

A Case for Anemia as the Fundamental Cause of Mass Hysteria

Mass Hysteria Categorization

Can be broken into two broad (by no means exclusive) categories:

- 1) **Collective delusions:** mass paranoia, anxiety, panic, around some rumoured threat. These can sometimes turn into a good ol' witch hunt. Children and adults seem affected. Perhaps women are more affected than men but not to the same extent as in category 2. People generally don't display physical symptoms or psychological symptoms beyond those of anxiety and panic.
- 2) **Mass Hysteria:** Affects children, particularly teens, and young adults the most and females far more than males. Physical and mental symptoms. There's an element of psycho-social contagion whereby the perception of other peoples' symptoms sets off more people to manifest similar but often different symptoms. This category can be further split into two (by no means exclusive) subcategories.
 - A. **Motor hysteria:** typically a buildup of stress in the community before many people have certain motor symptoms of restlessness like dancing, twitching, writhing, wandering.
 - B. **Anxiety Hysteria:** often a sudden stressor in one or a few individuals. Somatic symptoms are common, like fainting, vomiting, body pain, and headaches. Mental symptoms are common, like dissociation, delusions, hallucinations, poor cognition, anxiety, and panic. There is always a form of hyperventilation, like hyperventilation proper, crying, screaming, or laughing.
 - i) **Inflammatory:** perhaps a further subcategory where many of the symptoms revolve around inflammation like redness, itching, rashes, conjunctivitis. Note the Alabama and Kosovo cases.

In *Mass Delusions and Hysterias Highlights from the Past Millennium* Bartholomew summarizes as so:

"Collective delusions are typified as the spontaneous, rapid spread of false or exaggerated beliefs within a population at large, temporarily affecting a particular region, culture, or country. Mass hysteria is most commonly studied by psychiatrists and physicians. Episodes typically affect small, tightly knit groups in enclosed settings such as schools, factories, convents and orphanages (Calmeil 1845; Hirsch 1883; Sirois 1974). Mass hysteria is characterized by the rapid spread of conversion disorder, a condition involving the appearance of bodily complaints for which there is no organic basis. In such episodes, psychological distress is converted or channeled into physical symptoms. There are two common types: anxiety hysteria and motor hysteria. The former is of shorter duration, usually lasting a day, and is triggered by the sudden perception of a threatening agent, most commonly a strange odor. Symptoms typically include headache, dizziness, nausea, breathlessness, and general weakness. Motor hysteria is prevalent in intolerable social situations such as strict school and religious settings where discipline is excessive. Symptoms include trance-like states, melodramatic acts of rebellion known as histrionics, and what physicians term "psychomotor agitation" (whereby pent-up anxiety built up over a long period results in disruptions to the nerves or neurons that send messages to the muscles, triggering temporary bouts of twitching, spasms, and shaking). Motor hysteria appears gradually over time and usually takes weeks or months to subside (Wessely 1987; Bartholomew and Sirois 1996). The term *mass hysteria* is often used inappropriately to describe collective delusions, as the overwhelming majority of participants are not exhibiting hysteria, except in extremely rare cases. In short, all mass hysterias are collective delusions as they involve false or exaggerated beliefs, but only rarely do collective delusions involve mass hysteria as to do so, they must report illness symptoms."

[^]A good summary though I disagree with many of his assumptions and interpretations.

The cases summarized below are centred around type 2B mass anxiety hysterias. I believe the contextual evidence makes it obvious that anemia is at the root of these issues and that understanding this connection can bring great insights into other sociological matters like: authoritarianism, wokeness, gender dysphoria, propaganda, and more.

My Argument

I argue that at the root of mass hysteria is anemia, that anemia makes people susceptible to it. I do not argue there are no social and psychological elements to mass hysteria, but I argue that the social and psychological elements are greatly over emphasized by all experts who interpret these phenomena. See my fire analogy for the distinction. I would go as far as to say that the researchers, psychologists, and commentators on the subject of mass hysteria come up with their explanations in the same delusional manner as the locals who blame evil spirits. For the locals, the highest conceptions for explaining complex phenomena are within the spiritual realm while understanding of the psychological and physiological is limited. Experts in the psychological and sociological realms can only explain these phenomena in those terms. Those are the lenses through which they perceive the world. They don't seem to understand (or care) about physical health and physiology.

We tend to need an explanation for things. This is especially the case when the consequences are high. Perhaps any old narrative is good enough to summon resources and muster community support, but get the narrative wrong while being 100% sure you're right, and you might never find the solution while actively demonizing the earnest attempts of others who see things through a different lens. The people who study mass hysteria seem to me to only be doing the same thing the locals do, but with fancier terminology and a highbrow confidence rather than a fervent confidence. They'll never figure out how to fix the problem—no one will—until they realize the physical roots.

I believe that looking at the context of the pattern makes it overwhelmingly obvious that poor physical health, particularly anemia, is at the root of mass hysteria. If you have only people with many risk factors for anemia presenting with many symptoms of anemia then it is probably anemia, one of the world's most common health issues.

The Pattern

1. In pre-pubescent children, reports suggest males and females are equally likely to be affected.

My interpretation: Because they are rapidly growing children of both sexes are prone to anemia.

2. In pubescent children, teenagers, and young adults, females are far more likely to be affected.

My interpretation: Due to menstruation and still rapid growth females are far more likely to suffer anemia. Males are less likely at puberty because testosterone greatly improves iron absorption/metabolism and erythropoiesis.

3. Mean age of sufferers seems to be from 10-16 years old.

My interpretation: This is exactly what you would expect looking through the lens of anemia.

4. Almost exclusive to low socio-economic regions.

My interpretation: It basically only happens in places where they can't afford to eat much meat and subsist on grains.

5. A stressor often precedes the prodromal case(s).

My interpretation: Researchers are always looking for a psychological stressor to these cases. In poor areas especially, you will always be able to find some stressor that happened recently. In no cases I have encountered did the people in the area blame a stressor, only the researchers. I agree that stressors would increase risk. Psychological stress takes a toll on overall health. Stress (by definition really) is that which depletes the body of nutrients. And perhaps the locals (victims in particular) aren't in a place to recognize the stressors, but overall I believe the researchers put too much emphasis on this to make their psychological case.

6. Delusions of toxic scents. Sometimes people give different descriptions of the scent.

My interpretation: The perception of bad odours are deeply embedded within us as threatening. I hypothesize that the sufferers, in addition to having faulty nervous systems and perceptions due to a lack of oxygen, are getting many physiological signals of threat from their poor state, combined with later signals from the outer world when everyone around them starts to panic, and it makes them more prone to hallucinate a bad odour. In some of the cases, different people describe different scents that don't match with what the others described, but they all perceived the scents to be threatening. To put it simply, they're hallucinating scents.

7. Relatedly, rumours and panic go around easily about some evil-doing by people and/or spirits.

My interpretation: this ties into the above interpretation. These are likely hallucinations and delusions produced by hypoxic, dysfunctional brains in a state of panic.

8. Symptoms always involve a form of hyperventilation: hyperventilation proper, screaming/yelling, crying, laughing.

My interpretation: hyperventilation is the most reliable way of inducing feelings of dissociation. Low CO₂ causes increased hemoglobin-oxygen affinity, vasoconstriction, and neuronal depolarization. With all this happening in the cortex, the symptoms are not surprising at all, but what you would expect.

9. There is always dissociation of some sort: altered senses/perceptions, derealization, depersonalization, giddiness, hysteria

My interpretation: Hyperventilating causes these feelings and mental states. Many can surely relate—I know I can—to experiencing near delusional giddiness (giddiness has been labelled as a symptom of dissociation) from laughing too much while exhausted.

10. There are often cases of hallucination (auditory/visual/olfactory) and schizophrenic type behaviour.
11. Trance or possession is common.
12. Poor cognition in sufferers before during and after the event: inability to focus, trouble learning in school, inability to reason, confusion, poor memory, poor facial recognition, perceptual issues, falling over while trying to move, irrelevant and incomprehensible speech.

My interpretation: There are a whole bunch of clues for this throughout the cases. The brain needs tons of oxygen. When oxygen is limited, higher order functions will suffer so more vital brain processes can continue. Even within the brain, stress changes where blood will flow to, shunting more towards the basic processes of survival.

13. Movement problems are common: running/wandering, twisting of limbs, spasms, jerky movements, restlessness.

My interpretation: This looks similar to mania and seizure where hypoxia causes excess glutamate levels. People with schizophrenia and other mental illnesses are more likely to have movement disorders, possibly because of imbalanced blood pH causing twitches. Restless leg syndrome is also a classic sign of anemia.

14. Pain and headaches are common.

My interpretation: these are common symptoms of anemia and somatic symptom disorders.

15. Nausea, vomiting, abdominal pain is very common.

My interpretation: these are common symptoms of anemia and somatic symptom disorders.

16. Fainting, fallings, dizziness, and loss of consciousness is very common.

My interpretation: these are common symptoms of anemia and somatic symptom disorders.

17. Pseudo-seizure is moderately common.

My interpretation: seizures are caused by a lack of brain oxygen/energy. Hypoxia causes excess glutamate in the nervous system.

18. Difficulty breathing chest tightness, sore throat, coughing.

My interpretation: feelings of suffocation are common in anemia. Respiratory disorders and coughing are associated with anxiety. Similarly to how chemoreceptors monitor blood chemistry mechanoreceptors monitor mechanical ventilation. Anxiety increases if breathing difficulties are being experienced.

19. Anxiety, fear, and panic are ubiquitous.

My interpretation: common symptoms of anemia and inadequate respiration.

20. Fever is moderately common.

My interpretation: Hallucinations, delusions, and poor cognition are known to occur during fevers.

21. Inflammation, redness, conjunctivitis, rashes, itching/pruritis, myalgia, and arthralgia occur in some cases.

My interpretation: I don't know how all these signs of inflammation play into things, but inflammation can be both a sign and a cause of hypoxia.

Fire Analogy

On one continent the forests are lush green with growing trees that are well hydrated. On another continent the forests are dead and dried out. The latter continent has way more forest fires than the former. Investigators, experts in the ethereal nature of fire and wind, go to the latter continent to try to figure out what is causing all these forest fires and what they can do about it. They observe how the fire spreads from tree to tree and affects certain tree types more than others. They conclude that the solutions should be to reduce the number of open flames, to separate trees when one goes up in flames, and to use firefighting techniques when necessary. Such investigators wouldn't be wrong, but they would be idiots.

Case Summaries

Nepal 2018: The 3rd Time They've Been Charmed

Yr: 2018	Location: Western Nepal, remote village			Community: School
Total#: 47	%Female: 79	Age Range: 8-16	Mean Age: Not available	SES: Low
Risk Factors: Pubescent, Female, 87% Hindu (vegetarian diet), poor				

Symptoms: Loss of consciousness, Twisting of limbs, Pseudo-seizure (PNES), Breathing difficulty, Shouting, Chest tightness, Pain abdomen, Running/wandering, Headache, Irrelevant talks, Neck pain, Past history, Family history, first girl hallucinated

Table 1: Clinical/symptom profile of the affected children (n=47)				
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

Description:

3rd mass hysteria in three years (one in each summer). There was no delusional/environmental trigger such as a smell. “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 “Mass Psychogenic Illness.”

Relevant Excerpts: 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.

Reesor's notes: the first girl had physical symptoms first before having mental ones. This was a common theme in the cases.

Link: <https://pubmed.ncbi.nlm.nih.gov/32773876/>

Malaya 1973: In Need of a Factory Reset

Yr: 1973	Loc: Malaya - village settings			Com: Television Factory
Total#: 25 interviewed, 34 had attacks, 84 total affected	%Female: 100	Age Range: 16-31 For interviewed girls	Mean Age: 20 For interviewed girls	SES: low
Risk Factors: teen-young adult, Female, poor, timid personality				
Symptoms: fainting, screaming, crying, laughing, headache, confusion, trance, hallucinations, paranoia, possession,				
Description: 25 women aged 16-31 had hysteria one day working in a factory. They were poor/lower class. 2 thirds of them experienced visual, auditory, or even olfactory hallucinations. Most of the girls were already "timid" anxious and easily startled. There was screaming, crying, and many girls fainted. One of the cases "screamed and laughed continuously" when she had reached home and didn't recognize anyone. Many women were in a trance. Some felt possessed and a few talked like they were.				
Relevant Excerpts: Later it spread to two neighbouring factories.				
On reaching home she did not recognize anyone. She screamed and laughed continuously.				
There she fainted. On awakening she saw a tall black 'thing', the head of which was not visible. This vision waved a black hairy hand and beckoned to her. She fainted again. Later she was told that she shouted and screamed and struggled with the men who were grappling with her.				
A.S. remained in a trance-like state for a week. One moment she was quiet and still and then she started shouting and screaming and threatened her family in her strange voice.				
Reesor's notes: Facial recognition is often unrecognized as being connected to hallucination and poor cognition. There are multiple examples of poor facial recognition here.				
The pattern of apnea/stillness/quiet switching back and forth to panic and hyperventilation is demonstrated here in a different way when describing A.S. as quiet and still then screaming and threatening. We see this coming and going with schizophrenia and panic attacks. It comes and goes with the breath.				
Link: http://smj.sma.org.sg/1601/1601smj5.pdf				

Tanganyika 1963: You Wouldn't Get It

Yr: 1963	Location: Tanganyika			Community: Schools and villages
Total#: 480+	%Female: See nuances below	Age Range: ~12-young adults	Mean Age: ?	SES: low

Risk Factors: Pubescent, Female, poor

Symptoms: laughter, screaming, crying, hysteria, restlessness, fear, violence, dissociation and altered perceptions, loss of focus, fever

Description: Outbreak of laughter, screaming and crying started at an all-girls school affecting 95/159. The school was shut down after 1.5 months reopened then had another outbreak (57/159) for over a month. Between school outbreaks it affected 217 (majority young adults, remainder school kids) in a village of 10,000 55 miles west. During second outbreak another all-girls school shutdown with 48/154 affected. After the second shutdown 1 girl spread it to her immediate family (sister, brother, mother-in-law). It seemed to also spread to nearby villages as well. Two boys schools shutdown but it was not said if that was because the boys were affected and if so how many. 60 students at another school (100 miles north) were later affected.

Relevant Excerpts:

No literate and relatively sophisticated members of society have been attacked.

No fatal cases have been reported. Symptoms have lasted from several hours in a few cases up to a maximum of 16 days. During this time the patient is unable to perform her normal duties and is difficult to control. The majority of those affected have had more than one attack separated by a period of normality. The maximum number of attacks was four. No serious sequelae have been reported. However, school teachers state that for several weeks **after recovery the girls are unable to attend well to their lessons**.

The incubation period is from a few hours to a few days. The onset is sudden, with attacks of laughing and crying lasting for a few minutes to few hours, followed by a respite and then a recurrence. The attack is accompanied by restlessness and on occasions violence when restraint is attempted. The patient may say that things are moving around in the head and that she fears that someone is running after her.

Physiology of laughter from another paper: In addition, during laughter there is a pronounced antagonism between the opposing sets of muscles for inspiration and expiration, which are normally working alternately. **This produces the extraordinarily high levels of expiration** and subglottal air pressure in laughter, up to five times as much as in normal phonation (Ohala 1990; Schroetter 1925), which are **usually followed by long periods of apnea** (Lloyd 1938).

in June 1964, this plague of laughter spread through villages 'like a prairie fire.'

Reesor's notes: "No literate or sophisticated people affected" is typically thought of through a psychological lens but they are also less likely to be malnourished.

Anemia is related to poor attention as the brain needs lots of oxygen for higher order functions.

A pattern of respite and recurrence is found in panic attacks and the more intense symptoms of schizophrenia (they come and go). Basically, these laughter fits share the same pattern of hyperventilation at times and apnea at other times.

Link: An Epidemic of Laughing in The Bukoba District of Tanganyika BY A. M. RANKIN

https://journals.co.za/doi/pdf/10.10520/AJA00089176_6171

The laughter of the 1962 Tanganyika 'laughing epidemic' CHRISTIAN F. HEMPELMANN (for additional info)

https://www.researchgate.net/profile/Christian-Hempelmann/publication/249929567_The_laughter_of_the_1962_Tanganyika_%27laughing_epidemic%27/links/5e163534299bf10bc39db3c8/The-laughter-of-the-1962-Tanganyika-laughing-epidemic.pdf

Alabama, USA 1973: Rash Conclusions

Yr: 1973	Location: Alabama, rural			Community: elementary school
Total#: 98	%Female: ?	Age Range: 95 students Gr. 8 or less, and 3 teachers	Mean Age: Under 14	SES: ?
Risk Factors: pubescent				
Symptoms: pruritus, rash, headache, cough, weakness, sore throat, abdominal pain, sore or burning eyes, arthralgia, shortness of breath, numbness, fainting, nausea, vomiting, and diarrhoea.				
Description: In May, 1973, 95 students and 3 teachers at an elementary school in Alabama became ill with pruritus or rash and with one or more of the following symptoms: headache, cough, weakness, sore throat, abdominal pain, sore or burning eyes, arthralgia, shortness of breath, numbness, fainting, nausea, vomiting, and diarrhoea. More than 50 persons received care at a hospital emergency room. Four and seven days later, 18 and 14 individuals, respectively, most of whom had been ill on the first occasion, sought medical attention for the same problems. An extensive epidemiological investigation was undertaken, but infection, allergy, and other organic causes were incompatible with the epidemic. Hyperventilation, an apparent visual chain of transmission, and recurrences at widely scattered places and times suggest mass hysteria.				
Relevant Excerpts:				
Reesor's notes: I could only access the abstract (pasted in description).				
Link: https://www.sciencedirect.com/science/article/abs/pii/S0140673674902323				

Georgia, USA 1988: Mom, You're Embarrassing Me

Yr: 1988	Location: Georgia near Atlanta			Community: Elementary School
Total#: ?	%Female: ?	Age Range: <14	Mean Age: ?	SES: ?
Risk Factors: Pubescent, Female,				
Symptoms: pallor, dark circles under the eyes, headaches, fatigue, nausea, and occasional vomiting				
<p>Description: The episode began during a routine social gathering of parents and students at the school cafeteria in early September. A students mother commented that, ever since the term began, her child had experienced numerous minor health problems and looked pale. Other mothers at the meeting noted similar signs and symptoms in their children since the beginning of the school term: pallor, dark circles under the eyes, headaches, fatigue, nausea and occasional vomiting. They soon suspected that something in the school building was to blame, a view confirmed on October 11 when the school was evacuated after a minor natural gas leak occurred during routine maintenance. When intermittent minor gas leaks continued over the next month, concerned parents picketed the school and appealed to the local media, which highlighted their fears. After negative environmental and epidemiological studies, Phalen et al. (1989) concluded that mothers had almost exclusively redefined common and ever-present childhood illnesses, while the children in question neither sought attention nor were overly concerned with their symptoms, maintaining high attendance levels throughout the term.</p>				
Relevant Excerpts:				
<p>Reesor's notes: Given how good mothers are at detecting changes in their children and how underrated they are for this I lean towards believing them. Their daughters probably were experiencing these symptoms, but because they are pubescent females, not because the school was toxic. Anxious mothers are probably anemic and so their children would be more likely to also be anemic given they generally eat the same foods. I could only access the abstract and a description from another review paper.</p>				
Link: https://www.sciencedirect.com/science/article/abs/pii/S0140673689919764				

Jordan 1983: Fainting Girls

Yr: 1983 March-April	Location: West Bank, Jordan			Community: schools in several adjacent villages
Total#: 947	%Female: mostly school girls	Age Range:	Mean Age:	SES: Low
Risk Factors: Pubescent, Female, poor				
Symptoms: fainting, headache, abdominal pain, and dizziness				
Description: Between March and April 1983, 947 mostly female residents of the Israeli-occupied Jordan West Bank reported various psychogenic symptoms: fainting, headache, abdominal pain, and dizziness (Modan et al., 1983). The episode was precipitated by poison gas rumors and a long-standing Palestinian mistrust of Jews. The medical complaints appeared during a fifteen-day period, amid rumors and intense media publicity that poison gas was being sporadically targeted at Palestinians. The episode began in, and was predominantly confined to, schools in several adjacent villages. In one incident on March 27, sixty-four residents in Jenin were rushed for local medical care after believing that they had been poisoned when thick smoke belched from an apparently faulty exhaust system on a passing car. In all, 879 females were affected. Following negative medical tests, it became evident that no gassings had occurred, die hypothesis was discredited, and die transient symptoms rapidly ceased.				
Relevant Excerpts:				
Reesor's notes: All the risk factors and symptoms suggest anemia.				
Link: https://europepmc.org/article/med/4014505 description: http://centerforinquiry.s3.amazonaws.com/wp-content/uploads/sites/29/2000/05/22164854/p20.pdf				

Kosovo 1990: Strange Case in Kosovo

Yr: 1990	Location: Serbian province of Kosovo			Community: High schools					
Total#: at least 4000	%Female: (estimated) 66	Age Range: Mostly teens, some adults too	Mean Age: ?	SES: Low					
Risk Factors: Teen, Female, poor, Albanian (only Albanians affected for some reason, not Serbs)									
Headache Dizziness Impeded respiration Weakness/ adynamia Burning sensations Cramps Retrosternal/ chest pain Dry mouth Nausea									
Symptoms:	Red colour of face/ears	Conjunctivitis/ conjunctivae	Tachycardia	Screaming	Waving hands	Frowns	Jerks, finger/hands	High blood convuls.	High pressure
.....									
Headaches, weakness, fainting, psychogenic attacks, spasms, hyperventilation, mydriasis									
Description: On March 14, 1990, at least four thousand residents in the Serbian province of Kosovo, in the former Yugoslavia, were struck down by a mystery illness that persisted for some three weeks. According to Dr. Zoran Radovanovic (1995), the head of the community medicine faculty at Kuwait University, the symptoms were psychogenic in nature and prompted by ethnic Albanian mistrust of Serbs. The transient complaints were almost exclusively confined to young adolescent ethnic Albanians, and included headache, dizziness, hyperventilation, weakness, burning sensations, cramps, chest pain, nausea, and dry mouth. The episode began at a high school in Podujevo, and rapidly spread to dozens of schools within the province. An outbreak of respiratory infection within a single class appears to have triggered fears that Serbs may have dispensed poison. Influential factors included rumors, the scrutinization of mundane odors and substances, visits by health authorities that served to legitimate fears, ethnic tension between Serbs and Albanians, and mass communication. The dramatic proliferation of cases across the province on March 22 coincided with the implementation of an emergency disaster plan whereby ethnic Albanians seized control of public health services.									
Relevant Excerpts: Kosovo has been by far the poorest part of Serbia and of the former Yugoslavia. Along with the Republic of Albania it can be classed the poorest region of Europe. Its per capita income used to be several times lower than in more developed parts of Yugoslavia. In 1990, Kosovo's birth and infant mortality rates were as high as 27.8 and 34.4 per 1,000, respectively, and the crude rate of natural increase equaled 23.6 per 1,000 [13]. Over time there					Although fragmentary, these data have a consistent pattern: the female/male ratio appears to have been 2/1 while, with some exceptions, teenagers were the age group affected.				
Reesor's notes: This may be a bit of an outlier. The story behind it is strange with many different reports of smells. Also a slightly lower female percentage and symptoms of inflammation like red face, red conjunctiva, burning sensations, and high blood pressure.									
Link: https://beharselmani.com/ws/media-library/0e11e593b7274bd8ba13e654f34040f9/z.-rado-giftattacke.pdf									

Nepal 2005: Another School in Nepal

Yr: 2005	Location: Nepal – rural eastern Nepal			Community: High school
Total#: 70	%Female: 100	Age Range: 10-16	Mean Age:	SES: low
Risk Factors: Pubescent, Female, Hindu (vegetarian diet), poor				
Symptoms: abnormal behaviour, laughing for no reason, wailing/crying, loss of recollection, clenched teeth and grip, disorganized behaviour,				
Description: "The first case involved a 16 years old girl, daughter of the head master of a school. After hearing the death of a "mad" (psychotic) woman, whom she had met 2 weeks ago, the girl developed a brief spell of disorganized behaviour beside the tube well in her school. Soon after, other girls manifested almost similar behaviour in school at different places. In all 70 girls out 300 were afflicted with problem. Boys were spared. Out of 15 such incidents investigated, only 3 cases were precipitated by stressful events. Even though they were heterogenous in terms of diagnosis, the victims and carers believed that they were all the same, the effect of the evil spirit of the "mad woman"				
Relevant Excerpts:				
<p>She would laugh suddenly without any apparent reason. When her friends tried to talk to and caress her, she held them and did not let them off. She clenched her teeth repeatedly, tightened her fists, shook her arms and body, went around the well and made funny noises. She appeared to be very angry and ready to attack any intruder. She also wailed, burst into tears and threw away her belongings like spectacles, pens etc. She was forcefully brought to a teacher's room, where she calmed down with no memory of the incident.</p>				
<p>Each spell of disorganized behaviour usually lasted for 20-30 minutes. However, there were a few instances when the erratic behavior continued even after going home, up to 15 days, and subsided only after a series of offerings and worship in temples. The episodes of abnormal behaviour presented periodically. There would be a cluster of such attacks for 2-3 months followed by a period of quiescence for about 1-2 months. The mean incidence was 4 per month. Approximately 70 girls from the school were affected.</p>				
<p>Most of the students belong to families that are poor, have a low level of literacy and are involved in farming. 35% of the students attending the school are females.</p>				
<p>Detailed assessment of these cases revealed that only in one case the sign and symptoms matched those of Miss A. The second case had an episode with somewhat different clinical presentation and was diagnosed as dissociative Disorder. The third case clearly had an associated organic pathology (encephalitis). The fourth case was diagnosed as acute and transient psychotic disorder. All the cases were referred to higher psychiatric centres for management.</p>				
<p>Even though there were clear differences in clinical presentation, the victims and carers believed that they were all the same and due to the "evil spirit".</p>				
<p><u>Interestingly, girls below 10 years of age were spared. They believed that small children are not affected evil spirits.</u></p>				
<p>Reesor's notes: Despite only 35% of school students being female only females were affected. The four cases upon follow up having very different etiologies just shows that these kids are ill and that yes they're also mentally ill. The psychologists' conclusions aren't much better than the evil spirit explanation. Girls below 10 years and the lore around them being spared is likely because they haven't had menses yet and so are less likely to be anemic and suffer.</p>				
<p>Link: https://journals.sagepub.com/doi/pdf/10.1177/0973134220050404</p>				

India 1997: Bad Family Hysteri

Yr: 1997	Location: India, north-Indian village			Community: Extended family
Total#:	%Female:	Age Range:	Mean Age:	SES:
Risk Factors: Pubescent, Female, 87% Hindu (vegetarian diet), poor				
Symptoms: sudden unconsciousness, aches and pains, yelling, easy fatigability, indigestion, insomnia, menstrual disturbances, occupational dysfunction, hallucination				
Description: The case of a 31-member family displaying mass hysteria in up to 10 members over two decades is reported. The mass hysteria emerged in the context of the strong religious and cultural beliefs held by this closely knit family. The varied presentations included somatoform disorder, recurrent vomiting, conversion, dissociative and possession attacks. Two members had bipolar affective disorder that was recognized by the family as a 'medical' illness in contrast to other problems attributed to religiosity. The rarity of mass hysteria in a family and issues related to its medical and social management are highlighted.				
Relevant Excerpts: Later, they heard that the faith-healer had talked of his revenge by causing pain and suffering to their womenfolk. Within a few weeks RL's mother, followed by his second aunt, developed vague ill health: aches and pains, easy fatigability, indigestion, insomnia, menstrual disturbances, occupational dysfunction etc. There was no evidence of depression in terms of sadness, undue worrying, guilt, suicidal ideation, loss of appetite/interest/libido etc. Many doctors who were consulted over the years could neither find a medical cause nor provide any relief.				
In some daily prayers and in all special prayers, two to four men of the village would have possession attacks characterized by rotatory movements of the head and body in a squatting position, initially loud invocation of the deity, later utterances as if they had been possessed by the goddess, and responses to peoples' queries about problems such as illness, theft, loss, business etc. by explaining the problems and suggesting solutions in terms of prayers and rituals. The possession would spontaneously end in 10–30min, with a patchy memory of the happenings afterward.				
Such 'dissociative' episodes recurred every few weeks or months, with repeated medical examinations revealing no abnormality.				
Reesor's notes: Basically a bunch of women in the family have dissociative disorders with symptoms like sudden unconsciousness, aches and pains, easy fatigability, indigestion, insomnia, menstrual disturbances, occupational dysfunction (all anemia symptoms) and one man in the family was bipolar with psychotic symptoms like hallucinations. It was a Hindu family in India so they were probably all vegetarian and anemic. The second excerpt shows that the whole Hindu Village clearly had high rates of poor health and probably really need some red meat. I don't know how on earth the study authors call this a hysteria/contagion and not just a family with a lot of mental illness. I suppose because the people with mental illness blame it on spirits and a dishonest faith-healer that means that their physical symptoms are all in their heads somehow?? Simply the power of seeing others with the symptoms is the supposed cause?				
Link: https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1440-1819.2002.01069.x				

Ethiopia 2019: Meatless school meal programs. Take note New York.

Yr: 2019	Location: Ethiopia, Addis Ababa			Community: school
Total#: 113	%Female: 62	Age Range: 3.5-17	Mean Age: 12	SES: low
Risk Factors: Child, Pubescent, Female, poor, food program				
Symptoms: nausea and vomiting 46%, 24% headache, 16% abdominal pain, 16% chills, 10% fever, 7% cough, 5% shortness of breath. Diagnoses: 18% tachycardia, 7% tachypnoea, 5% recordable fever.				
Description: RESULTS: On November 25, 2019 a total of 113 students were brought from two schools in Addis to Tikur Anbessa Specialized Hospital. Most were between the ages of 10 and 15 years and were female students. Their school breakfast of bread and marmalade was attributed as the cause of the episode; however only 49% of the students brought in had eaten the food.				
Relevant Excerpts: Their age range was between 3.5 to 17 years with the majority (73%) being between 10-15 years (Figure 1). Sixty-five students (62.1%) were girls.				
Upon physical examination, 18.4% had tachycardia, 6.8% had tachypnoea, 4.9% had recordable fever, and one patient had carpal spasm which was secondary to low calcium level in the blood (hypocalcaemia) following hyperventilation.				
School feeding programs were started in Addis Ababa in September 2019 to support the nutrition of students from low-income families and thus to improve their performance and decrease dropping out rates from school.				
Reesor's notes: rapid heart rate and ventilatory rate are signs of anemia/low oxygen. Low calcium in the blood is caused by high blood pH (hyperventilating) and can cause muscle spasms.				
The meals of bread and marmalade are no help against anemia.				
Link: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Mass+Hysteria+among+Beneficiary+Students+of+the+School-Feeding+Program+in+Addis+Ababa%2C+Ethiopia&btnG=				