

A SURVEY ON PREVALENCE AND PRESCRIPTION PATTERN OF PATIENT WITH PSYCHIATRIC DISORDER

Farhana Israt Jahan¹, Anju Faridi Lopa¹, Aklima Akter¹
¹ Daffodil International University, Shukrabad, Dhaka, Bangladesh

* jifarhana@daffodilvarsity.edu.bd, anjufaridi239@gmail.com, aklima.ph@diu.edu.bd

Abstract

A Psychiatric disorder, also called a mental illness, psychological disorder or mental disorder, is mental or behavioral pattern that causes either suffering or a poor ability to function in ordinary life. The main goal of the survey is to enhance knowledge and awareness about various types of psychological disease and its medication to prevent and manage these diseases. To perform this study a survey was conducted among the patients with mental illness at the biggest mental hospital of Bangladesh "Pabna Mental Hospital" at Haemayetpur, Pabna of Bangladesh. From the study various mental disorder have been noticed. Among them Bipolar Mood disorder, Dissociative identity disorder, Psychotic Disorder, Neurodevelopment disorders, Attention deficit hyperactivity disorder, Schizophrenia and some others. The patients were randomly selected from Mental Hospital. The questionnaires of co-operative patients diagnosed with mental disease were collected and were interviewed for different parameters. The data collected and gathered through the interview was examined for the number of parameters such as age, sex, social and family history, psychological stage and drug therapy used for the treatment.

A total of 93 prescription was collected within September 2016 to October 2016, of which 81 was selected for the study which are directly related to Mental Disorder. Among 81 patient 82% was female patient and the rest 18% was male; both were in between 12-72 years. According to the study most common psychiatric disorders were Bipolar Mood disorder (24.5%) and Neurodevelopment disorders (22.8%). Other common problems were attention deficit hyperactivity disorder, schizophrenia, epilepsy, psychotic disorder, migraine, mood disorder, dissociative identity disorder and post-traumatic stress disorder. Frequently prescribe drugs for this symptoms were Midazolam (53.08%), Sodium Valproate (43.20%), Clonazepam (33.33%) and Propanolol (33.33%).

The burden of psychiatric disorders is high in Bangladesh, yet a largely unrecognized and under-researched area. Massive awareness is required to identify the early symptoms of mental disorder and its proper treatment.

Keywords: *Psychiatric Disorder 1, Bipolar Mood Disorder 2, Schizophrenia 3, Pabna Mental Hospital 4*

Introduction

Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.¹ Mental illness refers to a wide range of mental health conditions — disorders that can affect mood, thinking and behavior.³ More than 300 mental disorders listed in the DSM-5 (*Diagnostic and Statistical Manual of Mental Disorders*). Some of the main groups of mental disorders are: mood disorders (such as depression or bipolar disorder), anxiety disorders, personality disorders, psychotic disorders (such as schizophrenia), eating disorders, trauma-related disorders (such as post-traumatic stress disorder), and substance abuse disorders.² Worldwide, more than one in three people in most countries report sufficient criteria for at least one at some point in their life. In the United States 46% qualifies for a mental illness at some point. Rates varied by region.⁴ A review of anxiety disorder surveys in different countries found average lifetime prevalence estimates of 16.6%, with women having higher rates on average. A review of mood disorder surveys in different countries found lifetime rates of 6.7% for major depressive disorder and 0.8% for Bipolar disorder. A 2005 review of surveys in 16 European countries found that 27% of adult Europeans are affected by at least one mental disorder in a 12-month period.⁵ According to WHO, more than 450 million people in the world are suffering from neuro-psychiatric disorders and in Bangladesh there are 15 million people suffering from mental illnesses of various types.⁶ Mental health disorders— such as depression, anxiety, addiction, schizophrenia and neurosis – have a serious impact on health: they contribute up to 13% to the global burden of disease.⁷

Bangladesh's mental health policy, strategy and plan was approved in 2006 as a part of policy, strategy and action plan for surveillance and prevention of Non-Communicable Diseases (NCD) and community based activities in mental health is the main approach of the policy. A list of essential medicines is present in the country including antipsychotics, anxiolytics, antidepressants, mood stabilizers and antiepileptic drugs. There are 11

community residential facilities in the country and 55% of the beds in these facilities are for children and adolescents and 81% of admitted patients are female and 73% of them are children. There is one 500 bedded mental hospital in the country and on average patients spend 137 days in the hospital.⁸

The Baltimore Epidemiologic Catchment Area (ECA) data suggest that compared with persons age 45 to 64, adults age 65 years and older were .39 times as likely (95 percent CI=.23 to .64) to have reported a visit with a professional in the mental health sector and .24 times as likely (CI=.06 to .91) to report a visit in the mental health sector that bypassed the general medical sector altogether.⁹

The classification of mental disorders, also known as psychiatric oncology or taxonomy, is a key aspect of psychiatry and other mental health professions and an important issue for people who may be diagnosed. There are currently two widely established systems for classifying mental disorders—Chapter V of the International Classification of Diseases (ICD-10) produced by the World Health Organization (WHO) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) produced by the American Psychiatric Association (APA).¹⁰ The ICD-10 states that mental disorder is "not an exact term", although is generally used "to imply the existence of a clinically recognizable set of symptoms or behaviors associated in most cases with distress and with interference with personal functions." (WHO, 1992). The DSM -5 characterizes mental disorder as "a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual, is associated with present distress or disability or with a significant increased risk of suffering" but that "no definition adequately specifies precise boundaries for the concept of 'mental disorder' different situations call for different definitions" (APA, 1994 and 2000).¹⁰

While there are over 200 classified forms of mental illness, the five (5) major categories of mental illness are: (a) anxiety disorders, (b) mood disorders, (c) schizophrenia/psychotic disorders, (d) dementias and (f) eating disorders.¹¹

All of us encounter anxiety in many forms throughout the course of our routine activities.

However, the mechanisms that regulate anxiety may break down in a wide variety of circumstances, leading to excessive or inappropriate expressions of anxiety. An anxiety disorder may exist if the anxiety experienced is disproportionate to the circumstance, is difficult for the individual to control, or interferes with normal functioning.¹² Anxiety disorders run in families, which means that they can at least partly be inherited from one or both parents, like the risk for heart disease or cancer.¹²

Bipolar disorder, also known as manic-depressive illness, is a brain disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks. Symptoms of bipolar disorder are severe. But bipolar disorder can be treated, and people with this illness can lead full and productive lives.¹³

Psychotic disorders are mental disorders in which a person's personality is severely confused and that person loses touch with reality. When a psychotic episode occurs, a person becomes unsure about what is real and what is not real.¹⁴

In a study report of six developing countries in Africa (Lesotho and Zimbabwe), Asia (Indonesia and Pakistan) and Latin America (Brazil and Chile), some influential factors are found for mental disorders like low income, insecurity of people due to poverty, gender discrimination, unemployment and living through a period of rapid and unpredictable social change and illiteracy or poor education.¹⁵

A number of reviews and studies have shown that people with severe mental illness (SMI), including schizophrenia, bipolar disorder, schizoaffective disorder and major depressive disorder, have an excess mortality, being two or three times as high as that in the general population. About 60% of this excess mortality is due to physical illness. Individuals with SMI are prone to many different physical health problems.¹⁶

The statistic most often quoted is that one in four adults and one in five children will have a mental health disorder at some point in their lives. The stigma associated with mental illness is still the biggest barrier that prevents people from getting treatment or retaining their treatment. Mental

illness is real, mental illness is common and mental illness is treatable!¹²

Methods

This is a perspective and observational study which is based on the evaluation of the prescription collected from the biggest Mental Hospital of Bangladesh (Pabna Mental Hospital). To perform this study a survey was conducted among the patients with psychological disturbance. Psychological patients were not too much conscious and cooperative to ask them any question. For this reason method was designed to collect diagnostic reports and prescriptions of the patients. Over the 35 days (September 15 to October 20, 2016) collection period, 93 prescriptions were collected from Pabna Mental Hospital. Psychiatrists who were specialist in Brain, Nervous, Drug Addict, and Child Psychiatry & Psycho Sexual Disorder also asked for queries. Finally 81 prescription which have the complete information were selected for analysis.

This was absolutely essential for the purpose of obtaining information that actually represented the real scenario. Among 81 out of 93 prescription 82% female and 18% male and they were in age between 12-72 years. Some confidential information was collected orally and some were collected by observation. Here all data was collected from the hospital, direct interview of patient and Psychiatrists. The patients were randomly selected from Mental Hospital. The questionnaires of cooperative patients diagnosed with mental disease were collected and were interviewed for different parameters. The data collected and gathered through the interview was examined for the number of parameters such as age, sex, social history and drug therapy used for the treatment. Data analysis was done by using MS-Excel 2007.

Results

Out of 93 prescription 81 were selected who came to visit Pabna Mental Hospital and some others psychiatrists chamber, patients were 82% female and 18% were male. Approximately maximum patients were rural area whereas minimum patient comes from urban area and the difference was found to be statically insignificant. Most of the patients were above thirty years of old. But a

number of children also suffer from psychiatric disorder. Among various types of psychiatric disorder Bipolar Mood disorder, Dissociative identity disorder, Psychotic Disorder, Neurodevelopment disorders, Attention deficit hyperactivity disorder, Schizophrenia are most common.

Patient Characteristics: Different patient characteristics are given in table 1 and table 2. Psychiatric Disorder may affect at any age. But, from the survey we have got the results which shows that most of the patients who suffer from kidney disease are between 12-72 years old. (see Table 1)

From this survey it has seen that Mental Disorder occurs in female at high level on the other side it is low level for the male. This may cause due to mental pressure, weakness, lack of nutrition and also gender discrimination. (see Table 2)

Different types of Psychological or Mental Disorder: There are various types of mental disorder .From this study it was noticed following mental disorder. The data shows that Bipolar Mood disorder is found to be most common (24.5%) followed by neurodevelopment disorder (16.04%), psychotic disorder (12.34%) and migraine (12.34%). Conversely Dissociative Identity Disorder and Post Traumatic stress Disorder disease is found in a lowest number of patient (1.75%). Some other psychiatric disorders are also presented in this study. (see Figure 1)

Medication Therapy: Our prescriptions that are prescribed for various psychiatric disorder contain a number of drugs in each prescription. The percentage of mostly used drugs according to their generic name are given in table 4. According to the data most commonly prescribed drugs are Midazolam (53.08%), Sodium Evaporate (43.20%), Clonazepam (33.33%), Propanolol (33.33%), Procyclidine (28.39%). There are also some other drugs which are used in less amount and are presenting as miscellaneous. (see Figure 2)

Mostly used brand group in prescription: According to the data most commonly prescribed brands are Mizolam (53.08%), Convules CR (43.20%), Pase (33.33%), Propranol (33.33%), Kedrin (28.39%). There are also some other drugs which are used in less amount and are presenting as miscellaneous. (see Figure 3)

Mostly used therapeutic class: In the treatment of mental disorder benzodiazepine, anxiolytic agent, antipsychotic agents are mainly used. But the mostly used drug is Benzodiazepine. (see Figure 4)

Benzodiazepine : The mostly used therapeutic class in the treatment of mental disorder is Benzodiazepine(100%). But it is used from different generic group. In this survey those are Midazolam, Clonazepam and Bromazepam. (see Figure 5)

Discussion

A prescription based study is one of the most professional methods to assess and evaluate the prescribing patterns of physicians.¹² According to data, in table 1 ,the large number of patients suffer from psychiatric disorder are the age of 60-79 years(33.33%) and the least number of patients are of 40-59 years(11.11%).

Our study reveals that female patients suffer from psychiatric disorder more than male patients and it can be expressed in percentage as 82% and 18% which is shown in table 2.

In table 3, various types of psychiatric disorder of Bangladesh are shown. According to this data most prevalent mental disease is Bipolar Mood Disorder and Neurodevelopment Disorder and they belongs to 17.28% and 16.04%. In contrast, kidney Dissociative Identity Disorder and Post Traumatic Disorder is found to be lowest prevalent diseases, both of which is only 1.23%.

The prescription rates of various types of drugs used for mental illness are shown in table 4 according to their generic name. The study reveals that highest number of prescriber indicate Midazolam (Benzodiazepine) which is 53.08%. Other commonly used drugs for psychological disorder are Sodium Evaporate, Clonazepam, Propanolol, Procyclidine , Quetiapine Fumarate, Haloperidol, Ethynodiol , Naproxen, Bromazepam, Ketorolac, Omeprazole which percentage are 43.20%, 33.33%, 33.33%, 28.39%, 27.16%, 24.69%, 16.04%, 20.98%, 13.58%, 20.98%, 30.86% and some others.

The study also reveals the prescription pattern of drug according to their Brand (summarized in table 5). According to this study mostly prescribed drug is Tab Mizolam (53.08%) (generic Benzodiazepine) which is manufactured by ACME Laboratories Ltd.

Other commonly prescribed drugs are Tab. Convules CR (43.20%) and Tab. Propanolol (33.33%) and Tab. Pase (33.33%).

In table 6, the mostly used therapeutic class that had gotten from the survey is described and that is Benzodiazepine (100%). But this is not the same brand groups. In table 7, different brand groups of same Benzodiazepine (Midazolam 53.08%, Clonazepam 33.33%, Bromazepam 13.6%) are described with their percentage according to the survey.

Conclusion

The results from this prescription survey, among various types of psychiatric disorder Bipolar Mood disorder, Dissociative identity disorder, Psychotic Disorder, Neurodevelopment disorders, Attention deficit hyperactivity disorder, Schizophrenia are most common. The mostly used therapeutic class in the treatment of mental disorder is Benzodiazepine. Depending on use of drugs to the patients, Midazolam, Sodium Evaporate, Clonazepam, Propanolol, Procyclidine are found most common. Finally the study being done on a limited scale, only a few prescriptions are collected, additionally this can be done on overall population of Bangladesh.

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Table 1: Prevalence of psychiatric disorder in patient's years of age.

Age	Prescription	Percentage (%)
12-19	22	27.16
20-39	23	28.39
40-59	09	11.11
60-79	27	33.33

Table 2: Percentage of psychiatric disease according to sex.

Sex	No. of prescription	Percentage
Female	66	82 %
Male	15	18%

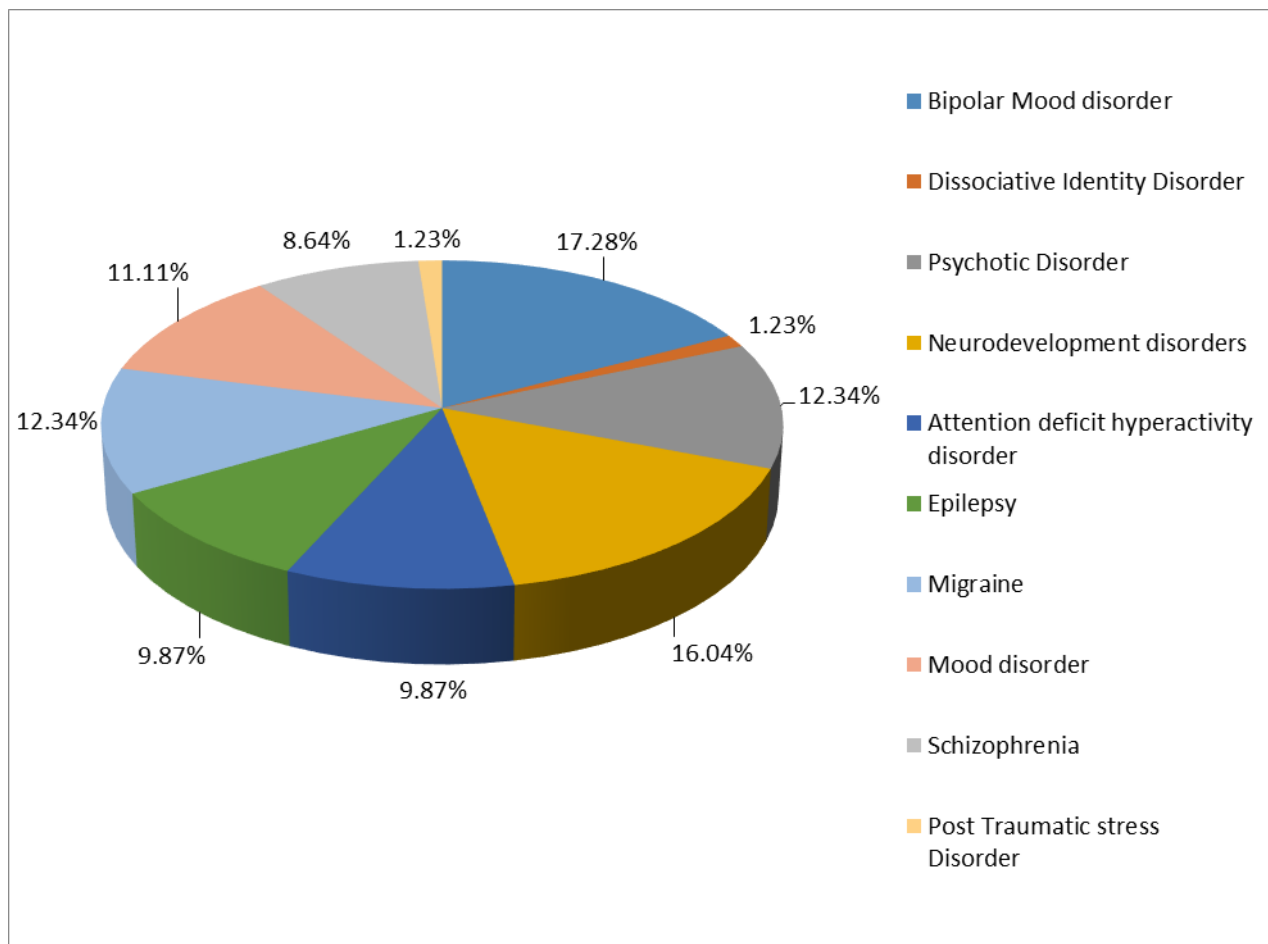
Figure 1: Comprehensive list of various types of psychiatric disorder.

Figure 2: Comprehensive list of various types drugs used to treat psychiatric disorder.

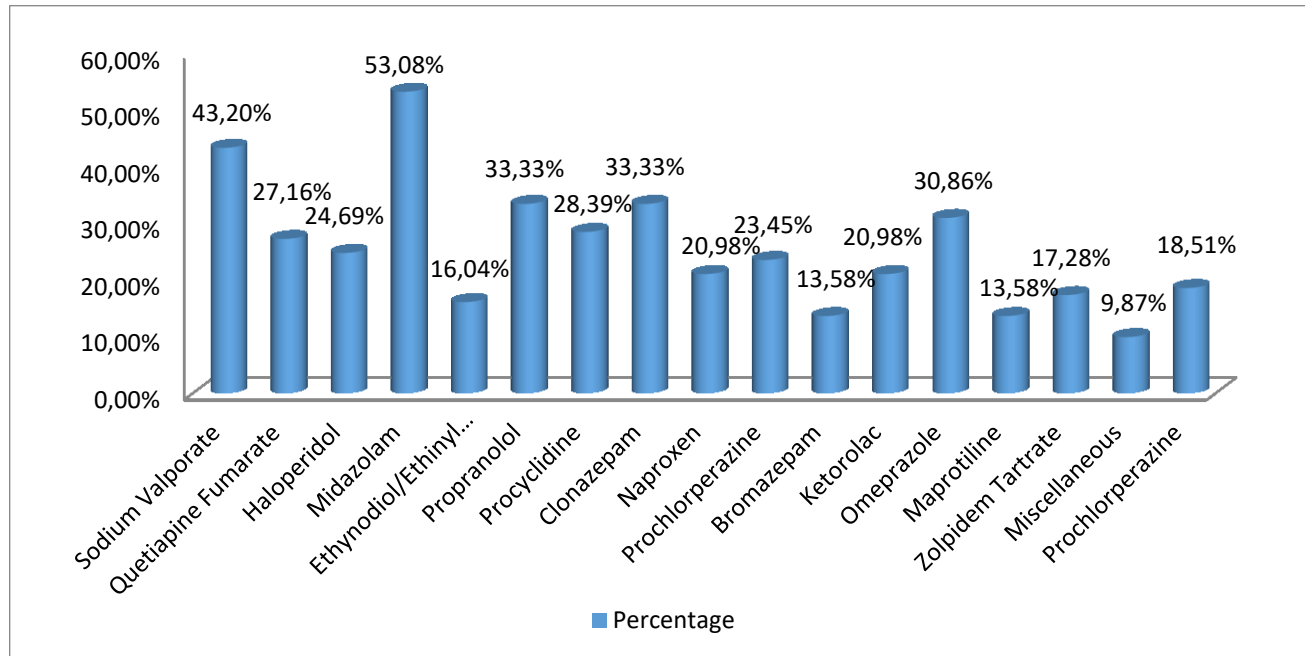


Figure 3: Comprehensive list of mostly used drugs according to brand name.

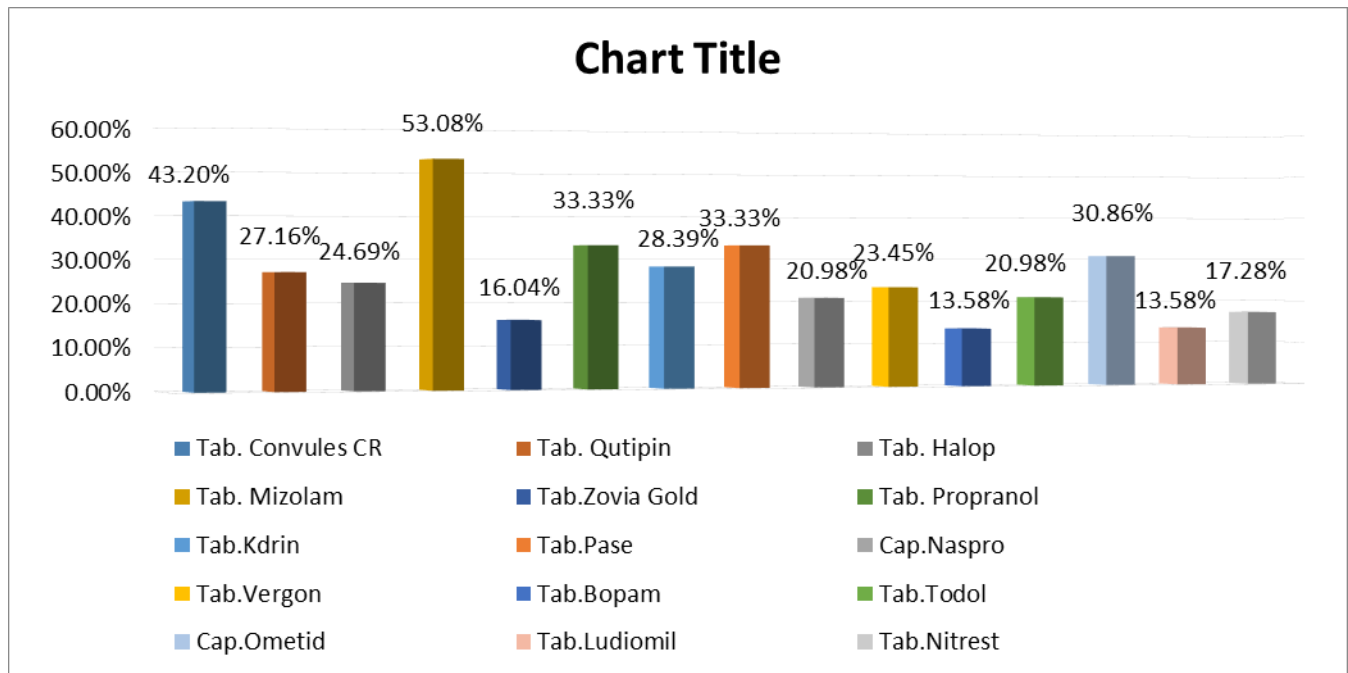


Figure 4: Comprehensive list of mostly used therapeutic class in prescription.

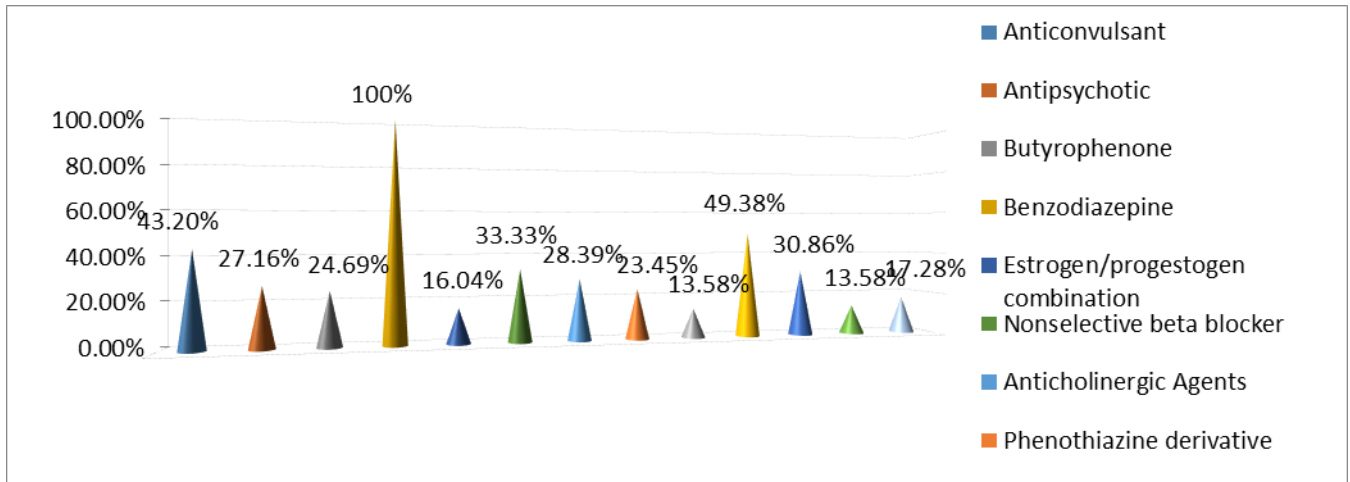


Figure 5: Comparison of used Benzodiazepine.

