

MASS HYSTERIA AND PERCEPTIONS OF THE SUPERNATURAL AMONG ADOLESCENT GIRL STUDENTS IN TAIWAN

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Introduction

Persons with mass hysteria present in various ways, yet the condition itself exhibits common features: sudden onset, immediate escalation and remission, and prevalence among adolescent females (Boss, 1997). Mass hysteria also occurs worldwide regardless of ethnicity, but it can be controlled effectively through early diagnosis and intervention. Pinpointing the root cause is problematic in spite of proposed theories. According to Tseng et al. (1992), who cite sexual taboos of Koro males in southern China, cultural belief systems serve as the catalyst. Boss (1997) and Wessely et al. (1990) suggest that mass hysteria is more likely a function of environmental toxicity or infectious disease, and discredit demonic possession as a significant source in contemporary Western societies. However, it remains uncertain whether or not it can be said of all others. It is agreed that people in distress tend to seek therapies and/or treatments administered in concert with cultural or personal beliefs. In Taiwan, for example, folk remedies are as popular as clinical treatment. The perception of mass hysteria is unclear since documentation is relatively non-existent. This paper presents an isolated outbreak of mass hysteria occurring in a class of 48 female students in Taiwan, and examines the situation from the perspective of both patients and families in order to contribute some understanding.

In October 2000, the student identified as the dominant character of the class, suddenly and in front of her classmates, appeared to have intense difficulty breathing and swallowing, followed by dizziness, fainting, and verbal outbursts. This was followed by a similar presentation by a group of adolescent girl classmates. They were brought to the Emergency Department of a municipal hospital. During preliminary examinations, symptoms were

unrelenting, so much so that each new attack would elicit similar behavior from others in the group. Mass hysteria was diagnosed. The consulting psychiatrist suggested that the girls be kept apart. Meanwhile, hospital staff and teachers provided reassurance, and sedatives were prescribed to prevent new attacks. Six girls required medical treatment. Three students remained ill for two weeks, and the others recovered within one week.

Methods

All girls who were directly influenced by the outbreak were asked to fill out a questionnaire, which outlined demographics, recent psychosocial stress factors and symptoms. The symptom checklist was based on studies conducted by Small (Small and Borus, 1983; Small and Nicholi, 1982; Small et al, 1991), who offered the definition of a "severe case" of hysteria as "one involving three or more symptoms during a single episode". Details also included students' thoughts as to the root cause, as well as their parents' ideas. Multiple-choice options were listed including food poisoning, air toxicity, infectious disease, psychological origin or evil forces. Students were also asked to complete the Mandarin version of Lai's Personality Inventory (LPI) (Lai, 1993), a self-administered evaluation derived from the Basic Personality Inventory (Jackson and Hoffmann, 1987) and used widely in Taiwan.

Results

All students who witnessed the initial episode, totaling 48 females averaging approximately 17 years of age, completed the questionnaire. Fifteen students (31.3%) were diagnosed as "severe cases". Twelve students (25.0%) attributed the hysteria to evil forces, thirty students (62.5%) believed the cause was psychological in nature, and one girl thought

environmental contamination was the cause. The remainder had no idea. Thirty-seven parents had been informed of the events by their daughters. Twelve of them (32.4%) believed evil forces were the root cause, twenty-one (56.8%) felt the hysteria was psychological in nature, and one parent suggested environmental contamination.

Findings according to univariate analysis indicated that the rate of mass hysteria among girls residing on campus was higher than that of girls who commuted daily ($\chi^2=5.00$, $p<0.05$), relationship problems with friends were more prevalent (Fisher's exact test, $p<0.01$), and those girls who attributed the hysteria to evil forces were more subject to mass hysteria (Fisher's exact test, $p<0.01$). Background data did not suggest that those suffering hysteria could trace the problem to religious affiliation, family relationships or economic pressures. However, according to the LPI, girls with low self-esteem ($t=-2.201$, $p<0.05$) or were more nervous ($t=-2.950$, $p<0.01$) were more vulnerable to mass hysteria. Results of regression analysis (Table 1) show three separate indicators: relationship problems with close friends, belief in evil forces, and neurotic tendencies towards mass hysteria. Parents of girls suffering distress were more likely to believe the hysteria was attributable to evil forces ($\chi^2=5.44$, $p<0.05$).

Discussion

Previous studies made in different cultural contexts suggest that outbreaks of hysteria tend to be associated with neurotic traits and relationship problems with friends. Peer pressure is generally accepted as the trigger factor (Chan and Kee, 1983). In the current instance, evaluation revealed that conflict did exist among the girls, although most were unaware of any possible connection between interpersonal troubles and the episode of hysteria. The manner in which the hysteria progressed suggested that pre-existing tensions were at play. Sirois (1974) explains that hysteria helps to relieve

tensions of existing psychological problems but that it can interfere with a rational understanding of all elements involved. Evidence supports the tendency for mass hysteria, particularly among girls who exhibit neurotic traits (McEvedy et al, 1966; Moss and McEvedy, 1966). In this case, actions of the class leader, who played a dominant role in the social ordering, were pivotal. It is likely that other girls prone to neurotic behavior, would unconsciously imitate, identify with, and/or develop similar symptoms (May et al, 1980).

It is intriguing that this study demonstrates an overriding belief in evil forces as the root cause to hysteria, a definite contrast to similar cases documented in Western cultures where toxic chemicals and environmental pollution were considered (Boss, 1997; Wessely and Wardle, 1990). In this case, relatively few students or parents attributed the episode to environmental contamination. Cases of mass hysteria have been reported in non-Western cultures over the past ten years, with belief in various causes, i.e., witchcraft in a South African Primary School (Wittstock et al, 1991), sexual taboos among males in south China (Tseng et al, 1992), fire in an Arab School (Amin et al, 1997), and photosensitive epilepsy in Japan (Radford and Bartholomew, 2001). This study suggests that folk beliefs regarding the supernatural affected the explanatory model of mental distress among young female adolescents as well as their parents. Although Taiwanese cultural attitudes can be traced to some extent to mainland China, there are differences. The supernatural plays a significant role in Taiwan, where spirit powers or "God's will" is perceived to regulate the world, cause disaster, punish or bless, whereas the Koro of southern China regard sexual taboos as more powerful (Lin et al, 1995). Another comparative study states that Taiwanese exhibit more delusions of spirit possession compared to patients from Shanghai (Kim et al, 2001).

Sensitivity to cultural beliefs of those suffering

distress is critical in administering effective psychotherapy. Although the principles and practices of modern psychiatry have been actively followed in Taiwan since the end of World War II, both traditional and Western medicine are currently practiced. Persons with social, emotional or psychological disorders often seek help simultaneously from medical professionals and folk healers (Wen, 1985). In this particular case, most parents, regardless of whether or not their daughters were affected, sought spirit intervention. Folk therapy, a popular remedy in Taiwan, coupled with Western practice was an effective approach.

It is important to note the specific methodology used in this study. Because not all who fell into the category of “mass hysteria” were seen in the hospital, this case was defined according to the symptom threshold rather than hospital visits. Secondly, an indication of three or more symptoms was used to determine the “severe case” baseline, following studies made by Small et al., since everyone in the study sample witnessed onset and were therefore at increased risk of developing symptoms. Finally, the limited sample size and cross-sectional analysis design might have inhibited interpretation.

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phenomena at a black South African primary school. *Hosp Community Psychiatry* **42**:851-3.

Table 1. Indicators for mass hysteria: logistic regression analysis^a

Independent variables	B (S.E.)	R	p	O.R. (95% C.I.)
Interpersonal conflict	2.63 (1.01)	0.29	0.009	13.92 (1.94, 99.87)
Evil forces attribution	2.86 (1.01)	0.32	0.005	17.40 (2.38, 127.17)
Neurotic traits	0.24 (0.12)	0.19	0.042	1.27 (1.01, 1.59)
Constant	-2.40 (1.40)		0.087	

^aGoodness of fit: -2Log likelihood = 34.25; $\chi^2=25.38$; df = 3; $p < 0.001$