Time of the year and absconding from a psychiatric hospital in Trinidad

AKLEEMA ALI & HARI D. MAHARAJH

ABSTRACT

Personal characteristics of patients and environmental factors at psychiatric hospitals have been identified as predictors of absconding. This study seeks to establish a relationship between time of the year and absconding. All characteristics of absconders were analysed over a two-year period using hospital records (N= 104). Public holidays and lunar phases were obtained through almanacs for each year; and school vacation period was determined by reference to a school academic calendar. Friday was the most popular day of the week for absconding, males tend to escape more on the weekends compared to females, females tend to escape more during the wet season, and Christmas was the most popular holiday season for absconding to take place. The full moon phase had the largest percentage of absconding when compared to other phases. Recommendations are that the system of patient care should be client driven at all times and greater supervision of patients is needed on weekends, vacation periods and during the full moon phase.

Key Words: Absconding, psychiatric hospital

A number of predictors have been identified as contributory factors of absconding from psychiatric hospitals. These include personal characteristics such as multiple admissions, male sex, single status and younger age (Muller, 1962; Milner, 1966; Antebi, 1967) and environmental factors such as stigmatization, ward settings, attitude of staff, lack of privacy, harassment by other patients and concerns about their homes and families (Altman et al., 1972; Tumison, 1989; Falkowski et al., 1990).

In the third world setting, a number of factors have been reported that can facilitate absconding (Maharajh & Ali, 2001). Factors can be categorized as being endemic or trigger factors. Endemic or chronic factors are those that have persisted over many years. Endemic factors such as overcrowding and staff shortage are common. Other factors that contribute to absconding are poor conditions, long stay of patients, abandonment, rejection and pancy of visits by relatives and the lack of therapeutic and occupational activities leading to boredom and institutional aimlessness. In addition, there are improper plan of care, absence of standardized treatment and follow up, incomplete documentation and handling over, irregular visits and unsatisfactory treatment by doctors on the ward, absence of basic amenities and the workers frustration resulting in the displacement of anger and aggression in the hospital setting.

Trigger factors act as precipitant and consist of occurrences such as riots on the wards for food, space or clothing, fear of personal safety due to aggression, fires, electrical outages and brutalization and the inability of the staff to defuse the situation. Other trigger factors are the transfer of staff and the admission of new disturbed patients.

Among all Caribbean islands, Trinidad and Tobago has the most public holidays. Most are at fixed dates and others vary annually. Due to the facts that it is a tropical country, Trinidad does not experience the four seasons (spring, summer, autumn and winter) typical of temperate countries. Instead, there are two distinct seasons: dry and wet season. The dry season (January-May) is characterized by mostly dry, hot, humid weather, while the wet season (June-December) is occasioned with heavy rains, thunderstorms and the possibilities of hurricanes.

The objective of this study is to investigate whether a relationship exists between time of the year (weekends, holidays, season and lunar phase) and absconding at St. Ann's Psychiatric Hospital in Trinidad.

MATERIAL AND METHOD

Data Collection

Public holidays for each year were obtained through the public holidays listing within almanacs for each year. Table 1 shows the public holiday listing for 1999 and 2000. Easter and Christmas seasons were determined by reference to a school academic calendar (see Table 2). The school academic calendar is issued by the Permanent Secretary of the Ministry of Education and forwarded to all school principals and supervisors. The lunar phases were gathered using the almanacs for each year and were defined as being 3 day preceding and 3 days following the specific moon date. Patients' characteristics such as sex, ward and date of escape and average number of nurses on duty per month was taken from hospital records over a two-year period.

Data Analysis

All data was entered and analyzed by the use of SPSS (Statistical Package for the Social Sciences, Version 8.0). Data was
collected along a nominal level, therefore the main statistical test used was Chi-Square.

RESULTS

In total, there were 104 escapes (N=104) from January 1999 to December 2000. Male absconding amounted to 85% of all escapes while female escapes were only 15%. This gender difference was statistically significant, (Pearson $X^2=49.846, d.f.=1, p<0.001$). The most popular (24%) day of the week for escapes to occur was Friday (See Chart 1).

Majority of escapes (77%) took place during the week, while 23% took place on weekends. The finding proved significant ($X^2=30.154, d.f.=1, p<0.001$). With respect to season, 66% of escapes took place during the wet season and 34% during the dry season, ($X^2=11.15, d.f.=1, p<0.01$). Most popular months for escapes were June (16%), December (15%) and January (14%).

Four percent (4%) of all escapes fell on a public holiday. When the public holiday fell on a Monday, 9% of escapes occurred on the weekend (Saturday and Sunday). With regards to escapes that occurred within a particular holiday season, 75% was at Christmas season, 15% was at Easter season, 5% on Emancipation Day and 5% on Carnival Sunday, ($X^2=27.20, d.f.=3, p<0.001$).

Males (38%) were more likely than their female (13%) counterparts to escape in the dry season. On the other hand, females were more likely (87%) than males (62%) to escape in the wet season (see Chart 2).

Males (26%) were also more likely than female (6%) absconders to escape on the weekend (see Table 3).

When escapes outside school vacation was controlled for, 48% of escapes during the July-September vacation period, 43% was during the Christmas vacation and 9% occurred during the Easter vacation. Females were more likely (43.8%) to escape during the school vacation period than their male counterparts (31.8%). Despite this fact, the relationship existing between gender and school vacation period was non-significant.

The cumulative mean (1999 & 2000) for number of nurses on duty per month was 459. Majority (57%) of nurses on duty per month was less than the mean. Of the 57%, 75% was on Christmas vacation, 15% was on Easter vacation and 10% was on July-September vacation.

Overall correlation between number of vacation days and absconding rate did not reveal a relationship. Further analysis of Christmas vacation revealed a perfect correlation ($p<0.01$ between vacation days and absconding).

| TABLE 1: Public Holidays for 1999 & 2000 |
|----------------------------------------|
| **1999** | **2000** |
| **Holiday** | **Date** | **Holiday** | **Date** |
| New Year’s Day | January 1 | New Year’s | January 1 |
| Eid-Ul-Fitr | January 19 | Eid-Ul-Fitr | January 9 |
| Carnival | January 19 | Carnival | March 6 |
| Monday* | February 15 | Monday* | March 7 |
| Carnival | March 30 | Carnival | March 30 |
| Shouter | March 30 | Shouter | March 30 |
| Baptist | Liberation Day | Liberation Day |
| Good Friday | April 2 | Good Friday | April 21 |
| Easter Monday | April 5 | Easter Monday | April 24 |
| Arrival Day | May 30 | Arrival Day | May 30 |
| Corpus Christi | June 3 | Labour Day | June 19 |
| Labour Day | June 19 | Corpus Christi | June 22 |
| Emancipation Day | August 1 | Emancipation Day | August 1 |
| Independence Day | August 31 | Independence Day | August 31 |
| Divali | November 8 | Divali | October 26 |
| Christmas | December 25 | Christmas | December 25 |
| Boxing Day | December 26 | Boxing | December 26 |

| TABLE 2: Holiday Seasons as specified by School Academic Calendar |
|-----------------------|
| **Holiday Season** | **1999** | **2000** |
| Easter | March 27 April 11 | April 15 April 30 |
| July-September | July 10 September 1 | July 8 September 3 |
| (Mid-Summer) Vacation | | |
| Christmas | December-11 January 2 | December 9 January 3 |

| TABLE 3: Escape (Week/Weekend) By Gender |
|------------------------------------------|
| **N** | **%** | **N** | **%** |
| **Weekend** | 23 | 26 | 1 | 6 |
| **During the week** | 65 | 74 | 15 | 94 |
| **Total** | 88 | 100 | 16 | 100 |
Majority (37%) of escapes occurred during the full moon phase, 24% was during the new moon, 24% during the last quarter phase, and 14% occurred during the first quarter phase (see Figure 4). This trend proved significant ($X^2=8.393$, d.f.=3, $p<0.05$). A greater percentage of females (41.7%) escaped during the full moon phase when compared to males (36.4%). There was no statistical difference between gender and all lunar phases.

![Figure 1: Days of the Week showing Number of Escapes](image1)

![Figure 2: Season of the Year by Sex](image2)

![Figure 3: Relationship between Number of Days in Vacation Period and Escapes](image3)

### DISCUSSION

Findings indicate that there is a significant relationship between time of the year and absconding rates of patients at St. Ann's Hospital. Seasons related both to climatic changes and festivity resulted in increased escapes. An interesting finding was that two thirds of all escapes occurred during the rainy season from June to December with peak time being the seasonal transition months of January, June and December (45%). Females were more likely to escape than males in the wet season while the reverse was true in the dry season.

At St. Ann's Hospital, peaks of hospital admission for depression have been reported for females during the months of January, June and December (St. Ann's Hospital, 1999-2000). The concomitant increase of female escapes during these months might be explained by an increase of female admissions due to a seasonal pattern of depression. This seasonal variation does support the hypothesis that depressive episodes show a seasonal pattern in temperate countries (Eastwood & Stainsky, 1978; Parker & Walter, 1982; Silverstone et al.,1995). Further investigation is needed in tropical countries.

The majority of male admissions to St. Ann's Hospital are diagnosed with Schizophrenia (Neehall,1991; Hilwig & Maharajh,1992). It is well established in the "social drift" hypothesis that psychiatric patients, especially chronic schizophrenics will seek out or drift to urban areas (Goldberg & Morrison, 1963). Our findings of increased escapes of male patients during the dry season and weekends can be explained by the fact that the majority of male escapes are schizophrenics who are exposed to high temperatures and overcrowding. Patients with mental illness feel more crowded than those without psychiatric disorders (Kamal & Gupta, 1998). In addition, it has been reported that men become more hostile and aggressive in high-density environs (Aiello, 1983).

With respect to days of the week, Fridays were the most popular day when escapes occurred (24%), followed by Thursdays 16% (Chart 1). Thursdays and Fridays are the official paydays in our setting. As the week comes to an end, patients face the prospect of spending yet another weekend isolated, with family abandonment, hopelessness and despair. Other contributory factors to 'end of weekday escape' is the low level of activity at the hospital during weekends, compared to the high degree of entertainment and socialisation in the community in a population well known for its frolic and festive attitudes.

The finding that males absconded during the weekend may reflect the admission diagnoses that the majority of male admissions suffered from schizophrenia and substance abuse (Neehall, 1991; Hilwig & Maharajh, 1992). As already stated, these patients perceivably with a low degree of internal stimulation will seek out areas of high activity. This is in contrast to the low absconding rate during carnival and public holidays (4%). This is an expected finding, since during these days, there are planned celebrations within the hospital that the patients look forward to. In addition, national celebrations in the city of Port-of-Spain, a few miles away, offer patients the opportunity to attend them through 'passes' and 'town parole'. At that time the movement of the general population is toward the city areas. Patients are therefore not tempted to return home.

The correlation between escapes and vacation period during the wet season is based on the fact that the two larger school vacations, the mid summer break of 532...
days and the Christmas break of 25 days fall within the rainy season. During these periods, children are out of school and mothers or caretakers of extended family, traditionally female, are needed at home. During these periods, absenteeism among nurses are common, and many health workers go on leave to spend holidays with their children. This is supported by the findings that a 7% decrease in the average number of nurses on duty from 1999 to 2000 resulted in a doubling of the absconding rate during the same period of time.

The strong correlation between absconding and the Christmas vacation underlines the meaning of Christmas to everyone. It is a period of relaxation of rules and regulations at the hospital where everyone seeks to be home with their families.

The highest percentage (37%) of escapes occurred within the full moon period when compared to the other lunar phases (new moon, first quarter and last quarter). Traditionally the full moon has been linked to crime, suicide, mental illness, disasters, accidents, births and fertility among other things. The relationship between absconding and the lunar phases, particularly the difference in gender, needs to be investigated further.

This study identifies an association with absconding from a mental hospital to time of the year. Knowledge of the types of patients with respect to sex and diagnosis, the pattern of escapes, Fridays, vacation period of weekdays, seasonal variations and lunar phases are important parameters for planning the delivery of health care and administrative restructuring of a psychiatric hospital. These findings should be used to strengthen the structural and managerial system. The system of patient care ought to be more robust and client driven at all times. There should be increased nursing personnel and administrators during the latter half of the year (June-December). It is imperative that hospital and nursing administrators restructure their staffing. Male wards should be supervised more closely on the weekend, while the females during the school vacation periods, and all patients during the full moon phase. In addition, it is recommended that more activity is needed during the weekend period to reduce the isolation of the patients.

**REFERENCES**

Aiello, J.R., Thompson, D.E. & Brodzensky, D.M. (1983) How funny is crowding anyway? Effects of room size, group size and the introduction of humour. Basic & Applied Social Psychology, 4, 193-207.

Altman, H., Angle, H.V., Brown, M.L., et al. (1972) Prediction of unauthorized absence. American Journal of Psychiatry, 128, 1460.

Antebi, R. (1987) Some characteristics of mental hospitals absconders. British Journal of Psychiatry, 113, 1087-1090.

Eastwood, M.R. & Staines, S. (1978) Psychiatric disorder, hospital admission and season. Archives of General Psychiatry, 35, 766-771.

Falkowski, J., Watts, V., Falkowski, W. & Dean, T. (1990) Patients leaving hospital without the knowledge or permission of staff: absconding. British Journal of Psychiatry, 156, 488-490.

Goldberg, E.M. & Morrison, S.L. (1963) Schizophrenia and social class. British Journal of Psychiatry, 109, 765.

Hilwig, M. & Maharajh, H.D. (1992) Pattern of first admissions in a psychiatric outpatient clinic in Trinidad. West Indian Medical Journal, 41(2), 32.

Kamat, P. & Gupta, I.D. (1998) Feeling of crowding and psychiatric disorders. Indian Journal of Psychiatry, 30, 85-89.

Maharajh, H. & Ali, A. (2002) Escapes from a West Indian psychiatric hospital: a two-year retrospective analysis. West Indian Medical Journal, 51(2), 43.

Milner, G. (1966) The absconder. Comprehensive Psychiatry, 7, 147-151.

Mueller D.J. (1962) The "missing" patient. British Medical Journal, 1, 177-179.

Meehall, M. (1991) An analysis of psychiatric in-patient admissions from a defined geographical area over a one year period. West Indian Medical Journal, 40(1), 16-21.

Parker, G. & Walter, S. (1982) Seasonal variation in depressive disorder and suicidal deaths in New South Wales. British Journal of Psychiatry, 140, 626-631.

Silverstone, T., Romans, S., Hunt, N. & McPherson, H. (1995) Is there a seasonal pattern of relapse in Bipolar Affective Disorders? A northern and southern hemisphere cohort study. British Journal of Psychiatry, 167, 58-60.

St. Ann's Hospital (1999-2000) Annual Records. Medical Records Department.

Tomison, A.R. (1988) Characteristics of psychiatric hospitals absconders. British Journal of Psychiatry, 154, 368-371.

* Correspondence

*AKLEEMA Ali, Research Assistant, Faculty of Social Sciences, Department of Behavioural Sciences, University of the West Indies, St. Augustine, Trinidad. (drharim@carib-link.net.)

HARI D. MAHARAJH- Senior Lecturer, Faculty of Medical Sciences, Department of Psychiatry, Eric Williams Medical Complex, Mt.Hope, Trinidad.(drharim@carib-link.net.)