed for this study. The results of this review therefore could be considered an underestimation, due to the relatively strict inclusion criteria in the study design.

This limitation also speaks to the limitations of the DSM IV-TR diagnostic system as discussed in the introduction and attempts through the DSM V to address these, even if just in terms of inclusion of a research category. The eventual aim will probably be to move away from a categorical approach in determining diagnoses of personality disorders, to rather a dimensional approach which will also take levels of functional disability into account.

The HJH programme to manage borderline personality disorder in its acute inpatient psychiatric assessment unit constitutes just one component of the referral system in the Southern Gauteng area. The other components are the HJH psychology and psychiatry outpatients departments, community psychiatry clinics in the HJH catchment area, the Tara H. Moross Centre and Sterkfontein Hospital. This report did not incorporate the assessment, criteria and interventions provided by the Department of Psychology at HJH, except to make mention when patients were referred. Ideally it would be useful to follow these patients and compare outcomes with or without inpatient and/or outpatient psychological intervention (e.g. individual therapy or groups). Better information on this process may contribute to a more seamless integrated programme to effect indicated prevention and early intervention. The study also did not incorporate the follow-up of patients who were referred to the longer Tara inpatient psychotherapy program. This is a voluntary program and additional information could have included whether the referred patients presented for their booked Tara assessment interviews, whether they were accepted into the program and if they completed the program. This information could also have been compared with acute admission relapse rates to determine the presence of a relationship between the two.

The total percentage of patients with borderline personality disorder or traits in this study, who were admitted to the acute psychiatric unit at HJH during 2010, was lower than expected compared with the international data referred to in the introduction. These studies which used research diagnostic instruments have found that 20-40% of psychiatric outpatients and about 50% of psychiatric inpatients fulfil criteria for a personality disorder.[20, 21] As noted above, this finding at HJH of about 18.5%, probably represents an under estimation and could possibly be because information for the purposes of this study was obtained mainly from ward statistics, discharge summaries and clinical notes. The published studies quoted obtained estimates from research diagnostic instruments, involving patient interviews. The literature does however, approximate more closely with previous HJH research results, where 24% of patients admitted in 2003/2004 had a diagnosis of cluster B personality traits or disorder and 27.3% in 2007/2008.[28, 29]

Borderline personality disorder is often considered a disorder of young females.[5] While the vast majority of the sample was female, this review suggests that the morbidity associated with the disorder persists into middle age, where the average age of patients in this sample was 34.9 years.

The average number of prior admissions to a psychiatric facility of users with BPD in this study was four admissions per user. These findings are in keeping with the study by Kent et al. stating that *"patients with personality disorders . . . are some of the most frequent users of psychiatric services."*[18] The number of previous admissions speaks to the severity of the illness and the large morbidity and possible mortality associated with borderline personality disorders. It also ties in with the information

gleaned from this review that patients with borderline personality disorder are very poorly adherent to scheduled follow-up, thus requiring more emergency care and treatment. The implications on the additional use of resources are therefore significant.

A large proportion of patients in this study were admitted for more than one reason, illustrating the severity of the presenting pathology. Patients were most commonly suicidal, posed a danger to others, or presented with mood lability, micro-psychotic episodes and substance abuse. This is in keeping with the literature, which reports that people with personality disorders often present in crisis situations and their personality pathology is sometimes secondary and emerges after admission. [9]

According to Reich et al., patients with borderline personality disorder have more severe Axis I symptomatology,[16] and according to Tyrer et al., patients with major depression, panic disorder and obsessive compulsive disorder who have a co-morbid personality disorder have been found to show a poorer response to a range of treatments.[17] A large proportion of patients admitted to HJH in 2010 with a personality disorder were also found to have an Axis I disorder, ranging from mood disorders to substance abuse disorders.

Patients with BPD in this study appeared to present more frequently with certain of the diagnostic criteria than others. A possible reason for this is that the criteria that seem underrepresented, for example a fear of abandonment, are more difficult to elicit during an acute admission and may be more apparent in the course of individual or dialectic behavioural therapy. An attempt was made to explore the validity/quality of the diagnosis by comparing the diagnosis given by the treating doctor, to the diagnosis actually based on DSM IV-TR diagnostic criteria. This comparison was found to be not statistically significant, which shows that the clinical diagnosis statistically approximates the diagnosis made according to DSM IV-TR criteria. This implies that clinicians at Helen Joseph are diagnosing patients in close approximation to internationally recognised and standardised diagnostic criteria.

The occurrence of poly pharmacy with psychotropic agents from all classes illustrates the point further that patients with personality disorders are significant users of resources and psychiatric care. This in the face of evidence to support the rationale that pharmacological intervention is not first-line in the treatment of personality disorders and are only useful when targeting specific symptoms. It may also reflect on the extent of co-morbidity observed in this group, as well as on the lack of clarity of diagnosis in some instances. Common combinations of agents included various permutations of antidepressants, mood stabilisers, antipsychotics and benzodiazepines. The use of habit forming benzodiazepines may generally have a limited indication in the management of BPD. Its use in this population with additionally very high rates of co-morbid substance abuse, as evidenced by this report, perhaps warrants further attention.

Comparing this study's finding of a relatively longer average length of stay (16.5 days) for BPD patients during this study period, with that for the general inpatient population in 2007 (15,4 days), [34,35] it seems that the objective of the HJH protocol for the management of BPD patients, advising a short inpatient stay, has not been achieved during this study period. A targeted intervention during the acute admission period should also include more focus on the setting of a discharge date early in the admission to prevent "longer-than-necessary" stays, while acknowledging the potential usefulness of a short, therapy-intensive admission.

As a group, the patients with BPD in this study were largely non-adherent to scheduled follow-up appointment, where a small minority of the sample presented on schedule. They instead frequently presented, during the rest of the year, to the HJH Emergency Department for unscheduled emergency psychiatric services. Their presentation to psychological services on an outpatient basis was not included in this report but the assumption is that the profile would be similar to that of the Psychiatry Department. The implications of this include the lack of continuity with named clinicians, and less than optimal after-hours assessments by often junior staff as well as inefficient use of resources. A targeted acute inpatient program should include an assertive treatment plan which contacts patients who do not present for scheduled visits.

CHAPTER 5 CONCLUSIONS

This retrospective review illustrated the demographic profile and further described the course of a typical inpatient admission for a patient with borderline personality disorder at Helen Joseph Hospital during 2010. While most of the results generally mirrored findings from the literature, especially with regards to multiple admissions and use of poly pharmacy, the average age of an inpatient admitted with borderline personality in this sample was older than expected.

All components in the referral system – The study also attempted to do a preliminary enquiry into the course following discharge of these patients, which clearly illustrated the burden on emergency versus scheduled care. Follow-up of patients via the psychology department at HJH was not explored in this project, due to this information being unavailable in discharge summaries and ward notes. The findings of this review suggest that it may be worthwhile to explore all the service components in the referral of borderline personality disorder patients in this area, including the extent of compliance to the plan on discharge given to the patients by the HJH psychology department, which runs parallel to the discharge recommendation by the HJH psychiatry department.

Quality of diagnoses - Clinical interviewing using a structured diagnostic tool (or interview) may also have yielded more accurate results with regard to clinical diagnosis versus a more objective research-orientated measure, and so would have improved the evidence for a more clear diagnosis of BPD. Future studies may also

look further into the close relationship between personality disorders and substance use, as well as suicidality, as a reason for admission, which emerged from this review.

Interventions - An acute inpatient facility provides an ideal opportunity for early intervention programmes in borderline personality disorder. Borderline personality disorder is a leading candidate for developing empirically based prevention and early intervention programmes because it is common in clinical practice, it is among the most functionally disabling of all mental disorders, it is often associated with help-seeking, and it has been shown to respond to intervention even in those with established disorder.[38]

The existing programme at HJH to manage borderline personality disorder in its acute inpatient psychiatric assessment unit may, for example, also benefit more from further incorporating short-stay inpatient MBT and out-patient DBT principles, as well as additional objectives such as early intervention. Early intervention should primarily aim to alter the life-course trajectory of people with borderline personality pathology by attenuating or averting associated adverse outcomes and promoting more adaptive developmental pathways. Novel early intervention programmes have been developed and researched in Australia and the Netherlands.[32] [39] These would include elements like:

1. Assertive, psychologically informed case management integrated with the delivery of individual of individual psychotherapy;

2. Active engagement of families or carers;
3. General psychiatric care by the same team;
4. Capacity for outreach care in the community, with flexible timing and location of intervention;
5. Crisis team and in-patient care, with a clear model of brief and goal-directed in-patient care;
6. Access to a psycho-social recovery programme;
7. Individual and group supervision of staff; and
8. A quality assurance programme.

An important aspect of an early intervention program would be to incorporate programs such as mentalisation-based treatment as well as dialectic behaviour therapy.

Barriers and potential risks - Stigma is still a barrier to the early diagnosis of borderline personality disorder in acute settings. It is highly stigmatised among professionals, and it is also associated with patient self-stigma.[40] Many clinicians will deliberately avoid using the diagnosis in young people with the aim of 'protecting' the individuals from discriminatory practices.

Future perspectives - Borderline personality disorder can be seen as a lifetime developmental disorder with ramifications across different life stages. There is now sufficient evidence to support diagnosing and treating the disorder when it first appears in routine clinical practice, that is, in acute inpatient or outpatient settings.

This has already been adopted by the NICE guideline and supported by DSM V and likely to be supported by ICD 11.[38] Prevention and early intervention, as indicated, also offers a unique platform for investigating borderline personality disorder early in its clinical course, where duration of illness factors that complicate the psychopathology and neurobiology of the disorder can be minimised.

This review showed that, during the study period, the current protocol at Helen Joseph Hospital did not have its desired outcome in patients with borderline personality disorder who were frequently re-admitted in crisis situations and who were not following up via the appropriate channels. These findings support the development and implementation of a 'unit-within-a-unit' structure at the acute inpatient assessment unit at Helen Joseph Hospital, whereby these patients are identified early and embarked upon structured programs which have a robust basis in literature for improving outcomes, reducing morbidity and thereby resources.

The acute inpatient psychiatric assessment unit at Helen Joseph hospital has been shown in this report to admit enough patients with criteria of borderline personality disorder to justify a pilot study exploring early intervention and indicated prevention programmes, as well as a higher index of clinical vigilance into patients who present in order that current protocol interventions are offered routinely.

The report also supports the need for further study into the course and prognosis of patients with personality disorders in Johannesburg, especially at referral centres

and psychology departments affiliated to the Unit. Patients that present with these disorders have shown to place a high burden on mental health services and they contribute significantly to the ‘revolving door syndrome’. Early intervention targeted services, coupled with an integrative approach between all institutions and departments involved will contribute to improved prognosis, functioning and productivity.

REFERENCES

[1]Davison S. Principles of managing patients with personality disorder. Adv Psychiatric Treatment. 2002; 8:1-9.

[2] World Health Organisation. The ICD 10 Classification of Mental and Behavioral Disorders. Clinical descriptions and Diagnostic Guidelines. Geneva: WHO; 1992.

[3] American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (4th Edition, DSM-IV-TR). Washington DC: APA; 1994.

[4] Stern A. Psychoanalytical investigation and therapy in borderline group of neuroses. Psychoanal Q. 1938; 7:467-489

[5] Gunderson JG, Kolb JE. Discriminating features of borderline patients. Am J Psychiatry. 1978*;* 135: 792-796

[6] Kernberg O. Hysterical and histrionic personality disorders. In: Cooper A. Frances A. Sacks M, eds, The personality disorders and neuroses. Philadelphia: JB Lipincott, 1988:231-241

[7] American Psychiatric Association, Diagnostic and Statistic Manual of Mental Disorders (5th Edition, DSM V). Washington DC: APA; 2013.

[8] American Psychiatric Association, Personality Disorders Fact Sheet. http://www.dsm5.org/Documents/Personality%20Disorders%20Fact%20Sheet.pdf; Retrieved 14 July 2013

[9] Zimmerman M, Chelminski I, Young D. The frequency of personality disorders in psychiatric patients. Psychiatr Clin North Am. 2008; 31: 405-420.

[10] Carrasco JL, Lecic-Tosevski D. Specific types of personality disorder. In Gelder M, Andreasen N, Lopez-Ibor Jr JJ, Geddes J, eds, New Oxford Textbook of Psychiatry. Oxford: Oxford University Press 2009: 866-868.

[11] Gunderson JG, Phillips KA. Personality Disorders. In: Kaplan HI. Sadock BJ, eds, Comprehensive Textbook of Psychiatry. Baltimore: Williams and Wilkins, 1995: 1438-1441.

[12] Links PS. Developing Effective Services for Patients with Personality Disorders. Can J Psychiatry. 1998 April; 43:3.

[13] Stroul B. Profiles of psychiatric crisis response systems. Rockville (MD): National Institute of Mental Health: 1991.

[14] Dowson JH. Grounds AT, eds, Personality Disorders, Recognition and Clinical Management. Cambridge: Cambridge University Press; 1995.

[15] Tyrer P, Merson S, Onyett S, Johnson T. The effect of personality disorder on clinical outcome, social networks and adjustment: a controlled clinical trial of psychiatric emergencies. Psychol Med. 1994; 24:731-740.

[16] Bateman A, Tyrer P. Effective Management of Personality Disorder. 2002; http://www.nimhe.org.uk/downloads/Bateman_Tyrer.doc. Retrieved 30 March 2010

[17] Reich J, Boerstler H, Yates W. Utilization of medical resources in persons with DSM III personality disorders in a community sample. Int J Psychiatry Med. 1989; 19: 1-9.

[18] Tyrer P, Seivewright N, Ferguson B. The Nottingham Study of Neurotic disorder: relationship between personality status and symptoms. Psychol Med. 1990; 20: 423-431.

[19] Reich J, and Green AI. Effect of Personality Disorders on outcome of treatment. J Mental and Nervous Diseases. 1991; 179:74-82.

[20] Kent S, Fogarty M, Yellowlees P. Heavy utilisation of inpatient and outpatient services in a public mental health service. Psychiatr Serv. 1995; 46:1254-1257.

[21] Emerson J, Pankrantz L, Joos S. Personality disorders in problematical medical patients. Psychosomatics 1994; 35:469-473.

[22] De Girolamo G, and Reich JH. Epidemiology of Mental Disorders and Psychosocial Problems: Personality Disorders. Geneva: World Health Organisation; 1993.

[23] Moran P. Antisocial Personality Disorder: An epidemiological Perspective. London: Gaskell; 1999.

[24] Department of Health (2000*a*) NHS Hospital In-patient Data for the Period of 1 April 1998 to 31 March 1999. London: Department of Health.

[25] Paris J. The treatment of borderline personality disorder in light of the research on its long term outcome. Can Journal Psychiatry. 1993; 38 (I Suppl):28S-34S.

[26] Silk KR, Eisner W, Allport C, DeMars C, Miller C, Justice RW et al. Focused time-limited inpatient treatment of borderline personality disorder. J Personal Disord. 1994; 8:268-278.

[27] Merson S, Tyrer P, Onyett S, Lack S, Birkett P, Lynch S, et al. Early intervention in psychiatric emergencies: a controlled clinical trial. Lancet. 1992; 339:1311-1314.

[28] Fagin L. Management of personality disorders in acute in-patient settings. Part 1: Borderline personality disorders. Adv Psychiatr Treatment. 2004, 10:93-99.

[29] Norton K, Hinshelwood RD. Severe personality disorder: Treatment issues and selection for in-patient psychotherapy. Br J Psychiatry. 1996; 168:723-731.

[30] Bateman A, Fonagy P. Mentalization-based treatment for borderline personality disorder – A Practical Guide. Oxford: Oxford University Press. 2006.

[31] Gabbard G. Foreward to Mentalization-based therapy for borderline personality disorder – A Practical Guide. Oxford: Oxford University Press. 2006

[32] Linehan MM. Dialectical behavioural therapy: A cognitive behavioural approach to parasuicide. J Pers Disorder. 1987; 1:328-333

[33] Kliem S. Kröger C, Kossfelder J. Dialectical behavior therapy for borderline personality disorder: A meta-analysis using mixed-effects modelling. J Consult Clin Psych. 2010; 78: 936-951.

[34] Janse van Rensburg ABR. Clinical profile of acutely ill psychiatric patients admitted to a general hospital psychiatric unit. Afr J Psychiatry. 2007; 10(3):159-163.

[35] Janse van Rensburg ABR. Acute mental health care and South African mental health legislation. Part I - Morbidity, treatment and outcome. Afr J Psychiatry. 2010; 13(5):382-389.

[36] Hess DR. Retrospective studies and chart reviews. Respir Care. 2004; 49(10):1171-1174

[37] Gearing RE, Mian IA, Barber J. A Methodology for Conducting Retrospective Chart Review Research in Child and Adolescent Psychiatry. J Can Acad Child Adolesc Psychiatry. 2006; 15(3):127-134.

[38] Chanen AM, McCutcheon L. Prevention and early intervention for borderline personality disorder: current status and recent evidence. Br J Psychiatry. 2013; 202:24-29.

[39]Schuppert H, Giesen-Bloo J, Van Gemert T, Wierserna H, Minderaa R, Emmelkamp P, et al. Effectiveness of an emotion regulation group training for adolescents – a randomised controlled pilot study. Clin Psychol Psychother. 2009; 16: 467-78.

[40] Aviram RB, Brodsky BS, Stanley B. Borderline personality disorder, stigma and treatment implications. Harv Rev Psychiatry. 2006; 14: 249-256.