CASE

Culture and posttraumatic stress disorder: a case of elephant attack

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Abstract

Report of posttraumatic stress disorder (PTSD) after wild animal attack is rare. A case of PTSD after a wild elephant attack is reported. Ideational components of PTSD symptoms in relation to eco-specificity of the region and the cultural context (religion and myth) of elephant are discussed. Cultural meaning and interpretation of trauma may be helpful for understanding of PTSD symptoms. Forest and adjoining human habitat is potential for human-animal conflicts, and thus needs new focus on ecopsychiatry.

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Introduction

Trauma that involves exposure to a life-threatening experience is related to posttraumatic stress disorder (PTSD). Different types of trauma that are associated with the development of PTSD are usually classified as serious accidents; military combat; violent personal assault (sexual assault, physical attack, abuse, robbery, mugging); being taken hostage; terrorist attack; being a prisoner-of-war; natural or man-made disasters and being diagnosed with a life-threatening illness. Pillai and Sekar[1] surveyed 238 children to find out the impact of the violent tsunami waves. The children suffered from multiple losses, and intrusion and avoidance was equally present.[1] Broadly these traumas fall under two categories: man-made trauma and ecological, i.e. nature- made trauma. PTSD after wild animal attacks may come under the latter category and is becoming an important clinical issue as the frequency of human-wildlife conflicts is increasing worldwide.[2] Human-wild elephant conflicts are frequently reported from various parts of India and are quite common in the Dooars area of North Bengal region of West Bengal State, India.[a][3] During a recent visit to North Bengal, a case of wild elephant attack (after an accidental confrontation) was examined at Nagrakata, Malbazar in Jalpaiguri district, West Bengal. Malbazar is very close to Gorumara National Park and Chapramari Wildlife Reserve. Elephant straying, either solitary or in a herd, is a frequent occurrence in Malbazar forest range.

Case report

Mr. Das, 42 years old married man, Bengali Hindu and a grocery shop owner, was returning on bicycle through a forest road at evening at Nagrakata town, two years ago. It was just dusk and he did not take notice of a huge elephant standing silently in the middle of the road. He collided with the elephant and fell on the ground. He was so terrified that he lost all his strength and senses, and virtually lay on the ground immobilised. The elephant kicked him in the chest and then smashed his right hand. He tried to stand up but the elephant struck him with its trunk and he fell on the road. The elephant then pounced on his right foot, at which point he lost consciousness. He was rescued after two hours by a jeep traveling on this road. He was transferred to Siliguri Sub-Divisional hospital. He sustained multiple injuries: soft tissue injuries to the right shoulder, elbow, forearm, hip, buttocks, knee and foot, injury of the face with bilateral mandible fractures, multiple rib fractures (four lower right and two upper left, one lower left) with haemothorax, both radius and ulnar fracture in right limb, right clavicle fracture, dislocation of the right shoulder, comminuted tibia-fibula fracture with all the metatarsals and phalanges of the right feet smashed. He recovered from all his injuries after few operations and amputation of left foot below tarsal bone. In the hospital, he was very anxious and had nightmares of an elephant foot trampling him. On several occasions, he expressed his fear that an elephant may haunt him there. He developed walking difficulties with limping gait and some restricted movement of his right hand.

First few months after discharge from hospital were very disturbing. He checked and rechecked the house premises with the apprehension that an elephant may be hiding in the adjoining garden or behind the bushes. He was not amenable to any logic or reassurance. At night, he lit the room and any trivial sound outside awoke him from sleep. He took an iron rod and would stand in an attention stance

as if the elephant is entering the room, and he would hit the elephant with this rod. In the midst of sleep he would shout "See! The elephant is coming", "See the long trunk near the window", and became tremulous with fear. Sometimes he would hear the elephant's trumpet, though others could not. He pledged a big puja (prayer) to Lord Ganesh, the elephant headed God and also consulted a local doctor for his elephant fear, who prescribed alprazolam 0.5 mg at night.

Though the elephant dream and acute elephant fear has subsided considerably after six months, he continued to have some symptoms related to this trauma. Elephant straying and destruction of property and human lives are frequent occurrences in Jalpaiguri forest range and tea gardens. Any such news upset him terribly. He said "If I hear any such news I cannot work on that day, it reminds me of my accident and I feel too nervous to discuss this. I have to take a sleeping pill at night". He avoided this particular forest short-cut after this incident and said "I cannot think of passing via this road even in the daylight". By the suggestion of a local priest he purchased one big clay idol of Lord Ganesh and offered puja every day. Once he had a very scary experience: "After offering flowers and fruits, I prayed to the Lord with my eyes closed. When I opened my eyes, I saw the head of the idol turning into a real big mouth of an elephant with a moving trunk. It was a terrible feeling and I shouted. My wife rushed into the room and comforted me. I avoid the forest altogether but our area is having lots of trees and bushes, and is not far from the tea garden. I always feel that an elephant is standing behind the bushes. My mind says that the elephant may come again to attack me because they can remember things of the past." After the incident he thinks that his capacity to work has diminished by 50% and very often, he suffers from multiple bodily pains. His appetite and sleep have reduced remarkably. He became apprehensive and fearful, and avoids going out of the house after evening. His wife added: "He was quite a jolly man but since the incident he has changed remarkably, he always feels low and hopeless, lost all his energy and spirit, is physically weak and cannot concentrate properly on business, and still has elephant fear because of which he cannot move freely and alone, especially after evening. He avoids any social mixing and prefers to stay alone in the house. It is only by the mercy of Lord Ganesh that he got his life back!" In fact, since then the family arranged a big puja with life-size clay idol on the first day of Bengali calendar, the designated day for Ganesh puja in West Bengal. He also said that after this ceremony, he regained his "mental strength to a larger extent".

Discussion

The clinical presentation of Mr. Das met almost all the criteria of PTSD according to DSM-IV,[4] viz. he has experienced 'an actual threat of death and serious bodily injury with a response of intense fear, helplessness, or horror' (Criteria A1, 2)); he also re-experienced traumatic event either by 'recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions' or flashbacks (Criteria B1) or 'recurrent distressing dreams of the event '(B2) or 'acting or feeling as if the traumatic event were recurring' through illusion of elephant perception in the vicinity, autokinetic illusionary visual perception of Ganesh idol turning into a real head of an elephant, hallucinatory hearing of elephant's roar or dissociative flashback episode as if the elephant is going to attack him in the room and acted in response to that (B3); 'intense psychological distress' with related external cues - feeling extremely fearful and anxious while hearing any similar events or elephant news in the locality (B4). He has 'Persistent avoidance of stimuli associated with the trauma' - by avoiding trauma related conversations (C1); has avoided activities related to trauma - abandoning the forest road where trauma occurred (C2). He has shown 'Persistent symptoms of increased arousal' like difficulty falling or staying asleep (D1); and hypervigilance (D4) or startle response (D5) with elephant news in the community. His symptoms started within a month of the insult and persisted for more than a month (E) and the disturbances caused significant distress and impairment in familial, social, and occupational functioning (F). In view of persistence of symptoms more than six months, he has chronic PTSD course. In addition to all these classical symptoms of PTSD, he is also presented with dysthymic mood, somatisation, and his personality has also changed as an 'apprehensive person'.

Some interesting findings emerged from this animal attack related PTSD presentation, especially in the context of local cultural and ecological landscape. Nightmares are quite common, of the "re-experiencing" symptoms of PTSD, 71% of those with PTSD endorsed nightmares.[5] The cultural interpretation of nightmares influence attitude and help seeking behaviour. Some cultures view nightmares as mental health problems, others view them as related to supernatural or spiritual phenomena.[6] Elephant is a sacred mythical and religious cult in Indian culture and epics. The elephant-headed God, Lord Ganesh or *Ganapati*, represents wisdom, and is known as *Siddhidatta* meaning 'bestower of accomplishment' and is worshiped with great reverence widely in India.[b] Hence the fear of elephant prompted Mr. Das to consult a priest who advised to set up an idol of Ganesh in the house and to please Him with regular prayer. This is a unique way of displacement of anxiety through socio-cultural and religious means. So, trauma here is not only psychological or physical but also has a spiritual dimension. Elephant is not only an animal, it represents Lord Ganesh, whose blessing and support is crucial for success in business and wellbeing of the self and family. So,

the trauma is also reflecting the fact that Lord Ganesh is displeased, and therefore has strong psychological and religious overtone on the continuing PTSD symptoms. It is interesting to note here that Forest Department of Jharkhand Government (neighbouring state to West Bengal) issued big public posters to warn people not to worship or offer puja to the straying wild elephants as an attempt to avoid elephant-human conflicts, which had until then caused death of over 300 villagers during previous four years in that state.[7]

Illusion or hallucination is quite common in PTSD but the autokinetic perception of moving trunk of the idol of Ganesh is quite interesting. Cultural belief and religiosity associated with elephant coupled with hypervigilance may have some contribution here. Two symptoms, elephant fear and the conviction of re-attack, are important from the cultural context and eco-specificity of the region. Elephant fear is a persistent symptom of his PTSD presentation here but from ecological perspective this is not unrealistic altogether. There are about 529 elephants in North Bengal forests and elephant straying is quite frequent in Jalpaiguri district and the tea gardens.[8,9] So, this fear is not entirely imaginary but rather was pathological intensifier of PTSD anxiety. The conviction and fear of re-attack have a strong cultural connection with mythical cult of elephant and folklore myths.[10] It is believed that the elephant has a strong memory and is able to locate people who caused harm or disturbed them in the past. There are many anecdotal popular elephant 'come-back stories' that circulate in the community. The acting out behaviour to fight a potential intruding elephant is a symptom, which has two components. Firstly, it implies an encroachment on a psychotic domain because in spite of explanation and support by the family members, he believed the presence of an elephant in the immediate vicinity, and secondly, it may be a transitory state of heightened anxiety as a part of PTSD flashback. But in both, there is a loss of reality testing. Hearing elephant's roar or hearing elephant's movement during flashback is indicative of psychotic elements of PTSD here. Positive symptoms like delusion and hallucination are not uncommon in PTSD cases.[11] The strong cultural belief about re-haunting by elephant triggered an anxiety surge, and the resultant behaviour to ward off this imaginary re-attack. So, proper delineation of symptom genesis, especially the causative agent of the trauma, from the cultural perspective and eco-landscape of the local universe is important, and will help to understand the PTSD symptoms and their management. Ethno-cultural factors like belief pattern, coping styles, attributions, social support,[12] and spiritual dimension strongly influence trauma reactions.

There are some reports of PTSD after domestic dog attacks,[13] wild bear attack,[14] and tiger and crocodile and shark attacks,[15,16] but this is the first PTSD report after wild elephant attack. The incidence of wild animal attacks in the vicinity of National Parks of India is increasing as also the human-elephant conflicts,[17] and if mental health professionals are aware of such presentation, it will help in their clinical decision making. It is interesting to note that recently animal behaviour researchers[18] discovered that elephants may also suffer from PTSD after human insults, and consequently when confronted by humans may act out with more aggressive and violent behaviour.

Note

a. Rising elephant attacks: In recent times, human-elephant conflicts in North-East India are becoming a serious public health issue and conservation challenge. Choudhury[3] reported that between 1980 and 2003, more than 1,150 humans and 370 elephants have died as a result of such conflict. North-East India is a home for 10,000 wild elephants, about 25% of the world's elephant population.[19] North Bengal and East Nepal have been identified as the 'hotspots' of man-elephant conflict in South Asia.[20] In recent years, elephant straying has increased due to rapid human population growth and development, and thereby shrinking the forest land leading to decreasing the traditional elephant habitat and scarcity of elephant food. In North Bengal, the forest cover was above 40% in 1960 but now it stands as 24%. There is also seasonal migration of elephants, especially during crop-season and many of their migratory routes encroaches human habitation. One of the common causes of solitary elephant straying is that often they detached from the herd in the thick vegetation of the tea gardens and mistakenly come close to human settlements. Number of elephants is on the rise in West Bengal.[21] The elephant census in 2010 has shown that the North Bengal region has 529 and the South Bengal has about 118 elephants. Elephant-human conflict is a frequent incident in North Bengal region especially in Jalpaiguri and Siliguri tea garden areas, to cite few examples: In October 2006, a herd of over 100 elephants rampaged the Terai and Dooars region of North Bengal and killed a girl and injured two others; on July 2007, one man was tossed in the air and flung to death by a elephant in Naxalbari area of North Bengal;[22] in July 2008, there was a consecutive death of four villagers due to trampling by straying elephants in different tea gardens near the Buxa Tiger reserve area of North Bengal;[8] three women were killed and three others injured when a tusker went on the rampage in a cluster of villages in Siliguri in North Bengal in October 2009;[23] in October 2010, a herd of about 50 elephants strayed into the Dumding tea garden in Jalpaiguri[24] and in November 2011, a four-year-old child was tossed to death by a wild elephant at Mantagara in Jalpaiguri district. Not only elephant, straying of other wild animals also causes destruction of property and human life in North Bengal, e.g.

three rhinoceroses with 30 elephants caused havoc in the Jadavpur tea garden in Jalpaiguri in August 2007, eight people were injured after three bisons strayed into Magalkata tea garden, Jalpaiguri in June 2011;[25] a straying leopard injured five people in Khetipulbadi village in Cooch Bihar in January 2011 and three persons in Newdamajali village, Jalpaiguri in January 2012.[26,27]

The frequency of human-elephant conflict is rising globally mainly because of habitat fragmentation, and expanding human settlement and agriculture. This is a critical issue for conservation as well as human wellbeing. The eco-specificity and its relation to human mortality and morbidity caused from human-animal conflict is an emerging area of public health issue and ecopsychiatry.[28]

b. Lord Ganesh: Ganesh, the Hindu zoomorphic elephant-headed, pot-bellied God, is the son of Siva and Parvati, is the most popular and most widely worshipped deity in the Hindu pantheon. Lord Ganesh is also called *Vinayak* (knowledgeable) or *Vighneshwere* (God to remove obstacle), and thus worshipped as Lord of beginnings, Lord of success, and destroyer of obstacles and evil, and God of education, knowledge, wisdom, and wealth. In any Hindu worshipping, Ganesh has to be worshipped first. People offer puja to Lord Ganesh for His blessings at the initiation of any new business, marriage, new job, taking up important examination, starting a project or any enterprise. Interestingly the *Ganesh symbolism* has a deep rooted connection with Hindu socio-cultural and moral perspectives. The physical attributes of Ganesh are rich in symbolism: His broken tusk, symbolises sacrifice; big head – symbolic of auspiciousness, strength, and intellectual prowess; large ears- listen more; small eyes – concentration; small mouth – talk less; trunk – high efficiency and adaptability. In His upper-right-hand, He carries an axe to cut away difficulties and obstacles; in His upper-left-hand, He holds a "goad" or noose, to pull the devotees nearer to the highest goal; in His lower-left-hand He carries a sweet (ladoo), which indicates the sweetness of the spiritual path. His lower-right-hand is almost always extended in a gesture of blessing to protect on spiritual path to supreme. *Ganesh Chaturthi* or *Vinayaka Chaturthi* is one of the largest socio-religious Hindu festivals in India, celebrated on the occasion of birthday of Lord Ganesh. The festival is observed in all states of India but the nature and elaborate festivity is remarkable in states of Maharasthra (Mumbai), Andhra Pradesh, Karnataka, and Goa. It is also celebrated in Nepal, and by the immigrant Hindus in Singapore, Thailand, Myanmar, Fiji, Cambodia, USA, and Canada. The main attraction of the festival is the colourful Ganesh idol (made up of clay or plaster of Paris) which ranged from six inches to 70 feet, placed in decorated home or under huge temporary *mandaps* (pandals). Ganesh is known by 108 names and there are several famous Ganesh temples in different parts of India. *Ganesha Purana* and the *Mudgala Purana* are the two core Hindu religious scriptures (AD 1100-1400) that are dedicated to Ganesh.[29] Courtright[30] provided an excellent mythological review of Lord Ganesh.

Image. Lord Ganesh, a pictorial depiction.

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