

A Preliminary Study on the Spatial and Temporal Pattern of the Human Emotional States

Sangeeta Kumari

P.G. Department of Zoology, Jamshedpur Co-Operativecollege, Jamshedpur 831001

Abstract: *It is assumed that emotion is a form of behaviour according to Lorenz aggression has been hypothetically first and most important emotion, from which, during evolution, the other emotions have developed. The nature and number of separable arousal States constitute emotion as essential ingredients for social coexistence and survival of the human beings. Additionally, the emotion associated behaviour of man are identified not only by character of external factors, but also by an active attitudes of its own state manifested in behaviour We have collected information on emotional harmful consequences each month from different sources i.e.local reputed newspapers and T.V. Channels at Jamshedpur(220 48,N,86°E.) and analysed. Results indicates that some of the people were more chronosusceptible to the raised geomagnetic field intensity especially around the full moon and new moon days than rest period of the month. It is also evident that adult people were more proned to the suicidal attitude or other harmful events than other age groups. However, male people are found more emotionally disturbed at night than daytime. Such studies have shown that the depressed or mental turmoil phases are followed by emotional outbursts especially around the full moon and new moon days of each month of the year. This may be the cognitive aspects of the chronosusceptibility to intensified geomagnetic field and may provoke the emotional derives for an aberrant overt expressions of different nature.*

Keywords: Chronosusceptibility, Cognitive Aspect, Geomagnetic Field, MentalTurmoil

1. Introduction

The earth magnetic field is ever changing phenomenon that influence human activity and natural world in a myriad of ways. The geomagnetic field changes from place to place, and on time scales ranging from seconds to decades to ions. These changes can affect health and safety, and economic well being. The present paper is an attempt to evaluate about the complex behavioural acts of human beings that play decisive role in the genesis of any deleterious emotional state including the emotional pitch of sensations. Anxiety or depression in general practice, suicide and self-poisoning, agitation among home To examine the relationship between lunar cycles and violent or aggressive behaviour of local people. The phases of the moon can influence behaviour. In some cases of manic depressive illness. Stressful events, e.g. .professional problems, stress at home or social problems, etc show relationship between these (above) factors and become out of control. We think it is more like that any variations in one's mood are due to combination of his natural mood cycling rate (as suffering from psychological and social stressors)that may be correlated with moon cycle. Human tidal waves caused by the gravitational pull of the moon. The cosmic forces(by the moon, stars and planet)makes people susceptible and residents, car accidents, major trauma, or emergency department admission. Human tidal waves caused by the gravitational pull of the moon. Putative effects of full moon on mental health and behaviour .Age and sexes of victims plotted against the occurrence of a full moon or new moon. The belief in the effect of the lunar cycle on human and animal behaviour has been present for centuries and is immortalized in the word "lunatic", once used to describe the mentally ill. A review of the literature on the association of psychiatric illness and the lunar cycle reveals a diverse and conflicting set of findings. Associations have been reported between the lunar cycle and parasuicide case admitted to hospitals, with the peaks occurring at fullmoon and newmoon (Rogers et

al., 1991). Similar associations have been demonstrated for homicides (Lieber&Sherin, 1972). De Castro &Pearcey(1995) demonstrate an 8% increase in meal size and a 26% decrease in alcohol intake at the time of the full moon relative to the new moon, thus suggesting that there is a true internal lunar rhythm which influences nutrient intakes of normal humans in their natural environment. A significant lunar periodicity has been observed for the number of accidents, the highest number being two days before full moon (Alonso, 1993). The mean number of misbehaviours in a population of developmentally delayed institutionalised women on the day of full moon was significantly higher than the mean number on any other day of the lunar period (Hicks-Caskey& Potter, 1991). In contrast, many authors (e.g. Beuer&Hornic, 1968; Lilienfeld, 1969; Laverty et al., 1992; Vijaylakshmi& Ramakrishna, 1992) failed to demonstrate any relationship between lunar phase and mental illness. All these authors examined the daily total number of cases at the psychiatric emergency room without classifying them into any diagnostic group. Wilkinson et 60al. (1997) did not find an influence of the moon of the frequency of consultations for anxiety or depression in general practice.

2. Method and Material

We have collected information on emotional harmful consequences each month from different sources i.e. local reputed newspapers and T.V. Channels and NGO at Jamshedpur (220 48, N, 86°E.) and analysed and relation to the present or absence of a full moon or new moon stratified by day of week so that comparison around full moon days or new moon were analysed. Data Collected from Case Notes were date of consultation, gender & psychiatric diagnoses according to ICD-10 (WHO. 1992). For lunar cycle dates, the \unar phase and eclipses were plotted by using standard astro calendars (Astro-Research Bureau, 1993 & 1997). The definitions related to the topic are:

Apogee: farthest distance of the moon from the earth,
Perigee: closest distance of the moon to the earth,
Aphelion: farthest distance of the earth from the sun,
Perihelion: closet distance of the earth to the sun.

3. Results

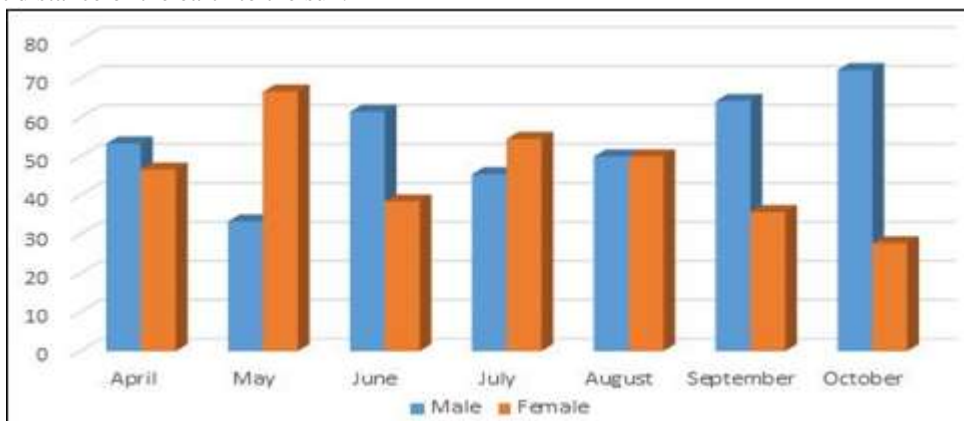


Figure 1: Differential suicide cases with reference to sex-ratio of human beings at Jamshedpur2017.

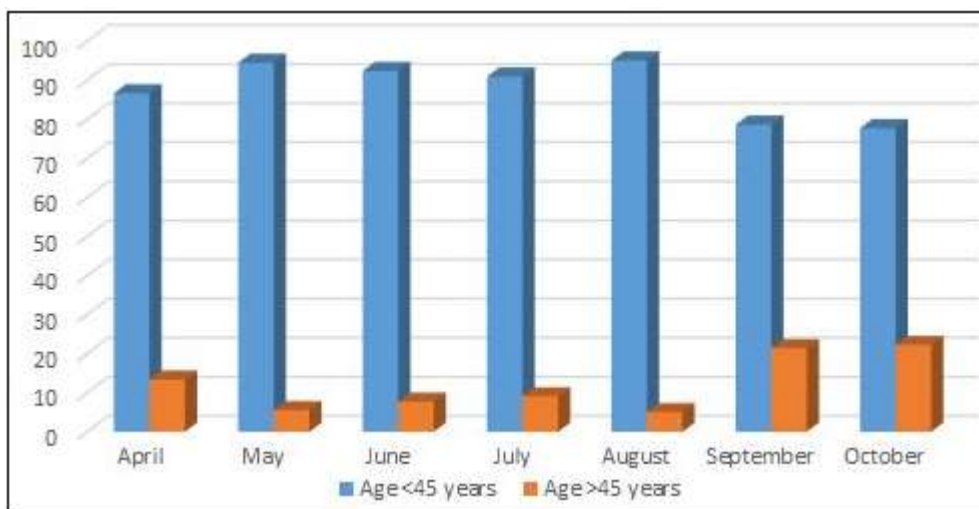


Figure 2: Differential suicide cases with reference to different age group of human beings at Jamshedpur.2017.

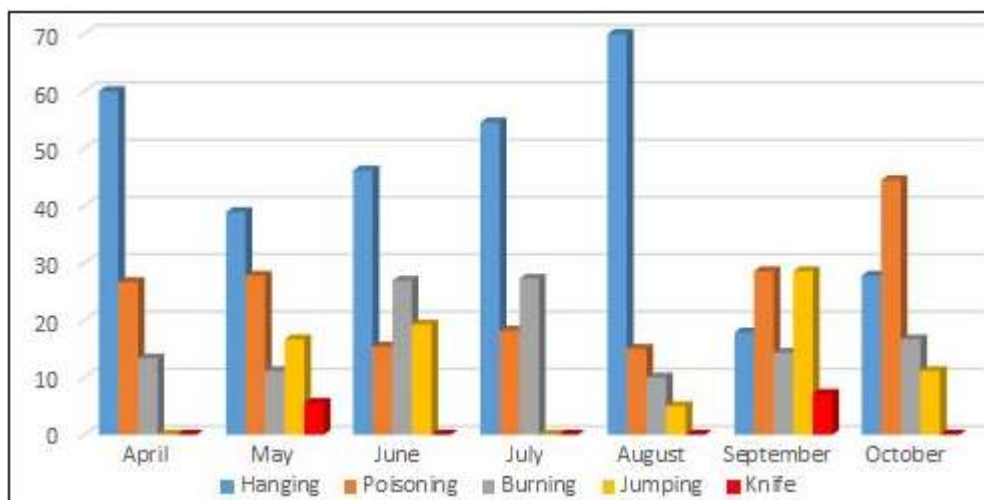


Figure 3: Differential suicide cases with reference to suicidal modes of human beings at Jamshedpur, 2017

4. Discussion

In male suicidal incidences were substantially higher than females in each month from April to October except November. Suicidal incidences were highest during full moon than other phases of lunar cycle .Male showing the

increasing trend and female showing the decreasing trend. In almost all phases of lunar cycle incidences were higher among the people among the people of more than 45 years. Hanging suicidal cases were found maximum in April and minimum during June. Poisoning showing almost increasing trend, highest in September and minimum in august.

Burning cases were found almost equal in each month from April to November. The Key limitations of this study are that it combines two different types of data collection, i.e. prospective and retrospective (based on history sheets, which may have introduced a bias). Further, given the nature of the lunar calendar, two years may be limited a period to obtain longitudinal trends or replicate findings over different years. Some authors have advocated that research into possible links between lunar phases and human behaviour is not worth pursuing (Rotten and Kelly, 1985). This view is encouraged by unsubstantiated assertion and speculation about the cause of any effect. We consider that further investigation may be justified and that disregarding this field of enquiry because it is replete with myths is an understandable but inappropriate scientific response. We would suggest replication of similar study using a much larger data of atleast of two sunspot activity cycles, to confirm the relationship between nonaffective psychosis & full moon and the potential mechanisms by looking in more detail at psychiatric disorders at the time of apogees, perigees, aphelion's and perihelion's.

5. Acknowledgements

We would like to thanks Dr. Ram (NGO) the volunteers in helping collect the data and for valuable suggestions.

References

- [1] Alonso, Y. (1993) Geophysical variables and behaviour: Barometric pressure, lunar cycle and traffic accidents. *Perceptual and Motor Skills*, 77, 371-376.
- [2] Astro-Research Bureau (1993, 1997) *Indian Ephemeris of Planets positions*. Calcutta. Lahiri.
- [3] Bauer, S.F. &Hornic, E.J. (1968) lunar effect on mental illness. The relationship of moon phase to psychiatric emergencies. *American Journal of Psychiatry*, 125, 696-697.
- [4] De-Castro, J.M. &Pearcey, S.M. (1995) lunar rhythm of the meal and alcohol intake of humans. *Physiology and Behaviour*, 57, 439-444.
- [5] Hicks-Caskey, W.E. & Potter, D.R. (1991) Effect of the full moon on a sample of developmentally delayed, institutionalised women. *Perceptual and Motor Skills*, 72, 1375-1380.
- [6] Kay, R.W. (1994) Geomagnetic storms: Association with incidence of depression as measured by hospital admission. *British Journal of Psychiatry*, 164, 403-404.
- [7] Laverty, W.H., Kelly, I.W. & Flynn, M. (1992) Geophysical variables and behaviour: Distal and lunar variables and traffic accidents in Saskatchewan 1984-1989. *Perceptual and Motor Skills*, 74, 483-488
- [8] Lieber, A.L. &Sherin, C.R. (1972) Homicides and the lunar cycle: toward a theory of lunar influence on human emotional disturbance. *American Journal of Psychiatry*, 129, 69-74.
- [9] Lilienfeld, D.M. (1969) Lunar effect on mental illness (letter). *American Journal of Psychiatry*, 125, 1454.
- [10] Pokorny, AD. &Jachimczyk, J. (1974) The questionable relationship between homicides and the lunar cycle. *American Journal of Psychiatry*, 131, 827-829.
- [11] Raps, A &Stoupel, E. (1992) Geophysical variables and human behaviour: LXIX solar activity and admission of psychiatric inpatients. *Perceptual and Motor Skills*. 74, 449-450.
- [12] Rogers, T.D., Masterton, G. & McGuire, R. (1991) Parasuicide and the lunar cycle. *Psychological Medicine*, 21, 393-397.
- [13] Rotten, J. & Kelly, I.W. (1985) Mucha do about the full moon: A meta analysis of lunar-lunacy research. *Psychological Bulletin*, 97, 286-306.
- [14] Vijayalakshmi, D. & Ramakrishna, P. (1992) Effect of lunar phases on the incidence of mental illness. *Andhra Pradesh Journal of Psychological Medicine*, 5, 48-55.
- Wilkinson, G., Piccinelli, M., Roberts, S., Micciolo, R. & Fry, J. (1997) Lunar cycle and consultations for anxiety and depression in general practice. *International Journal of Social Psychiatry*, 43, 29-34.
- [15] WHO (1992) *The ICD-10 classification of mental and behavioural disorders*. Geneva: WHO