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BRIEF RESEARCH COMMUNICATION

Recurrent mass hysteria in schoolchildren in Western Nepal

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ABSTRACT

Aim: The aim was to study the clinical presentation and factors contributing to “recurrent mass hysteria” among rural school-going children.

Materials and Methods: A visit to a school in a remote hilly district of Puythan, Nepal, was carried out to assess students experiencing mass dissociative/conversion symptoms over a short period of time. There was a second incidence of “mass hysteria” on the day of visit. Regular follow-up of these students was done telephonically for the next 1 year.

Results: The total number of child victim of “mass hysteria” was 47, with majority of them being girl students. Historically, at least two more attacks of “mass hysteria” were noted in the schoolchildren in the preceding years. Follow-up study revealed no further attacks of similar “mass attacks” over the following 1 year.

Conclusion: Supporting, assuring, counseling, and educating these children, their parents and teachers and conducting public awareness programs are the mainstay of treatment of mass hysteria.

Key words: Mass hysteria, Nepal, recurrent hysteria, schoolchildren

INTRODUCTION

“Mass hysteria,” also known as “mass psychogenic illness” (MPI), “mass sociogenic illness,” or “mass psychogenic disorder,” is defined as “the rapid spread of illness signs and symptoms affecting members of a cohesive group, originating from a nervous system disturbance involving excitation, loss, or alteration of function, whereby physical complaints that are exhibited unconsciously have no corresponding organic etiology.”[1]

Mass hysteria has been reported in the past from various parts of the world including Nepal.[2-5] We present here a brief study on “recurrent mass hysteria,” which occurred in a remote village school in western Nepal.

MATERIALS AND METHODS

Location
The first author (RP) and other team members were called to assess a mass incidence that happened in a Madhyamik Vidyalaya, in a hilly Puythan district of western Nepal. The total number of students enrolled in the school, in the year 2018, was 435 (244 girls and 191 boys).

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The eventful day
On a fateful morning in the month of June 2018, a 9-year-old girl student complained of headache and pain abdomen. Soon, she started crying and shaking her body in the class. She shouted that a white dressed lady with big teeth was trying to drag her. Later, she fell on the floor and rolled all over and over for some period. As she continued with such behavior, soon other students in the class and neighboring classes followed her. Over a period of the next few hours, on that particular day, a total of 47 children were noted to have abnormal movements and behavior and verbal outbursts suggestive of “MPI.” Students were segregated, and the school was declared closed before the schedule time. During the next few hours, most of these students returned to a state of normalcy. Their parents/guardians were called, and they were sent back to home. Some of these students experienced recurrent dissociative/conversion symptoms, intermittently, in the days ahead during school hours, which prompted the school authority to ask for medical help from the district health board.

The interview day
When we reached the destination, we found a huge crowd gathered in the school premises including parents of the affected students, other family members, students, teachers, local politicians, and media persons. We asked the school authority to disperse the crowd and started interviewing all those affected students one by one. As we finished interviewing about ten students, we were informed that some students began to show varied conversion and dissociative symptoms. We immediately rushed to the classroom where the incidence was unfolding. We tried to separate the affected students so that the incidence did not get to spread further. Initially, eight students were segregated in a separate classroom. However, the abnormal behavior spread rapidly among other students in a short time span. We video recorded the behavior of some of these children. These children were demonstrating various symptoms as mentioned in Table 1. We suggested the school authority to declare closure of the school for the day and the parents of the affected children were called to take them back home.

Interventions done
We stayed there for a period of 2 more days. We spoke to all the parents of the affected children and all the teachers in the school. We arranged individual counseling sessions for all the children affected, followed by counseling the parents of the affected students. A group counseling session was done including all parents, teachers, local faith healers, and other community people, highlighting the need to dispel the myths and challenging them, as and when necessary, that is prevailing in the area as an explanation of causation of such mass attacks of psychogenic illness.

| Symptoms                        | Male | Female | n (%) | P/Fisher’s exact test |
|---------------------------------|------|--------|-------|-----------------------|
| Loss of consciousness          | 3    | 27     | 30 (63.8) | 0.02*                |
| Twisting of limbs               | 7    | 21     | 28 (59.5) | 0.7                  |
| Pseudo-seizure (PNES)           | 5    | 21     | 26 (55.3) | 0.7                  |
| Breathing difficulty           | 5    | 19     | 24 (51.1) | 1.0                  |
| Shouting                        | 3    | 19     | 22 (46.8) | 0.2                  |
| Chest tightness                | 1    | 18     | 19 (40.4) | 0.03*                |
| Pain abdomen                    | 3    | 15     | 18 (38.3) | 0.7                  |
| Running/wandering              | 3    | 14     | 17 (36.2) | 0.7                  |
| Headache                       | 7    | 6      | 13 (27.6) | 0.002**              |
| Irrelevant talks               | 3    | 10     | 13 (27.6) | 1.0                  |
| Neck pain                       | 2    | 4      | 6 (12.7)  | 0.6                  |
| Past history                    | 2    | 11     | 13 (27.6) | 0.7                  |
| Family history                  | 1    | 5      | 6 (12.7)  | 1.0                  |

*Significant at 0.05 level, **Significant at 0.01 level. PNES – Psychogenic Non-Epileptic Seizure

Past history
The school experienced recurring similar mass episodes in the past also. In the month of August 2016, 12 students were afflicted by mass conversion/dissociative symptoms. Moreover, again in the month of July 2017, a total of 18 students were affected by similar “mass hysteria.”

Follow-up
Though our team had planned for a follow-up visit, it could not get materialized. We kept contact with the principal of the school over telephone and with the parents of some of the affected children, as a follow-up measure. Though there were reports of sporadic conversion/dissociative symptoms among students, no further “mass hysteria” was reported from the school till the submission of the present article.

As we decided to publish our experience in a “research communication,” ethical committee clearance was taken and permission was obtained from the institutional review board for the same.

RESULTS
The total number of students in the school, at the time of assessment, was 435. Forty-seven (10.8%) of them suffered mass conversion/dissociative symptoms. As revealed in Table 2, girls formed the predominant patient population (78.7%).

As revealed in Table 1, predominant presenting symptoms during mass attacks were fainting spells/loss of consciousness, twisting of limbs, pseudo-seizure (PNES), breathing difficulty, shouting/crying loud, chest tightness, aimless running/wandering, headache, etc.

Girl students significantly presented with the symptoms of fainting attacks \( (P = 0.02) \) and chest tightness \( (P = 0.03) \), whereas boys mostly complained of severe throbbing headache \( (P = 0.002) \). Breathing difficulty and
pseudo-seizure was a common presentation in both boys and girls.

DISCUSSION

The Diagnostic and Statistical Manual of Mental Disorders (DSM) Fourth Edition, Text Revision (IV-TR) does not have specific diagnosis for “MPI,” but the text describing conversion disorder states that “in epidemic hysteria,” shared symptoms develop in a circumscribed group of people following “exposure” to a common precipitant. No reference is available in the International Classification of Diseases (ICD)-10 or DSM-V regarding mass hysteria or MPI. The ICD-10 states that “dissociative disorders have previously been classified as various types of “conversion hysteria,” but it now seems best to avoid the term “hysteria” as far as possible, in view of its many varied meanings.” Conversion hysteria, conversion reaction, hysteria, and hysterical psychosis have been included in dissociative (conversion) disorders category in the ICD-10.

MPI involves the spread of illness symptoms through a population where there is no viral or bacterial agent responsible for contagion. MPI is distinct from other types of collective delusions in that MPI involves physical symptoms. Our patient population was predominantly represented by young girls (78.7%). The same has been reported by other authors from Nepal. Available literature on mass hysteria in children showed that younger girls were more susceptible, but disturbance was more severe and lasted longer in older girls.

British psychiatrist Simon Wessely distinguishes between two forms of MPI. One, “mass anxiety hysteria,” consists of episodes of acute anxiety, occurring mainly in schoolchildren. Prior history of stress/tension is absent, and there is rapid spread by visual contact. The other one is “mass motor hysteria,” which consists of abnormalities in motor behavior. It usually occurs in any age group, and prior history of stress/tension is present in such cases. Initial cases can be identified, and the spread is gradual. Symptoms of “MPI” in our case fit into a combination of pictures of both mass anxiety hysteria and mass motor hysteria.

Intense media coverage seems to exacerbate outbreaks. In our case also, as we reached the school to assess the affected children, we found a huge crowd in the school premises on the news of arrival of mental health experts, and there was a second attack of “MPI” among these schoolchildren.

Various studies have suggested that the episode of mass hysteria occurs after an environmental event of trigger, such as an odor or smell. However, no such triggering factor was found in our study.

No specific drug treatment is there in mass hysteria. Reassuring children is the primary therapy. Individual counseling, group and parental counseling, support, and education at various levels are the mainstay of treatment. Most children experience rapid resolution of symptoms once they are removed from the environment in which the outbreak started.

CONCLUSION

We have few published studies on mass hysteria in children from Nepal till date. Our report is significantly different from other reported outbreaks in that there were recurrent episodes of “mass hysteria” in the same school over the period of 3 consecutive years. We concluded the study findings as being a special case of “recurrent epidemic of mass hysteria.” Our study differed from other published studies in that we did not find any specific precipitating factors associated with the onset of the outbreak, which has been routinely mentioned in the available literature.

Follow-up study revealed no further episode of “mass hysteria” over the next 1 year, though episodes of isolated conversion/dissociative symptoms were reported from the school. Supporting, assuring, counseling, and educating these children, their parents and teachers, local faith healers, and prominent citizens in the locality are the mainstay of treatment and management of mass hysteria. Increasing public awareness programs about the illness

### Table 2: Demographic characteristics of the students (n=47)

| Characteristics | n (%)/mean (SD) |
|-----------------|----------------|
| **Sex**         |                |
| Male            | 10 (21.3)      |
| Female          | 37 (78.7)      |
| **Age (years)** |                |
| Male            | 10.8 (2.3)     |
| Female          | 11.3 (2.1)     |
| Total           | 11.2 (2.1)     |
| **Age group (years)** |       |
| 8-10            | 10 (20.28)     |
| 11-13           | 33 (70.21)     |
| 14-16           | 4 (8.51)       |
| **Education**   |                |
| Class 3         | 2 (4.3)        |
| Class 4         | 6 (12.8)       |
| Class 5         | 5 (10.6)       |
| Class 6         | 26 (55.3)      |
| Class 7         | 7 (14.9)       |
| Class 8         | 1 (2.1)        |
| **Caste**       |                |
| Brahmin         | 4 (8.5)        |
| Chhetri         | 18 (38.3)      |
| Magar           | 6 (12.8)       |
| Kami            | 19 (40.4)      |
| **Religion**    |                |
| Hinduism        | 41 (87.2)      |
| Others          | 6 (12.7)       |
should be an integral part of short- and long-term planning in avoiding the repetition of similar mass hysteria among children in future.

Mass hysteria has been reported from all over the globe, from different cultural, religious, and ethnic population. Illiteracy, poverty, and difficulty to reach modern treatment facility probably perpetuated the repeated episodes of “mass hysteria” in the present setup.

Finally, though “mass hysteria” has been reported from various geographical areas around the globe, no reference is available in the ICD-10 or DSM-V regarding mass hysteria or MPI. The authors suggest that it is high time to acknowledge “mass hysteria” as a specific mental and behavioral disorder and that there is a strong need to form a specific diagnostic criteria for such “MPI” so that it will be better understood and reported in academic literatures in future.

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Conflicts of interest
There are no conflicts of interest.

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