We describe a case of Epidemic Psychological Disturbance (EPD) involving 110 pupils at a Catholic Girls Secondary School in Malawi. The EPD 'syndrome' included 'outward' behaviours (screaming, continuous laughing, crying loudly, falling down and rolling, violently threatening classmates, speaking gibberish) and 'inward' behaviours (refusing to eat, withdrawal, ballucinating, bypersensitivity to noise, and beadache at the base of the skull).

These problems disappeared when most of the affected pupils were sent home. We consider a number of possible causes for this case of EPD, including physical, psychological, traditional, institutional, and political factors. It is suggested that the present case of EPD can be interpreted as reflecting a defence and protest against certain aspects of the rapid social and political changes which Malawi has witnessed over the past few years.

Epidemic Psychological Disturbance in a Malawian Secondary School: A Case Study in Social Change

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The term epidemic psychological disturbance refers to a sociocultural-psychological phenomenon in which a group of

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people, through social contagion, collectively manifest psychological disorders within a brief period of time. Although it may take several forms such as group panic or collective delusion, its most common manifestation is an outbreak of hysteria. (Tseng & Hsu, 1980, p. 77).

Accounts of "mass hysterical" behaviour have been reported in England (Moss & McEverdy, 1966), America (Schuller & Parenton, 1943), Japan (Ikeda, 1966), South Africa (Wittstock, Rosental, & Henn, 1991), and Zambia (Zambian Ministry of Education, 1992). These outbreaks often involve fainting, hyperventilation, trance states, screaming, and headaches. Kiev (1972) has suggested that *Latab*—a Chinese term for hysteria—is attributable to sudden, overwhelming stress which might best be characterised as an "acute catastrophic reaction" (p. 75). Various authors have suggested that such reactions, which frequently occur in institutional settings, such as boarding schools, may also represent a reaction against social change (see Tseng and Hsu, 1980; Wittstock et al., 1991; Kiev, 1972).

It has been suggested that mass hysterical reactions are common in "transitional societies" (Wittstock et al., 1991) where "Western" concepts being taught in schools may conflict with traditional beliefs (Lee and Ackerman, 1980). A recent study suggested that in the context of Zambian schools, hysterical reactions are similar to "a little child who closes his eyes to keep the bogey man away!" (Zambian Ministry of Education, 1992, p. 3). The defensive function of epidemic psychological disturbance (EPD) has also been suggested by Tseng and Hsu (1980) who, in addition, interpret it as a form of group protest. The motivation for the present case study was to investigate whether there is any support for the interpretation of EPD reflecting a defence and a protest against social change.

Although there have been no professional publications concerning EPD in Malawi, we were able to trace accounts of such phenomenon in 8 schools since 1985: Malindi Secondary School (1985), Malamulo Secondary School (1988), Police Secondary School (Zomba) (1989), St. Mary's Girls Secondary School (1989), Luchenza Secondary School (1991), Providence Secondary School (1993), Stella Maris Secondary School (1993), and Thyolo Secondary School (1994). All of these cases were substantiated and reported in the local press at the time. All cases involved female secondary school pupils. The restriction of EPD in Malawi to female pupils (and usually only female schools),

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is an intriguing finding which has also been observed elsewhere (Zambian Ministry of Education, 1992; Kiev, 1972).

Stella Maris Secondary School

In June 1993 our team—composed of clinical, educational, and research psychologists—investigated a case of EPD at Stella Maris Secondary School in Blantyre, Malawi. The school enrols 540 female students who board on a Monday to Friday basis, with pupils who live far away also staying over the weekend. The school is run by the Catholic Church.

EPD at Stella Maris was first reported in the local press as follows:

At least 110 students at Stella Maris Secondary School in Blantyre have been hit by an unidentified mental illness, and some of them have been violent. (*Daily Times*, 14 June, 1993).

Nine days later, on 23 June, the Daily Times again reported:

Mental Hospital officials said yesterday the mental illness that affected students at Stella Maris had...nothing to do with food poisoning as some people feared...the problem was hysteria due to tension.

Two days after the initial reports, we visited Stella Maris Secondary School. The following account is based on interviews with staff, pupils, and guardians concerning the EPD at the school. However, we feel that it is important to highlight the difficulties we encountered in conducting our investigation into EPD at Stella Maris Secondary School. Without exception, those interviewed were very sensitive and guarded about discussing their impressions or experiences of EPD. This is most likely due to the sensitive nature of the causes which people attributed to the EPD they have been discussed later on in this article. In addition, because the worst affected pupils were sent home, their distribution throughout Malawi prohibited a comprehensive series of interviews. At the same time there was a fear that studying the phenomenon—giving it "professional" attention—might worsen it. This fear was not unfounded as it was

reported that the problem worsened after an exploratory visit by two psychiatric nurses.

Individual Cases

The first case appears to have been a 19-year old, form 3 pupil who had taken the anti-malaria drug, Fansidar, because she was unwell (medication for "malaria-like" symptoms is available over the counter, and self-administration is common in Malawi). Several hours after taking Fansidar she began shouting and screaming and was taken to hospital where she was prescribed minor tranquillizers (Diazepam). This had no effect on her shouting and screaming behaviour and she was therefore sent to her parental home to rest and "recover". After two weeks she requested to return to school, having stopped the disruptive behaviour. When she arrived back at the school gate she said she was frightened at the sight of her friends and she fainted. When she "came to" she did not want to return to either the hospital or home.

One of her teachers suggested that at this stage she had become phobic of her fellow students. Indeed, the pupil reported becoming very frightened and collapsing when she came across someone who she had not seen for some time (another pupil or teacher). Nonetheless, she wanted to stay at school so that she could become "used to them again". Along with shouting, screaming, collapsing, and fear of others, she also reported severe headaches, difficulty reading (leading to worse headaches), and extreme sensitivity to noise. After a few days, she was again sent home.

While the first pupil was still at home, the pupils of Stella Maris Secondary School were required to attend a ceremony presided over by the then President of Malawi, Dr. Hastings Kamuzu Banda. Whenever the President was presiding over ceremonies in Blantyre (the commercial capital of Malawi), girls from Stella Maris Secondary School would be required to perform various dances for the President. At this time, June 1993, there was growing pressure from both within Malawi and from the international community for the country to adopt multi-party democracy after the 30-year old oneparty rule and dictatorship. The country was preparing for the national referendum in which the people of Malawi would choose the system of government they wished. The campaign had reached its peak and as a consequence, social division was growing between those who supported multi-partyism and those who wished to maintain the system of one party rule. On this particular occasion when the school pupils had "danced for the President", the school bus was stoned as it left Kamuzu Central Stadium to return to their school. Subsequently some men also came to the school gates and threw stones, threatening to attack the girls if they danced for the President again. It is important to emphasise that this dancing was not a voluntary activity but a longstanding conventional practice in which the school took part.

The second case of EPD was a 16-year old pupil. She displayed EPD on the same day when she had returned from dancing for the President on the bus which had been stoned. She continued dancing and shouting when she came back to the school and complained of severe pain in the back of her head.

The third case, the next day, was another 16-year old pupil form the same class as the first and second cases. She started to scream and shout uncontrollably, and after the episode took Fansidar to combat her strange behaviour. In this instance she received Fansidar from the hospital, where it was prescribed because Fansidar was the only drug they had! Her behaviour worsened with more screaming, refusal to eat, crying, becoming withdrawn, and unwillingness to engage in conversation with staff or other pupils.

The fourth case also began with a "screaming fit" during a study period. After being given Valium, she continued to have screaming fits through the next day. This pupil also laughed uncontrollably at teachers and friends.

The first three cases were from the same class. When they were asked to explain their behaviour, they could not. They also claimed to have no memory or awareness of their unusual behaviours. Following these cases, 10 to 20 pupils developed similar behaviour every day over the next week. Of the 105 pupils who were affected, the majority were sent home.

EPD "SYMPTOMS"

A variety of behaviours and experiences appear to have made up an EPD "syndrome" which varied from individual to individual.

These included various "outward" behaviours (screaming, continuous laughing, crying loudly, falling down and rolling, violently threatening classmates, and speaking gibberish), and "inward" behaviours (refusing to eat, withdrawal, hallucinating, hypersensitivity to noise, and headache at the base of the skull).

It is important to note the pattern of remission. After a week the number of new cases developing EPD reduced to only one or two a day. Most of those affected were sent home. There were then several weeks when no new cases developed at the school. After three weeks when all the pupils who had been sent home had returned, the school was able to resume its normal functioning. No particular therapeutic agent was identified. Separation from the school environment resulted in the cessation of the various strange behaviours.

Possible Causes of EPD at Stella Maris

On the basis of our interviews with teachers, pupils, and guardians we were able to develop a variety of possible explorations for the cause of EPD at Stella Maris. Most of the explanations offered involved the notion of a psychological stressor leading to anxiety-related reactions. However, first we consider explanations that suggest a physical cause for EPD.

Physical Causes

Although the diet of the pupils had not recently changed, it was first suspected that food poisoning or some nutrient deficiency might be responsible for the strange behaviours. But checks carried out by the school staff and health officials found no support for this theory. A physical cause was suspected in the first few cases, with a process of social contagion spreading the various behaviours via increasing levels of anxiety about the cause. Some suggested that the initial causes could have been a bad reaction to a common illness, such as malaria, or to the anti-malaria drug, Fansidar. While local health officials did not feel that this provided an adequate explanation, it is true that the first cases involved pupils feeling feverish. Fever may be associated with psychological disturbance and disorientation. Epidemic Psychological Disturbance in a Malawian Secondary School / 85

Examination Anxiety

The EPD at Stella Maris occurred just before the final examinations. Several pupils emphasised the stressful atmosphere generated in a boarding school in the period prior to examinations. With only 4% of Malawian children being selected into secondary schools, there is a great pressure to perform well. One belief was that increased pressures due to impending examinations produced a stress reaction in a few pupils, which escalated subsequently.

Traditional Beliefs

Some people believed that EPD was the result of witchcraft. Several pupils and parents suggested that *juju* had been used. By using particular herbs, spells were cast on pupils by other pupil so as to gain the knowledge and ability of the bewitched pupils and to take some of their "brain power". However, if this attempt to put a spell on another person is anticipated, or intercepted, by the person, then the spell can be returned to affect its originator(s). The mass reaction could therefore be accounted for by the several pupils attempting juju on a particular student (for instance, one known to be very bright), and this student reflecting the spell back on those who had cast it. Having such a spell returned to one, it is believed, can result in the sort of disturbance evident in EPD. Although this was not a widely help explanation for the EPD at Stella Maris, the potentially destructive role of (beliefs in) witchcraft in everyday life is well recognised in Malawi (Bowa and MacLachlan. 1994), and indeed one-third of psychiatric in-patients in Malawi attribute the cause of their admission to witchcraft (MacLachlan, Nvirenda, & Nvando, 1994).

Institutional Factors

Within a few weeks of the outbreak of EPD at Stella Maris, there had been similar outbreaks at the Providence Secondary School and at St. Mary's Girls School, both of which are also run by the Catholic Church. At this point it is important to highlight that the stimulus for democratisation and social change in Malawi is widely

attributed to an open "pastoral letter" from the Bishops of Malawi to President Banda, published in March 1992 (Chiona, et al., 1992). After the publication of the letter, the Catholic Church became closely associated with ideas of democracy, freedom of speech, transparency, and individual expression. Several of the pupils in Stella Maris, Providence and St. Mary's Schools expressed frustration that although the church seemed to be standing up for all these "good things" outside their schools, within the schools the "regimes" requiring discipline and timidity remained unchanged. It was therefore suggested by some (including priests and nuns) that the EPD was an expression of protest and frustration with the Catholic church, which pupils perceived as not practising what it was preaching.

A further suggestion regarding the religious nature of the institutional setting came from the observation that three of the first four cases occurred among girls who attended a "Bom Again" Christian group. This group, which was seen as too extreme and was not supported by the school and had in fact been banned from meeting. During their meetings they worshipped by singing, dancing, praying aloud, speaking in tongues, and by working up to a frenzied state of euphoria which reportedly sometimes included hallucinating. Although the group was banned, it continued to meet secretly. Some people believed that the initial cases of the EPD represented an "overflow" form this religious group that frightened other pupils, so igniting a mass anxiety response which mimicked the behaviours of the "Born Again" Christians at worship.

Political Concerns

Until recently the ruling Malawi Congress Party had a youth division called the Malawi Young Pioneers (MYP). Each school within Malawi was required to have an MYP teacher who taught pupils the political doctrine of "the party". Due to transfers and illness, Stella Maris Secondary School had been without an MYP teacher for several months. However, even prior to the process of democratisation and social change, MYP teachers were often treated with a degree of wariness, and were sometimes held in contempt by fellow staff and pupils. One week before the first case of the EPD occurred, a new MYP teacher took up appointment at the school. In the tense political context which existed, staff and pupils had expressed concern over the post being filled and some felt that an MYP teacher would be an oppressive element within the school. Some people therefore believed that the EPD was an expression of collective frustration and protest at the MYP post being filled at a time when there was a move away from the Malawi Congress Party ethos.

It was also suggested that the EPD at Stella Maris could be a reflection of the increasing level of general anxiety which was apparent with the approaching referendum on whether Malawi should adopt a multi-party system of government or not.

Discussion and Conclusion

The various factors discussed till now are illustrated in Figure 1 as a multi-causal model of EPD at Stella Maris. We believe that the mass scale of the phenomenon necessitates the notion of a nonphysical social contagion mechanism. Whatever the "causes" of the first cases (dietary, medical, religious, social or psychological) the rapid spreading of the reaction must have incorporated some form of modelling on the initial cases. We believe that the "fuel" for this reaction was the social anxiety, which again could have had various causes (examination stress, traditional beliefs of bewitchment, worry concerning political instability).

To what extent can this case of EPD of Stella Maris Secondary School be interpreted as reflecting a defence and protest against social change? Malawi has been described as a society in transition From "traditional" to "modern" ways of life (Peltzer, 1987). While it may be argued that all societies are in transition, the rate of change in Malawi is dramatic. In the socio-economic sense, often only one generation has had to assimilate the co-existent contrasts between traditional subsistence agriculture and modern international business, with its panoply of technology. While reports of EPD in Malawian schools go back many years, the number of cases in the past three years, which have witnessed great socio-political change, may be significant. Clearly, social change may produce "adaptation anxiety:" even if change is desired, it has its risks and dangers.

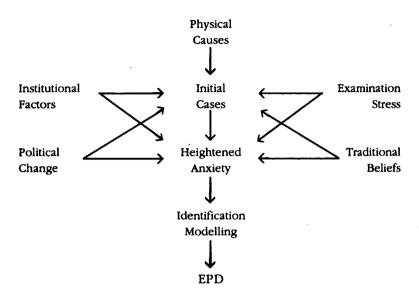


Figure 1 Model of the Causes of EPD at Stella Maris Secondary School

In the present case study one of the significant forces may not only have been the rapid social change occurring in Malawi, but also the frustration of female pupils at being placed in subservient, compliant roles. For instance, one of the present themes of the "development" ethos within Malawi is that of empowering women. Yet, the girls at Stella Maris were placed in the subservient role of having to "dance for the President", even though many of them would not have favoured him. Being stoned and denigrated would have heightened their feelings of disempowerment, as would having to comply to the traditions and rigidities of Catholic convent schools. Thus, the agitation and anxiety developed by the context of social change may also reflect a frustration with the "unevenness" and selectivity of change. As such, the case study of Stella Maris can indeed be interpreted to provide support for the notion of EPD as a defence and as a protest against the pressures for, and of, change.

There may also be other examples of such defence and protest against change in developing societies. Brain-fag Syndrome (see

Prince, 1989, for a review) describes various burning and crawling sensations experienced in the head and body. These symptoms have been reported characteristically in African societies among high academic achievers who come from very traditional families (see Prince, 1989); Morakinyo, 1985). One possible interpretation of the symptoms is that they represents a psychosomatic expression of the conflicts which pupils experience between modern and traditional norms. What is especially interesting in the present context is that brain-fag, like EPD, appears to be a predominantly single sex phenomenon. While most cases of EPD relate to female pupils, most cases of Brain-Fag relate to male pupils (see prince, 1987). Both EPD and brain-fag syndrome may represent the characteristic protest of girls and boys against the pressure to assimilate dramatic social change.

Although the model described in Figure 1 is able to account for a matrix of causal factors, it is (at this stage of our research) necessarily weak in predictive utility. One important question is: "What determines which pupils become part of an EPD and which do not?" Another matter of concern is what effect the EPD may have on pupils" future academic performance, as well as other aspects of their physical, social, and psychological functioning. These are just two of the issues being investigated currently as part of a prospective study of EPD at another Malawian girls secondary school.

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