Introduction

The purpose of this study is to explore the relationship between violent crime and mental illness of patients at the St. Ann's Psychiatric Hospital in Trinidad and Tobago by examining the types of mental disorders and the types of offences committed. The analysis will also explore the characteristics of the patients in order to present the first profile of a patient sub-group in this jurisdiction. To this end, the paper will be divided into six major sections which are (i) a brief description of the incidence of crime in Trinidad and Tobago; (ii) a review of the literature; (iii) theoretical framework; (iv) methodology; (v) examination of findings and (vi) the implications for policy and practice.

Crime in Trinidad and Tobago

The small twin island Republic of Trinidad and Tobago is the most southerly island in the archipelago of Caribbean islands with a population of 1,262,366 up to the year 2000. Its Central Statistical Office (2005), reported that the total number of crimes in 1994 was 65,578 which declined to 56,019 in 2004. Some of the common crimes committed in Trinidad and Tobago for the period mentioned are murders, manslaughter, kidnapping, fraud, breakings and burglaries, narcotic offences and petty crimes just to mention a few. In addition, the Central Statistical Office (2005) also revealed that the total number of serious crimes reported in 1994 was 18,621 which declined by 12% to 16,387 in 2004. There was a decrease in offences such as manslaughter, breakings and burglary, robbery, narcotic offences, forgery and crimes against currency. However, there was also an increase in crimes such as murder, wounding, other crimes against persons, larceny, and other crimes against property. Murder and other crimes against the person showed the largest increase of 86% and 59% respectively from 1994 to 2004. In 2004 only 27% of these crimes were detected.

Review of Literature

According to the Britannica Concise Encyclopedia, 'mental illness' refers to "any illness with a psychological origin, manifested either in symptoms of emotional distress or in abnormal behaviour. Most mental disorders can be broadly classified as either psychoses or neuroses. Psychoses (e.g., schizophrenia and bipolar disorder) are major mental illnesses characterized by severe symptoms such as delusions, hallucinations, and an inability to evaluate reality in an objective manner. Neuroses are less severe and more treatable illnesses, including depression, anxiety, and paranoia as well as obsessive-compulsive disorders and post-traumatic stress disorders. Schizophrenia appears to be partly caused by inherited genetic factors. Neuroses often appear to be caused by psychological factors such as emotional deprivation, frustration, or abuse..."
during childhood, and they may be treated through psychotherapy. All the mental illness mentioned here fall under the DSM-IV, the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association which provides diagnostic criteria for mental disorders. There have been five revisions since it was first published in 1952, the last major revision was the fourth edition (“DSM-IV”), published in 1994 with the 5th still being formulated.

‘Crime’ according to the Grolier International Dictionary, is viewed as “an act committed or omitted in violation of a law forbidding or commanding it, and for which punishment is imposed upon conviction.” While crime is a natural occurrence in any society, when it occurs in great proportion there is a need for concern. Therefore, this leads to the question of what or who is responsible for this escalation in crime. According to Beyers & Loeber (2003), “A proportion of offenders who commit serious violent crime suffer from some sort of mental health disorder.”

Crime therefore resulted not from what criminals had in common with others in society, but from their distinctive physical or mental defects (Hoorten 1939). A popular view is that mental disorders predispose people to crime. Indeed, international studies continue to indicate that major mental disorders may render people more vulnerable to arrest, to injustice, to other harm within the criminal justice system (e.g. suicide in prisons) and to becoming a victim of crime. One such study by Hodgins (1992) indicated that criminality among patients in psychiatric hospitals and patients with mental disorder among incarcerated offenders suggest an association between the major mental disorders (schizophrenia and major affective disorders) and crime. However, a study by Link, Cullen and Andrew (1992), implied that the risk of mentally ill patients experiencing psychotic symptoms, and becoming violent is increased when compared to normal patients. This is further supported by the research findings of Angermeyer (2000) who explicated that Schizophrenia is one disorder that seems to be the most prevalent disorder related to increased violence or crime. He further reiterated that there is a moderate but significant association between schizophrenia (or more generally psychotic disorders) and violence. In addition to the aforementioned, Lindqvist & Allebeck (1990) indicated that the rate of violent offences is higher among those with schizophrenia and that substance abuse increases the chance that this group will become violent.

It is suggested by Revheim & Medalia (2002) that mental illness has an effect on cognitive functioning. Cognitive dysfunction can hinder a person’s ability to think or act rationally, therefore contributing to the mentally ill committing crime. While mental illness is a contributing factor to cognitive dysfunction, other factors such as schizophrenia, substance abuse and non-adherence to medication also contribute to the increased violence in psychotic patients.

Swartz et. al. (1998) suggest that drug abuse problems combined with poor adherence to medication indicate a higher risk of violent behavior among persons with severe mental illness. If someone is ill and does not take the required medication to treat the illness, they can become worse. Similarly, this is the case with the mentally ill, they can become increasingly violent if they are not treated. This can be considered another contributing factor to crime as it can be more prevalent when schizophrenic patients do not adhere to medication.
Swartz et al. (1998) studied violent behavior among individuals with severe mental illness. Their study however focused on examining the joint effect of substance abuse and medication noncompliance as a risk factor for serious violence among persons with severe mental illness. Findings from the above studies indicate that the combination of medication noncompliance and alcohol or substance abuse problems was significantly associated with serious violent acts. Alcohol or other drug abuse problems combined with poor adherence to medication indicates a higher risk of violent behavior among persons with severe mental illness.

According to Revheim and Medalia (2002:6) cognition refers "to thinking skills, the intellectual skills that allow you to perceive, acquire, understand and respond to information. This includes the abilities to pay attention, remember, process information, solve problems, organize and reorganize information, communicate and to carry out information". Research indicates that in people suffering with schizophrenia and certain affective disorders, the regions of the brain responsible for specific cognitive skills do not function normal (ibid.). This indicates that mental illness affects the way the brain functions. In addition it causes cognitive problems.

There are other factors that relate to mentally ill patients who are treated for violent crimes in jails and other correctional facilities. Some of these factors are a lack of detection by the relevant authorities, a flaw in the judicial system which did not allow them to be sent to the institution and symptoms that were not displayed at the time of the court hearing. Quanbeck et al. (2007) found that there is the need to look at individuals treated for violence in institutions such as jails and prisons as well as those who have not been institutionalized. It is evident that some persons are not diagnosed and remain undetected, or are diagnosed late. Chronic, severe mental disorders appear to be predominant among the incarcerated. In the United States it was found that by mid-year 1998, an estimated 283,800 mentally ill offenders were incarcerated in the Nation's prisons and jails. These findings are based on the 1997 Survey of Inmates in State or Federal Correctional Facilities, the 1996 Survey of Inmates in Local Jails, and the 1995 Survey of Adults on Probation (Ditton 1999).

Cote and Hodgins (1990) of Quebec, Canada provide a classic example to which many other researchers make reference. They found that many convicted offenders suffer from major mental disorders and these offenders committed crimes with great frequency. They did not receive mental health care and were often found in isolation cells of correctional facilities.

There are other individuals who are treated for violent crimes in other institutions such as juvenile delinquents who suffer from severe mental disorder. Youths with a diagnosable mental health disorder are those that meet the formal criteria for any of the disorders listed in the DSM-IV, such as psychotic, learning, conduct and substance abuse disorders. Some of the mental disorders suffered by these individuals include psychotic illnesses, major depression, personality disorders, schizophrenia, suicide, post traumatic stress syndrome, bipolar disorder, conduct disorder, epilepsy, and substance induced psychosis.

Prevalence of Mental Health disorders in Youth Correctional facilities

It is safe to estimate that at least one out of every five youths in the juvenile justice system
has serious mental health problems. Cocozza and Skowyra (2000) suggest that youths in the juvenile system experience to a larger extent, substantially higher rates of mental health disorders than youths in the general population. It also agrees with the finding that mental illness rates in juveniles are similar to those in the general adult population proposed by Teplin and Swartz (1990). These studies collectively show that there is a lack of systems in place for identifying and treating mentally ill offenders. Non-adherence to medication and after release treatment is critical to offenders committing crime. Youths in the juvenile system exhibit higher rates of mental health disorders than youths in the general population (Cocozza & Skowyra 2000).

Theoretical Framework

Several theories have been advanced to explain the relationship between crime and mental illness which include positivist, psychodynamic, cognitive and psychiatric/neuropsychological theory.

The positivists were concerned with isolating and identifying the determining causes of criminal behavior in individual offenders. One of the first exponents of positivism, the father of modern criminology, Cesare Lombroso was one of the first to explain crime. Auguste Comte (1798-1847), another founding father of Positivism, suggests that “human behavior is a function of forces beyond a person’s control. Such forces include social forces (wealth, class), historical forces (war, famine), and personal and psychological forces (brain structure, biological, make up or mental ability). It is put forward that each of these factors influence human behavior” (Siegel 2006). Offenders are seen as ‘different’ to the rest of the society and have conditions that predispose them to crime. Some of the earliest positivists were convinced that criminal behavior was a result of genetic abnormality.

The positivist position can best explain the ideas presented in this study and will be used as the basic framework. Mental illnesses has been shown to have a negative effect on a person’s cognition. Several theories have arisen out of the work of positivism but I will only look at a few that examine the relationship between crime and mental illness.

Psychodynamic Theory

Psychodynamic theories claim that behavior is the result of basic conflicts of which people often have little awareness. Sigmund Freud was the towering proponent of psychoanalytic theory. Freud’s theory of psychoanalysis holds two major views: (1) that a great deal of mental life is unconscious and (2) that past experiences, especially in early childhood (psychosexual stages), form how a person feels and behaves throughout life (Holosko and Feit 1978).

Freud divided the personality into three parts: the id, the ego, and the superego. When all three parts of the personality are in balance, the individual is believed to be mentally healthy. Unfortunately, if the ego is unable to intercede between the id and the superego, an imbalance would occur in the form of psychological distress and symptoms of mental disorders. The most severe form of psychological disturbance results in a type of mental illness referred to as psychosis. This includes disorders such as paranoia, obsessive behaviours, depression, bipolar disorder, schizophrenia which hinder a person’s ability to think rationally, respond emotionally, communicate effectively, understand reality, and to behave appropriately. They may even hallucinate, hear non-present voices or
view themselves as objects, angels and other figures. Individuals with mental disorders display irrational and confused thought processes and a lack of understanding as to why they behave the way they do. This theory proposes that if you have a disorder, it will affect the way you behave, and crime is one example of deviant behaviour. Crime is also viewed as an appearance of oppressed feelings and an individual’s inability to develop defense mechanisms to keep these feelings under control. While this theory does a good job at explaining psychological disorders, it does not give a biological explanation for cognitive deficiencies. Out of the psychological theory comes another theory which gives a good explanation of crime and mental illness: Cognitive theory.

The Cognitive Theory

This theory focuses on mental processes and how persons perceive the world around them. It claims that when people make decisions they usually go through stages of cognitive thought processes. In the first stage they encode information so that it can be interpreted then they find an appropriate response and decide on the next appropriate action. In the final stage they proceed on their decision. Everyone does not process information in that same way and there are differences in interpretation. Those who use information properly, make reasoned judgments, and quick rational decisions when faced with a crisis are better able to avoid antisocial behaviour. Distorted thinking causes disordered behavior and correcting the distorted thinking will alleviate and even restore the disordered behavior (Rosenhan & Seligman 1995).

Persons who commit crime often might have cognitive deficits which hinder their ability to use information correctly when making decisions. For example, a person suffering from depression may believe that they have no control over the events of their life and may display passive, sad and depressive behaviour. Cognitive theorists believe that if therapy is used it will help to change these thoughts. These persons sometimes believe that the world is against them or breaking the law is seen as a means of survival.

This ‘cognitive deficit’ could be related to mental illness and this can hinder someone’s moral judgment thus leading them to commit crime. This theory also does a useful job in explaining crime and mental illness but still does not do so in its entirety. While the two theories explained previously seem to provide strong evidence, they are not enough. A medical or psychiatric theory is needed: psychiatry theory.

Psychiatry Theory/
Neuropsychological Approach

Arising out of the positivist theory is the theory of psychiatry. This approach was developed partly from the work of physicians, notably Philippe Pinel (1798) a positivist, who uncovered new ways of categorizing mental health conditions. Psychiatry was involved in the development of psychotherapies.

Psychiatry is very often described as being based within, or dominated by, a biomedical model, although it comprises different theoretical approaches. These theoretical approaches are:

- Bio-psychiatry (or Neuropsychiatry) - focused on genetics, neurochemistry and medication
- Social psychiatry or Community Psychiatry - focused on the interpersonal or public health context, including psychiatric rehabilitation
Cross-cultural psychiatry - focused on the relevance of culture, including ethnicity and globalization.

Psychoanalytic psychiatry (or Dynamic Psychiatry) - concerned with applying concepts and methods from psychoanalysis (Bernstein 2003).

The theoretical approach which best gives evidence to support a relationship between crime and mental illness is the Bio-psychiatry or Neuropsychiatry approach. Out of this theory comes many other areas such as neuropsychiatry/neuropsychology, neuropathology, functional neuroanatomy and neurophysiology. Mental illness as we all know has an adverse effect on the body and more specifically one's brain.

According to this approach cognition is one area of the brain that is affected by mental illness and is defined by the Concise Oxford English dictionary as “the mental action or process of acquiring knowledge through thought, experience, and the senses,” in other words, an individual’s ability to think logically. Many times the words ‘insanity’, and ‘diminished capacity’ are spoken of in relation to mental illness but they really describe a particular cognitive condition. Cognition in the criminal sense according to Bernstein (2003: 1) is “either the ability of an individual to premeditate, deliberate, and structure criminal intent (as pertains to murder), or the cognitive capacity of an individual to understand and interact with others. (As pertains to having the knowledge to participate in court, aiding in one’s own defense, etc.).”

The brain is divided into two major areas, the cortex and the brain stem. Although the brain stem is important to behavioral and cognitive abnormalities, the cortex is most vital to cognition. The cortex is separated into four sections: the frontal lobes, the temporal lobes, the occipital lobe, and the parietal lobes. Apart from other cognitive functions, the frontal and temporal lobes of the brain are involved in premeditation, deliberation, and the formation of specific intent which relates to decisive and non-decisive decision-making. Specific irregularities of these brain regions can result in cognitive abnormalities (Bernstein 2003). This point provides very vital support for mental illness as a defense in court.

All of the mental illnesses stated in the DSM-IV can have an immense effect on cognition. Different degrees of cognitive deficiencies can exist in any person suffering from schizophrenia, mood disorders, dementia, delirium, and other neuropsychiatric disorders which will be revealed by neuropsychological testing. In addition, many medications used to treat mental illness in persons can cause cognitive abnormalities. Chronic drug and alcohol abuse has also been shown to have an effect on cognitive functioning.

Common medical conditions such as chronic heart and vascular disease, endocrine disorders such as diabetes and thyroid disease, autoimmune disorders such as systemic lupus erythematosus, non-psychiatric medications, neurotoxins e.g. lead, solvents etc. can cause cognitive abnormalities in mentally healthy and mentally ill persons as well (Bernstein 2003). Neuropsychological assessment is used to assess frontotemporal cortical brain functioning and to detect the presence, absence and severity of major cognitive deficiencies in offenders. It is also vital to demonstrate to a court, the presence and severity of cognitive abnormalities caused by the mental illness presented.
Methodology

The study was based on a sample of inmates from the hospital and rested primarily on their organizational records and several individual interviews. In addition, chi square tests were performed to examine some of the associations under consideration. Before we explore the specifics of the methodology, however, it is necessary to provide a description of the history and workings of the hospital itself.

The Institution

The St. Ann’s hospital is the only institution of its kind in Trinidad and Tobago. It was first known as the ‘Lunatic Asylum’ during the 1800s and was situated in the urban area of Belmont where the present Belmont police station is located. The rooms which were used to house the patients are now the prison cells. The hospital was relocated in 1900 to its present location in St. Ann’s. The hospital was built 107 years ago and has the capacity to accommodate 950 patients, but it routinely houses 1,000 and more patients. There are currently 27 wards. The yearly admittance is an average of 500 to 600 persons, indicating a high turnover of patients. The patients’ wards range from pediatric to geriatric and the institution offers psychiatric treatment and rehabilitation.

A special feature of this hospital is its Forensic wards. These wards have very tight security and are similar to a prison. Patients sent to these wards have either committed an offence, been considered dangerous or were convicted prisoners who became ill while in prison. The Forensic ward is comprised of two individual wards, one each for males and females. At the time of the study, the male ward had approximately fifty-six patients and the female ward sixteen.

Legal Processing pathways

A person who has committed an offence as listed in the Laws of Trinidad and Tobago, Mental Health Act (1975) Chap 28: 02 may be sent to the forensic ward of the St. Ann’s Psychiatric Hospital for one or more of three reasons:

- A history of mental illness
- Sent by the court on an order to be evaluated
- A prisoner who displayed psychiatric symptoms while in prison

A court order issued by a judge or magistrate is for 14 days but another order can also be given if more time is needed for evaluation. The case is usually adjourned until a diagnosis is made so the patient can be fairly tried. After the person is admitted, the medical practitioner conducts the necessary tests to determine whether the person is mentally ill and in need of care and treatment. This decision is then submitted in the form of a written report to the court. Upon receiving the evaluation report, the court decides whether the person will be admitted to the hospital. As also stated in the Mental Health Act (1975), two medical practitioners must confirm that a prisoner is suffering from a mental illness. Upon receipt of the medical certificates, the Minister of National Security can order the prisoner to be transferred to the hospital for care and treatment until satisfactory. When the court refers a person to the forensic ward, they are grouped into four types of status or sentences: President’s pleasure, National Security, Court’s pleasure and Court Order. While at the hospital, the patients are also referred to by the name of their status.
President’s Pleasure - This is mostly for murder and other serious crimes. The offender is sentenced to the hospital for life and will only be released by president’s pardon.

Court’s Pleasure - Offenders who committed serious crimes such as murder are also given this type of sentence. This sentence has only been recently formulated and is often used in place of the president’s pleasure. Instead of a life sentence, the offender is sentenced for a certain period of time and if the patient is found to be well, they are recommended to be released. If not, the patient remains at the hospital until necessary.

National Security - This is only valid for prisoners who are transferred from prison because of mental disorder symptoms. They remain at the hospital until they are deemed well enough to return to the prison and if not they remain at the hospital.

Court Order - These are persons who are sent by the court for medical evaluation for any short period of time for example 14 days, 1 month or 3 months etc. The time can be renewed if more time is needed for evaluation.

From the information above, it is evident that St. Ann’s is the only institution of its kind in Trinidad and Tobago and its forensic wards therefore provide a useful environment for this study.

Data Collection

The data were collected using the hospital records of each patient during one month. The staff were cooperative and willing to share any information possible. A letter was sent from the University to the Hospital asking for permission to collect the data. I then gained access to the ward where I had to report to a nurse who assisted and acted as my supervisor. Some interviews were also conducted with the patients and clinicians in order for the researcher to become more acquainted with the cases. The records were detailed and contained information about the address, marital status, ethnicity, religion, education level, occupation, prior admissions, offences (date, type, recent & prior and the number), relationship to victim if any, drug use (type), diagnosis (date and type), medication status and type of sentence currently being served by each patient.

Description of Sample

At the time of the study, the female ward comprised sixteen patients, four of whom were considered forensic while the male ward comprised fifty-six patients. So the sample for this study was sixty patients which comprised four (6.7%) female patients and fifty-six (93.3%) male patients. These patients had been remanded or convicted for an offence and found to be in need of treatment and rehabilitation. Their ages ranged from 17 to 77 while the average age was 39.

In terms of ethnicity 36 (60%) were of African descent, 14 (23.3%) of East Indian descent and 10 (16.7%) of Mixed descent (which refers to those of East Indian and African descent or mixed with another race). Their educational status was as follows: 1 (1.7%) Incomplete primary education; 10 (16.7%) Complete primary; 7 (11.7%) Incomplete Secondary education; 15 (25%) Complete Secondary; 2 (3.3%) Tertiary and 25 (41.7%) Unknown. Data were also collected on the employment status of the subjects and it was found that thirty-two (53.3%) of the participants were employed at the time of the crime, while 15 (25%) were unemployed, and it is unknown...
for 13 (21.7%). Most of the participants were found to be not married, results indicate that 55 (91.1%) were single, 3 (5.0%) were in a common law relationship while 2 (3.3%) were married. The subjects were also from various religious backgrounds: 9 (15%) were Roman Catholic; 10 (16.7%) Anglican; 7 (11.7%) Pentecostal; 8 (13.3%) Baptist; 4 (6.7%) Seventh Day Adventist; 1 (1.7%) Jehovah’s Witness; 6 (10%) Hindu; 5 (8.3%) Islam; 2 (3.3%) Jewish; 1 (1.7%), Other and 7 (11.7%) Unknown.

Since the St. Ann’s Psychiatric hospital is the only institution of its kind in the country, persons from all regions of the country are represented. The region or area in Trinidad and Tobago that the participants came from were divided into north, south, east, west, central and Tobago. There were 28 (46.7%) persons from the south, 13 (21.7%) from the east, 7 (11.7%) from the north and 6 (10%) from Tobago. The highest number of patients from the sample resided in the southern areas prior to being institutionalized; to be more specific, the village of Moruga.

Findings

It was found that 35(58.3%) of the patients committed Serious Crimes, 16 (26.7%) Minor crimes and 9 (15%) Minor offences (see

<table>
<thead>
<tr>
<th>Table 1. Major and Minor Crimes</th>
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<tbody>
<tr>
<td><strong>Major</strong></td>
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<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Murder</td>
</tr>
<tr>
<td>Attempted murder</td>
</tr>
<tr>
<td>Manslaughter</td>
</tr>
<tr>
<td>Arson</td>
</tr>
<tr>
<td>Larceny (motor vehicle/dwelling)</td>
</tr>
<tr>
<td>Burglaries/Breakins</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Minor</strong></td>
</tr>
<tr>
<td>Woundings/Assaults</td>
</tr>
<tr>
<td>Possession of weapons/firearms and ammunition</td>
</tr>
<tr>
<td>Property damage</td>
</tr>
<tr>
<td>Possession of narcotics</td>
</tr>
<tr>
<td>Unlawful wounding and grievous bodily harm</td>
</tr>
<tr>
<td>Escaping unlawful custody</td>
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<tr>
<td>Indecent exposure</td>
</tr>
<tr>
<td>Possession of illegal substances</td>
</tr>
<tr>
<td>Wilful neglect/abandonment</td>
</tr>
<tr>
<td>Simple larceny</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>Minor Offences</td>
</tr>
</tbody>
</table>
Table 1. The minor offences refer to offences such as: breaching a protection order, gambling, using obscene language and damage to one’s property (violent behaviour) etc.

It was also found that for prior offences, fifty-three persons (88.3%) committed 1 offence, five persons (8.3%) committed 2 offences, 1 (1.7%) person committed 3 offences and 1 (1.7%) person committed 4 offences. The possible relationship of the offender to the victim was also examined (Table 2).

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>15</td>
</tr>
<tr>
<td>Sibling and other relatives</td>
<td>10</td>
</tr>
<tr>
<td>Partner</td>
<td>8.3</td>
</tr>
<tr>
<td>Friend</td>
<td>5</td>
</tr>
<tr>
<td>No relationship</td>
<td>30</td>
</tr>
<tr>
<td>Missing</td>
<td>31.7</td>
</tr>
</tbody>
</table>

Table 2 shows that the majority of the crimes were committed by thirty percent of the patients who did not have any relationship with the victim. Most of the serious crimes 58% (35) and minor crimes 27% (16) were committed against a person whom the patient knew or were related. Results show that 15% percent were committed against a parent, 10% committed against a sibling or other relative and 8% against a partner.

Prior offences were subdivided, into ‘Serious Crime’, ‘Minor Crime’ or ‘Minor Offences’ as was done with current offences. Twenty-six persons (43.3%) had prior offences and thirty-four (56.7%) did not and this was unknown for three persons. Among the 43% with prior offences, four (15.3%) had committed serious crimes, 19 (73%) had committed minor crimes and two (11.5%) had committed minor offences.

Information on the length of time a patient took to commit another offence if convicted previously was also collected. The average period between current offence and most recent prior offence was 12 months, with the minimum being 2 months and the maximum 5 years.

Data on the type of narcotic/illegal drugs offenders used at the time of the offence were also collected. It was found that 38 (63.3%) of the patients used drugs while 10 (17%) did not use drugs at the time of the offence. The drug use of twelve persons (20%) was unknown. The most common types of drugs used were Marijuana, Cocaine, Alcohol or Tobacco (cigarettes). Further analysis of these findings are summarized as follows: it was found that 30 (50%) used marijuana, 12 (20%) used cocaine, 19 (31%) used alcohol, and 20 (33.3%) used tobacco. The reason these figures add up to more than the number of participants is because some of the 38 (63.3%) participants who used drugs used more than one type of drug. Data on exactly how many participants used more than one drug were not collected.

With reference to the major aim of the study, which was to examine the possible link between mental illness and crime, it was found that those patients suffering with schizophrenia were more likely to use narcotic/illegal drugs at the time of the offence. Of 38 persons who used drugs, 19 (73%) committed a serious crime. The following table 3 classifies the major disorders that were present among the patients.
Table 3. Types of Disorders

<table>
<thead>
<tr>
<th>Types of Disorders present</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>30 (50%)</td>
</tr>
<tr>
<td>Substance Induced Disorder</td>
<td>6 (10%)</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>5 (8.3%)</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>4 (6.7%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td>Mental Subnormal</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td>Depression</td>
<td>6 (10%)</td>
</tr>
<tr>
<td>Personality Disorder</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>No Diagnosis (either not yet diagnosed or no diagnosis found)</td>
<td>4 (6.7%)</td>
</tr>
</tbody>
</table>

Total 60

Twenty-two (73%) of the 30 persons suffering with Schizophrenia committed serious crime, while two persons (40%) of 5 persons suffering with Bipolar disorder and three (50%) of 6 persons suffering with Personality Disorder committed serious crimes. The data also indicated that 16 (26.7%) persons were on prescribed medication prior to the offence while 23 (38.3%) were not on any. It was unknown whether 22 (36%) were on any medication at the time. On further analysis of this data, it was found that of those 16 (26.7%) persons who were prescribed medication at the time of the offence, only two (12%) persons adhered and took their medication while 11 (68%) did not and it was unknown for three (18%). The results show that those who were not on prescribed medication at the time of crime were more likely to commit serious crimes.

Previously diagnosed was another important aspect of this study and it was established that 41 (68.3%) of persons had disorders diagnosed before their offence while 18 (30%) had their disorders diagnosed only after they committed the crime. It is unknown whether one person had their disorder diagnosed before or after they committed the crime.

It was also found that 41 (68.3%) of the subjects were institutionalized for mental illness prior to the offence, while 15 (25%) were not institutionalized. It is unknown whether 3 persons were previously institutionalized. The number of times the patients were institutionalized either at St. Ann’s Hospital or the San Fernando General Hospital (one of the major general hospitals located in the country’s second city) was also examined. Of the 41 patients who were previously institutionalized, the average number of times the patients were institutionalized was once before they committed the crime and the highest number was 25 times which applied to one person (1.7%).

As explained previously, patients at the forensic wards of the St. Ann’s psychiatric hospital are grouped into four types of status or sentences by the court: President’s pleasure, National Security, Court’s pleasure and Court Order. In these respects, there were 22 (36.7%) inmates under the President’s pleasure, 5 (8.3%) with Court’s Pleasure status, 28 (46.7%) under Court Orders, and five (8.3%) classified as National Security. In order to test the relationship between crime and mental illness, a chi square test of association was conducted on a number of variable combinations.

In order to test the relationship between type of current offence (serious crime, minor crime, and minor offence) and Diagnosis type, the number of categories in this variable had to be reduced from nine disorders (schizophrenia, substance induced psychosis, bipolar disorder, epilepsy, stroke, mental sub-normality, depression, personality disorder, no diagnosis) to four (schizophrenia, bipolar disorder,
personality disorder and substance induced psychosis). I did so by collapsing the categories, and reducing the number of categories, in order to decrease the number of cells. A chi squared test of association (with cross tabulation) was conducted. Although the relationship between these factors was not statistically significant ($\chi^2 (df = 6, N = 47) = 11.25; p = .081$), row percentages indicated a trend for those with schizophrenia to be over represented in the serious crime category (eg. 73% of the serious crimes were committed by patients with schizophrenia, while only 46% and 33% of the other two types of crime were committed by patients with that diagnosis).

In order to test the relationship between type of current offence (serious crime, minor crime, and minor offence) and relationship to the victim, a chi square test of association (with cross tabulation) was also conducted. The number of categories in this variable was also reduced from eight (parent, sibling, other relatives, spouse, common law, girlfriend, friend, no relationship) to five (parent, sibling or other relatives, partner and no relationship). I also did so by collapsing the categories, and reducing the number of categories, in order to decrease the number of cells. There was a non-significant relationship between these factors ($\chi^2 (df = 6, N = 38) = 9.96; p = .126$). Row percentages indicated that the majority of the victims of serious crime had no relationship to the offender (50%), while (20%) of the victims were parents of the offender.

The relationship between type of current offence and the number of prior offences was also tested. The number of categories in the variable ‘number of prior offences’ was also changed from five no. of priors (0,1,2,3,4) to four no. of priors (0,1,2,3 or more). I did so by collapsing the categories, just like the previous category in order to decrease the number of cells. This test showed a non-significant relationship ($\chi^2 (df = 6, N = 60) = 3.81; p = .702$). In order to test the relationship between type of current offence and a history of drug abuse (Yes, No) a chi squared test of association (with cross tabulation) was conducted. Results indicate a non-significant relationship ($\chi^2 (df = 2, N = 48) = 2.26; p = .323$). There were also non-significant relationships between type of current offence and marijuana use, cocaine use and alcohol use. Results show marijuana use ($\chi^2 (df = 2, N = 48) = .029; p = .985$), cocaine use ($\chi^2 (df = 2, N = 48) = .98; p = .246$); and alcohol use ($\chi^2 (df = 2, N = 48) = 4.27; p = .118$). A non-significant relationship also existed between type of current offence and the prescribed medication status of the participants ($\chi^2 (df = 2, N = 36) = 4.378; p = .357$); prescribed medication prior to the offence ($\chi^2 (df = 2, N = 39) = 2.80; p = .247$); and previous Institutionalization ($\chi^2 (df = 2, N = 56) = 1.35; p = .507$). It was also found that of those who committed serious crime, 61.9%, were also not on any medication at the time.

The relationship between type of current offence and current sentence being served (president’s pleasure, Court’s pleasure, Court order and National security) was tested and there was a statistically significant relationship between these two variables ($\chi^2 (df = 6, N = 60) = 37.25; p < .001$). The row percentages indicated that the majority of the patients who committed serious crime were sentenced to President’s pleasure (69.2%).

Profile of Offender

From the data collected, some distinguishing characteristics were found among the majority of mentally ill offenders. The ‘average’ offender residing at St. Ann’s at the time of the study was
a single male of African descent, from south Trinidad, with a history of drug abuse, and a low level of education. The offender was unemployed at the time of the offence, and had been previously diagnosed and hospitalized with schizophrenia. The offender was discharged but was either not prescribed medication or was not taking it at the time of the offence. He is likely to be a first time offender, and if a prior offence was committed it was minor. The offender is likely to have committed a serious crime against a stranger.

**Conclusion**

The main aim of this study was to examine the relationship between crime and mental illness in Trinidad and Tobago. We also sought to determine what or who was responsible for this escalation in certain crimes and whether mental illness could be a contributing factor. It was found that certain disorders such as schizophrenia, bipolar disorder, substance induced disorder and personality disorder were found to be more prevalent among offenders than others and were closely related to serious types of crime. Specific factors for example, substance abuse and non-adherence to medication, in addition to mental illness is shown to have an effect on the mentally ill and if offenders commit crime serious in nature. Mental illnesses have also been seen to have an immense effect on cognition. Evidence from this study and theories suggest that this impairment of cognition in the mentally ill is the contributing factor to crime.

The study also tells of a health system that is not good at detecting mental illness and when it does it is not equipped to do so. Offenders were found to be institutionalized previously for mental illness and were not found to be prescribed psychotropic medication, and if they were, many did not comply. This indicates a clear need for aftercare programs. After reviewing previous studies and this present study, there are some recommendations for dealing with mental illness and crime.

**Implications for Policy and Practice**

In Trinidad and Tobago, the view of the mentally ill is one for concern. The media portrays the many opinions of citizens and in most cases the view is that the mentally ill are not seen as individuals, but are rather feared and should be 'locked away' (Daily Express, 2 April 2007). The public also thinks that mentally ill people should be kept in a psychiatric hospital which should be operated or secured similar to a prison (ibid.). Consequently, the public and media believe these persons to be dangerous, and whenever a patient escapes from the hospital or is seen wandering around the hospital, there are claims that the system is being careless with the public's safety. Therefore, the main way to address this type of thinking is through education. Moreover, the media and public are not aware of the types of disorders or symptoms that increase a person's risk of violence and thus, classify all mentally ill persons into one category.

Accordingly, there is need for the public to be better educated as to the seriousness of mental illness in the society and the relationship between mentally ill people and the escalation of serious crime. Similarly, the prison system needs to have enough rehabilitation programs to assist offenders with various mental problems. In addition, there should be mandatory aftercare hospitalization programs in order to ensure that individuals released from the hospital adhere to their medication. Furthermore, unless the seriousness of the relationship between mental health disorders and crime become significant in this
country, we will continue to witness the escalation of crime.

In Trinidad Tobago, there is a clear need for better mental health services and approaches that will assist in reducing the crime rate. The jurisdiction could benefit from a system of mandatory community treatment for those released from the psychiatric hospital.

This is supported by Teplin and Swartz (1990) who suggest that despite the prevalence of severe mental disorder and the need for improved mental health services, most prisons do not have the resources to incorporate traditional or time-consuming psychological assessment techniques into their routine intake process. As a result a number of mentally ill offenders remain undetected and untreated.

The elevated rates of mental disorders in offenders call for the use of improved services such as psychiatric screening instruments, improved assessment and treatment capacities in the prison and an increased number of forensic psychiatric inpatient facilities to care for those psychotic offenders who are too ill to be treated in the prison. While retribution and deterrence focus on the crime, rehabilitation focuses on the criminal. It’s goal is to return criminals as law abiding citizens thus increasing the possibility of change. Rehabilitation proposes that social, psychological, psychiatric and other factors which are not under a person’s control influence the offender’s actions. If these approaches are developed or improved more can be done to alleviate crime.

Draine (2000), suggests that the two systems, criminal justice and mental health, should be united. “When people seem to belong in both systems, making sense of any response to deviant behaviour becomes difficult. If someone is treated primarily as a person with a psychiatric problem, then mental-health professionals appear unsympathetic to the community’s need for criminal accountability. If the individual is treated primarily as a criminal, then officers of the court appear unsympathetic to her as a person with psychiatric illness and addiction.” She went on to state that “advocates of mental-health care have encouraged policymakers to decide that one system, the mental-health system, is the most appropriate for addressing criminal behaviour linked to mental disorders. This way of thinking has created much trouble. By putting the onus on the mental-health system, the criminal-justice system is absolved from responsibility. Furthermore, can the distinctions between criminal and mental be so clean-cut? People with mental illness do end up in jail. To say that these arrests are primarily linked to mental illness is an oversimplification.” I agree with Draine that the mental health system and the criminal justice system should work together in order to assist these offenders.

The mental-health system and the criminal-justice system can respond to people with mental illness who become involved in crime. Prison services should implement aftercare planning for individuals released into society who require mental-health services after a prison sentence. With this approach, both systems would be prepared for a person’s release. Perhaps this area should be further examined and explicated in another study.
References


