Beyond-Control Behavior: From Court to Mental Health Institution, and the Challenge of Managing Behavioral Crisis among Children and Adolescents in Trinidad and Tobago

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Abstract

There is a noticeable trend in the admission of children and adolescents into the local adult psychiatric hospital in Trinidad (St. Ann’s Hospital). This facility was built in 1900 as an asylum with 400 patients but currently houses 800 patients, among whom are children and adolescents. A brief review showed that many were referred for what parents deem beyond-control behavior. The characteristics of the children and adolescents admitted for inpatient treatment have never been reviewed. The specific aims were to analyze the (1) demographic characteristics; (2) reasons for referral; (3) source of referral, and (4) diagnoses.

Methods: This is a retrospective study. The records of children and adolescents admitted between 2009 and 2013 were reviewed. The participants would have been evaluated and diagnosed on the ward by the consultant psychiatrist. A data capture sheet was developed based on the information contained in the patient intake form. Two nursing staff members were trained on data extraction. The data sheet was pretested with 20 files before a final adjustment was developed.

Result: In summary, the findings showed that the major source of referral was from the judiciary (34%), followed by relatives (22%) and private care providers (20%, e.g., general medical practitioners). The least frequent source of referral was the child and adolescent mental health service (child guidance clinic).

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Based on the data, the results show that there are statistically significant associations between beyond-control behavior and major depression, ADHD and conduct disorder diagnoses. In assessing the strength of the associations based on the phi coefficient, beyond-control behavior has a weak negative association with major depression, but weak positive associations with both ADHD and conduct disorder. Looking at absolute values, the relationship between beyond-control behavior and ADHD is the strongest.

**Conclusions:** In this analysis there were significant association between beyond-control behavior and varieties of mental disorders. The behavior displayed by the children and adolescent may be an indication of undiagnosed mental health problems.

**Keywords:** Beyond-control behavior, Trinidad, Tobago, Children, Adolescent, Psychiatric, Inpatient, Treatment.

**Introduction**

Beyond-control behavior in children and adolescents is an important area of psychiatric practice. Although the term is used loosely, this may be an insidious way that mental illness presents in this population. A large number of children/adolescents are often referred for assessment and management, either through the judicial system or other forms of referrals. These referrals may be unrelated to any criminal offence or legal problems but as a result of loss of parental control. The parental control will be influenced by the type of parenting style common to each environment or culture. The parenting style adopted may include authoritative, authoritarian, permissive-indulgent and neglect-uninvolved and these may influence what individual families will therefore refer to as "beyond-control behavior." Therefore, what is deemed "beyond-control behavior" in one culture may be an acceptable behavior in another culture, as parenting style may influence the method of discipline and underreporting of symptoms in adolescents with disruptive behavior. Failure of parental control, in any form, becomes the basis of approaching the court for guidance in accordance with the relevant laws.

It is important to examine factors that will make lose parental control despite their best efforts, to a point of deferring care to the state. The help provided by the courts may vary from placement in places of safety, mandatory assessment, or parental support, where necessary. It is therefore not unusual for these children and adolescents to be referred to the psychiatric facility, especially when outpatient services are inadequate and in situations where parental rights are being surrendered.

The causes of beyond-control behavior in children may be attributed to a number of factors including a family history of neglect, abuse and trauma, substance abuse, and mental illness. This is notwithstanding the fact that behavior which may be consistent with the normal development of adolescence such as some misbehavior, experimentation and seeking independence may also be mischaracterized as "beyond-control". In the Caribbean, what is considered risky behavior will include age inappropriate use of cigarette and marijuana. A discussion of what is deemed "beyond-control behavior" is critical since behavioral problems in this sub-population are often cited as one of the determinants of adult psychiatric disorder, with early presentation being conduct disorders in boys and emotional problems in girls. Also, behavioral problems can be a major challenge in children and adolescents with neurocognitive deficit. However, this may be unidentified as a result of 'cultural ignorance,' despite evidence of a substantial relationship between behavioral problems and developmental delay. (Baker et al, 2002). These findings may be reasonable justification for referring children and adolescents for psychiatric assessment, including the reported increase in the number of children and adolescents admitted into psychiatric facilities in the past decade. The factors that influence this trend include increased detection of suicidal behavior, agressive behavior and psychotic symptoms, danger to self and others, and persistent and repeated running away from home. Studies reported that a large number of adolescents are admitted for behavior labelled as conduct disorder, older children are noted to be more likely to be hospitalized. Those admitted for inpatient service are said to be significantly more functionally impaired than those who attend the outpatient services.

This article looked at the children who were referred for psychiatric assessment after parental request for intervention. These were children with general complaints of displaying 'beyond-control behavior,'
who were admitted into the adult psychiatric hospital in Trinidad and Tobago from 2009 to 2013.

Trinidad is the southernmost island of the Lesser Antilles and borders Venezuela in the North. Tobago, the second island is about 20 miles north east of Trinidad. The official language is English. The population is multi-ethnic but is primarily composed equally of people of East Indian (Indo) and African (Afro) origin.

Research Questions

1. What are the characteristics of children and adolescents who were admitted for inpatient psychiatric care?
2. Are there any diagnostic differences between adolescents who were admitted for being beyond-control and other groups?
3. Is there any relationship in children and adolescents presenting with beyond-control behavior and family history of mental illness?

Subjects and Methods

The study was conducted at the St. Ann’s Psychiatric Hospital (the only psychiatric hospital in Trinidad and Tobago), a 900-bed adult psychiatric facility. Conventional sampling was used, utilizing medical information of children and adolescents who were admitted into the hospital during a five-year period (2009-2013). Since the inception of the facility, it is a common practice to admit children/adolescents with symptoms of acute mental illness or behavioral problems at this site, including children with gross developmental disorders.

Measures

Information from all patients admitted into the institution is usually recorded with a standard intake form, which contains necessary demographic details and diagnostic and management information. The form was examined to determine the variables captured during admission and a data sheet was developed based on this information and that contained in the patient intake record and clinical file. These were then coded, assigning a unique number to each possible variable in the data capture intake form.

The process of admission into the institution involves evaluation and diagnosis by the resident doctor-on-call and definitive diagnosis was made on the ward by the Consultant Psychiatrist. The Diagnostic and Statistical Manual, Fourth Edition (DSM-III-R) was adopted as the diagnostic criteria utilized. The categories of doctors that work in St. Ann’s Psychiatric Hospital include general Psychiatrists, Registrars and House Officers. When necessary, referrals were made to other specialists, e.g., Psychologists and Occupational, Speech and Art Therapists. The analyses were performed using SPSS 20 and the results were summarized as frequencies and percentages in the case of categorical variables and means and/or percentages for numerical variables.

Some variables, e.g., beyond-control behavior, were also transformed into dichotomous variables, with “yes” indicating presence, and “no” indicating absence.

Chi-square tests of independence were conducted to assess if there was an association between beyond-control behavior and all the diagnoses. If the chi-square test resulted in a statistically significant association between beyond-control behavior and the respective diagnosis, the phi coefficient was used to assess the strength of the relationship. Please note that oppositional defiant disorder (ODD), mood disorder and substance abuse were not diagnosed in those who exhibited beyond-control behavior and therefore were exempt from the chi-square tests.

Ethical Approval

The research protocol was approved by the Ethics Committees of the North West Regional Health Authority, Port-of-Spain, and Faculty of Medical Sciences, University of the West Indies, St. Augustine, Trinidad and Tobago.

Training for Data Abstractors

The researchers verified and coded the standard intake forms. An abstractions procedure manual was created for data abstractors detailing the variables, procedures and coding. Data abstractors were then trained to use the forms, identifying the variables, which included getting familiar with the hospital intake forms. They were then allowed to code 20 patient files each as practice. The coded forms were then verified for accuracy by the researchers. The data abstractors were allowed to ask questions about the process. Discrepancies were reviewed and discussed. The data abstractors were blind to the research question and were not members of the research team.
Inclusion and Exclusion Criteria

Admission files of patients less than 18 years old at the time of admission were included. Patients not admitted into the hospital, but evaluated in the assessment unit (psychiatric emergency unit) were excluded, as detailed follow-up interviews were unavailable for the psychiatrist to arrive at the necessary diagnosis.

File Retrieval

The biodata of admitted patients is recorded into ledger books at the Information and Assessment department of the hospital. Fifteen adolescents were not admitted after evaluation; they were sent home with no diagnosis. Intake assessment is then completed by the Residents-on-call before the patients are sent to the wards. We examined the ledgers for the period of study, and data on relevant subjects admitted were collated and presented to the records department for the associated files to be retrieved (a total of 200 files were found). The files of the 15 children and adolescents that were not admitted were not included in the analysis.

Pilot Test

A pilot test was carried out with 40 files to assess the feasibility of the data abstraction document and to highlight potential data collection concerns (e.g., missing patient records, coding challenges and appropriateness of the variables). Selection for the pilot testing was also based on convenience, since all retrieved files were to be analyzed.

Results

Research Question 1: What are the characteristics of adolescents who were admitted for inpatient psychiatric care?

| Source of Referral | Frequency N | Percent % | Valid Percent % | Cumulative Percent % |
|--------------------|-------------|-----------|-----------------|----------------------|
| The court          | 68          | 34.0      | 34.0            | 34.0                 |
| The home           | 10          | 5.0       | 5.0             | 39.0                 |
| Private            | 40          | 20.0      | 20.0            | 59.0                 |
| Relative           | 44          | 22.0      | 22.0            | 81.0                 |
| Hospital           | 26          | 13.0      | 13.0            | 94.0                 |
| Not documented     | 4           | 2.0       | 2.0             | 96.0                 |
| Self               | 5           | 2.5       | 2.5             | 98.5                 |
| Child guidance clinic | 3       | 1.5       | 1.5             | 100.0                |
| Total              | 200         | 100.0     | 100.0           | 100.0                |

In summary, the findings showed that the major source of referral was from the judiciary (34%), followed by consultation by relatives (22%) and private care providers (20%, e.g., general medical practitioners). The least source of referral was the child and adolescent mental health service, i.e., child guidance clinic.

| Gender     | Male (n=90) | Female (n=110) | Total | %  |
|------------|-------------|-----------------|-------|----|
| Age        |             |                 |       |    |
| 10–12      | 3           | 4               | 7     | 3.5|
| 13–14      | 8           | 29              | 37    | 18.5|
| 15–16      | 30          | 48              | 78    | 39.0|
| 17–18      | 49          | 29              | 78    | 39.0|
| Total      | 90 (45%)    | 110 (55%)       | 200   | 100%|

| Number of Admissions | 1-2 | 2-5 | >5 |
|----------------------|-----|-----|----|
| Age                  |     |     |    |
| 10–12                | 6   | 1   | 0  |
| 13–14                | 34  | 3   | 0  |
| 15–16                | 71  | 7   | 0  |
| 17–18                | 69  | 8   | 1  |
| Total                | 180 (90%) | 19 (9.5%) | 1 (0.5%) |
Table 4. Analysis of Age vs. Level at School

| Age   | Primary | Secondary | Vocational | Out of School | Unknown |
|-------|---------|-----------|------------|---------------|---------|
| 10–12 | 5       | 2         | 0          | 0             | 0       |
| 13–14 | 8       | 4         | 0          | 4             | 1       |
| 15–16 | 9       | 49        | 10         | 8             | 2       |
| 17–18 | 6       | 50        | 6          | 15            | 1       |
| Total | 28 (14%)| 105 (52.5%)| 16 (8%)    | 27 (13.5%)    | 4 (2%)  |

Table 5. Analysis of Age vs. Family History of Mental Illness

| Age   | Yes (%) | No (%) | Unknown (%) |
|-------|---------|--------|-------------|
| 10–12 | 2       | 4      | 1           |
| 13–14 | 7       | 30     | 0           |
| 15–16 | 30      | 42     | 6           |
| 17–18 | 28      | 45     | 5           |
| Total | 67 (33) | 121 (60.5) | 12 (6)     |

Table 6. Analysis of Age vs. Diagnosis

| Age   | Adjustment Disorder | Major Depression | ADHD | Conduct Disorder | Developmental Disorder | Psychotic Illness | No Diagnosis |
|-------|---------------------|-------------------|------|------------------|------------------------|------------------|--------------|
| 10–12 | 1                   | 1                 | 0    | 2                | 0                      | 2                | 1            |
| 13–14 | 0                   | 4                 | 0    | 22               | 2                      | 7                | 2            |
| 15–16 | 1                   | 12                | 2    | 27               | 7                      | 28               | 1            |
| 17–18 | 1                   | 11                | 6    | 6                | 2                      | 50               | 2            |
| Total | 3 (1.5%)            | 28 (14%)          | 8 (4%)| 57 (28.5%)      | 11 (5.5%)             | 87 (43.5%)       | 6 (3%)       |

Table 7. Analysis of Age vs. Reason for Admission

| Age   | Reason for admission | 10–12 | 13–14 | 15–16 | 17–18 | Total n, (%) |
|-------|----------------------|-------|-------|-------|-------|--------------|
|       | Beyond-control behavior | 4    | 31    | 61    | 54    | 150 (75%)    |
|       | Drug possession       | 0     | 0     | 0     | 1     | 1 (0.5%)     |
|       | Poor coping           | 0     | 0     | 0     | 2     | 2 (1%)       |
|       | Violence              | 0     | 0     | 0     | 1     | 1 (0.5%)     |
|       | Strange behavior      | 0     | 0     | 1     | 0     | 1 (0.5%)     |
|       | History of abuse/neglect | 0   | 2     | 0     | 0     | 2 (1%)       |
|       | Substance abuse       | 2     | 3     | 9     | 11    | 25 (12.5%)   |
|       | Suicide attempts      | 1     | 1     | 6     | 5     | 13 (6.5%)    |
|       | Wounding with intent  | 0     | 0     | 0     | 1     | 1 (0.5%)     |
|       | Depression            | 0     | 0     | 1     | 3     | 4 (2%)       |

Majority of the children and adolescents were female (55%) within the period of study and a large portion of all admissions were between ages 15 and 18 (78%). Ninety percent of subjects had 1–2 admissions while the remainder had more than two admissions. In terms of their educational achievement, the majority (52.5%) were in secondary school. Sixty-seven percent had family history of mental illness while for 6%, the history was documented.

The diagnoses were as shown in Table 6; psychotic illness (43.5%) and conduct disorder (28.5%) were the predominant diagnoses. Table 7 shows the reason for admission: beyond-control behavior was predominant (75%) complaint followed by drug use (12.5%) and attempted suicide (6.5%).

Research Question 2: Is there any relationship between beyond-control behavior in adolescents and mental health disorders?
Table 8. Comparison of Beyond-Control Behavior and Diagnosis

| Diagnosis                  | Beyond-control Behavior (N=200) | Yes | No   | P-Value | Phi Coefficient |
|----------------------------|---------------------------------|-----|------|---------|----------------|
| Adjustment disorder        |                                 | Yes | 1    | 2       | 0.155*         |
|                           |                                 | No  | 149  | 48      | −0.119         |
| Major depression           |                                 | Yes | 18   | 12      | 0.04*          |
|                           |                                 | No  | 132  | 38      | −0.146         |
| ADHD                      |                                 | Yes | 3    | 5       | 0.025*         |
|                           |                                 | No  | 147  | 45      | 0.177          |
| Conduct disorder           |                                 | Yes | 45   | 7       | 0.026*         |
|                           |                                 | No  | 105  | 43      | 0.158          |
| Developmental disorder     |                                 | Yes | 8    | 2       | 0.708          |
|                           |                                 | No  | 142  | 48      | 0.026          |
| Psychotic disorder         |                                 | Yes | 66   | 19      | 0.457          |
|                           |                                 | No  | 84   | 31      | 0.053          |

*p<0.05
^Fisher’s exact test used as there were cells with count less than 5.

Based on the data, the results show that there are statistically significant associations between beyond-control behavior and major depression, ADHD and conduct disorder diagnoses. In assessing the strength of the associations based on the phi coefficient, beyond-control behavior has a weak negative association with major depression, but weak positive associations with both ADHD and conduct disorder. Looking at absolute values, the relationship between beyond-control behavior and ADHD is the strongest.

As shown in the Table 8, there is a statistically significant relationship between the reason for admission and clinical diagnosis (based on DSM IV). Cramer’s V was 0.395

**Research Question 3:** What is the strength of the relationship between beyond-control behavior and family history of mental illness?

Table 9. Relationship between Beyond-Control Behavior and Family History of Mental Illness

| Family history of mental illness | Beyond-control Behavior (N=200) | Yes | No   | P-Value | Cramer’s V |
|---------------------------------|---------------------------------|-----|------|---------|------------|
|                                 |                                 | Yes | 52   | 15      | 0.363      |
|                                 |                                 | No  | 91   | 30      | -          |
|                                 |                                 | Unknown | 7 | 5 | -          |

*Cramer’s V is used instead of the phi coefficient because it is a 2X3 contingency table.

The results show that based on the p-value, the relationship between beyond-control behavior and family history of mental illness is not statistically significant. However, it can be seen that out of the 67 who had a family history of mental illness, 52 (78%) were admitted for beyond-control while 91 (75%) of those without family history of mental illness presented with beyond-control behavior.

**Discussion**

In the Caribbean context, *beyond-control* signifies a behavior in which a child or adolescent is deemed to be disrespectful to adults, leaving the house without permission, skipping classes and going around with other adolescents who are considered to have bad behavior. This characterization may be influenced by other factors like parental socialization and culture-specific behavioral expectations of children and adolescents.

The vast majority of children admitted into St. Ann’s Psychiatric Hospital between 2008 and 2013 were as a result of beyond-control behavior which was six times as frequent as the second reason (substance abuse) and nearly 12 times more common than the third reason for admission (suicidal attempt). This suggests that beyond-control behavior poses a significant concern to mental health services. Whether the referrals are warranted or valid, it poses a considerable demand on the psychiatric hospital services.

Among the adolescents admitted, older children (ages 15–18) and females were over-represented. This finding supports past research that older children are
more likely to be hospitalized. Another factor may be the stigma which is often associated with mental illness and mental hospitals in general. Wherever possible, relatives may seek alternative sources of care for their loved ones. Also, the presence of multidisciplinary mental healthcare professionals at the Child and Adolescent Mental Health Clinic may lead to hospitalization as a last-resort option.

The gender disparity suggests that females with behavioral problems or psychiatric symptoms are more likely to be brought for psychiatric assessment at an early age. In a society where girls are supposed to be less vocal and more obedient to family orders and instructions, there is likely to be a higher standard for acceptable behavior than for boys, and younger girls displaying this behavior will be subject to greater scrutiny and negative appraisal. There is an attendant concern as behavioral problem may often include running away from home, an action that may further expose younger females to different risks including sexual exploitation. The explanation for late presentation of the males is consistent with the literature, which suggests that disruptive and behavioral problems in boys manifest progressively with less serious offences preceding more egregious ones (Kelley et al, 1997). It may also be explained by the paternalistic nature of the society where boys are given more freedom hence behavioral problems may not be perceived as such until very late.

While the most frequent source of referral was the courts followed by relatives and private care providers, the least number of referrals came from the child guidance clinics (2%), which is the child and adolescent out-patient mental health service. This may be as a result of intervention and appropriate management at the out-patient level that makes it unnecessary for the children and adolescents to be admitted into the hospital. It may also be attributed to referral from the judiciary to the child guidance clinics who are seeking an assessment and diagnosis on children that are brought before it for behavioral problems. As such, reports are sent back to the courts and not the psychiatric facility. The low numbers could also be due to limited help-seeking behavior that results in caregivers avoiding the clinic until the child becomes acutely ill and is taken to the hospital.

The most prevalent diagnoses were psychotic disorder followed by conduct disorder and major depression in both the beyond-control group and non-beyond-control group. However, the proportion of psychiatric diagnoses in the beyond-control group was less than that found in the non-beyond-control group for all diagnoses. This suggests that a mental illness may be underlying some of the ‘beyond-control behavior’ which may have gone unrecognized by parents and others due to lack of knowledge or they may have delayed seeking help for a suspected mental illness due to stigma. Of the remaining children in the ‘beyond-control group’ who received no diagnosis, this may be indicative of two things – that there is some measure of undiagnosed mental illness which was not picked up at the hospital screening or that the beyond-control behavior is not attributable to a mental illness but perhaps other psychosocial and environmental factors and therefore a hospital admission was not warranted. The diagnosis of mental illness points to a need for more rigorous screening of the range of mental illnesses which may affect children (e.g., intellectual disability, learning disorders, and substance use disorders).

While psychotic disorders were the most prevalent diagnosis, these are difficult to assess in children and are especially controversial due to the differential challenge posed by ruling out developmental and cognitive issues, and other psychiatric disorders such as bipolar disorder, major depressive disorder, obsessive compulsive disorder and attention deficit hyperactivity disorder (Courvoisie, 2001). In light of this and especially in cases with younger adolescents, the recommendation is for follow up to clarify and confirm diagnoses.

There was a significant association between beyond-control behavior and major depression, attention deficit hyperactive disorder and conduct disorder. These findings are in keeping with previous reports of common conditions associated with inpatient psychiatric treatment, although conduct disorder constitutes the largest group, which is in keeping with the findings of Warren and Guttridge. Beyond-control behavior was found to be weakly positive with attention deficit hyperactive disorder and conduct disorder. This finding may suggest that children and adolescent who are deemed to have beyond-control behavior may actually have undiagnosed mental health issues.

The majority of the children and adolescents (90%) had only one admission to the hospital. This suggests that if proper intervention and screening mechanisms exist in the community, many of these cases can be properly evaluated and managed without the necessity for hospitalization. This may also explain the low level of referrals from the child and adolescent mental health service. Alternately, a dedicated ward
in the general hospital setting may be suitable, thereby avoiding issues of stigma and discrimination.

**Beyond-control** is a broad terminology used to describe behavior that is not in keeping with age, sex and social cultural norms, despite prescribed societal and cultural interventions. These referrals may have been initiated where mental illness is suspected, especially where other forms of remediation failed. In the West Indian society, families will often go to their general medical practitioners or religious practitioners, e.g., pundit, imam and pastors, before consideration is given to psychiatric consultation. In this analysis, there was significant association between beyond-control behavior and varieties of mental disorders. The behavior displayed by the children and adolescents may be an indication of undiagnosed mental health problems.

**Limitations and Conclusion**

There are limitations to this survey. Convenient sampling method was used in the data collection. The data were extracted from records that were collected by multiple physicians during the admission process. This may therefore have affected the consistency of the data collection process.

A large number (33.5%) had positive family history of mental illness; however, the record did not document whether the family members were hospitalized for psychiatric care. Similarly, the length of stay for the clients was not examined. The challenge of managing adolescents/children in wards or hospitals, not designated for their care, is multi-factorial. These included staff and doctors that were not trained to recognize or manage disorders common in childhood. The resulting implication may be wrong diagnosis and inappropriate management, which may affect the result of the analysis and interpretation of the findings.

Addressing the issues of beyond-control behavior must not only include the understanding of the culture, education, assessment but also pursue creative ways for service delivery that is Caribbean-focused. This should include not just parental education but early childhood assessment and re-assessment in situations where a social and culturally variant behavior is observed, especially screening for mental health issues.

**Conflict of Interest:** Nil

**References**

1. Emery RE, Kitzmann KM. The child in the family; disruptions in family functions. In Cicchetti D, Cohen DJ (Eds). Developmental Psychopathology. Risk, disorder and adaptation. New York: Wiley 1995; 2: 3-31.
2. Schwab-Stone ME, Shaffer D, Dulcan M et al. Criterion validity of the NIMH diagnostic interview schedule for children version 2.3 (DISC-2.3) J Amer Acad Child Adolesc Psychiatry 1996; 35: 878-88.
3. Maharaj RC, Paula N, Renwick S. A review of health risk behaviors among adolescents in the English speaking Caribbean. Child and Adolescent Psychiatry and Mental Health 2009; 3: 10. Retrieved Mar 1, 2017 from: http://www.Capmh.com/content/3/1/10.
4. Gyllenberg D, Sourander A, Niemela S et al. Childhood predictors of later psychiatric hospital treatment: findings from the Finnish 1981 birth cohort study. Eur Child Adolesc Psychiatry 2010; 19(11): 823-33.
5. Feehan M, McGee R, Williams SM et al. Models of adolescent psychopathology: Childhood risk and the transition to adulthood. J Am Acad Child Adolesc Psychiatry 1995; 34(5): 670-79.
6. Copeland WE, Shanahan L, Costello EJ et al. Childhood and adolescent psychiatric disorders as predictors of young adult disorders. Arch Gen Psychiatry 2009; 66(7): 764-72.
7. Jacobson J. Do some mental disorders occur less frequently among persons with mental retardation? American Journal on Mental Retardation 1990; 94(6): 596-602.
8. Kessler RC, Amminger GP, Aguilar-Gaxiola S et al. Age of onset of mental disorders: A review of recent literature. Curr. Opin Psychiatry 2007; 20: 359-64.
9. Thompson JW, Rosenstein MJ, Milazzo-Sayre LJ et al. Psychiatric services to adolescents: 1970-1980. Hospital Community Psychiatry 1986; 37: 584-90.
10. Pfeffer Cr, Plutchik R, Mizruchi MS. A comparison of psychopathology in child psychiatric Inpatients, outpatients, and nonpatients: Implications for treatment planning. J Nerv Ment Dis 1986; 174: 529-35.
11. Guterman EM, Markowitz JS, LoConte JS et al. Determinants for hospitalization from an emergency mental health service. J Am Acad Child and Adolesc Psychiatry 1993; 32: 114-22.
12. Costello AJ, Dulcan MK, Kalas R. A checklist of hospitalization criteria for use with children. Hosp Community Psychiatry 1991; 42: 823-28.
13. Warren T, Guttridge R. Adolescent psychiatric hospitalization and social control. In: Mental Health and Criminal Justice. Teplin L, ed. Beverly Hills, CA: Sage Publication 1984.
14. Patrick C, Padgett DK, Burns BJ et al. Use of inpatient services by a national population: do benefits make a difference? J Am Acad Child Adolesc Psychiatry 1993; 32: 144-54.
15. Therrien RW, Fischer J. Differences in the severity of disturbance of behaviors in children receiving inpatient and outpatient psychiatric treatment. Journal of Personality Assessment 1979; 43: 276-80.
16. Sharpe J, Shafe S. Mental health in the Caribbean. In: Roopnarine JL, Chadee D (Eds). Caribbean Psychology, Indigenous Contributions to a Global Discipline. Washington DC: APA 2015; 305-25.
17. Central Statistical Office. Population and Vital Statistics: Pocket Digest, Port of Spain, Trinidad and Tobago, West Indies: Central Statistical Office, Republic of Trinidad and Tobago. 2003.
18. American Psychiatric Association. Diagnostic and Statistical manual of Mental Disorders (DSM-III-R), Washington, DC, 1987
19. Joshi PT, Towbin KE. Psychosis in Childhood and its management. In: Joseph T. Coyle (ed). Neuropsychopharmacology-The Fifth Generation of Progress. Baltimore MD: Lippincott, Williams & Wilkins 613-24.

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