AN EPIDEMIC OF PSYCHOGENIC ILLNESS IN A TELEPHONE EXCHANGE BUILDING

R. S. TIWARY¹, K. S. BAGHIANA², P. SARKAR³

The term epidemic psychogenic illness is referred to a psychological chain reaction in the members of a group; as the members interact, the symptoms spread from one person to the other with spiraling increase in the number of the victims. The symptoms predominating in the epidemic are those of one or two key persons. Reports of such illness are frequent in school children (Moss and Band, 1982; Robinson and Szewegyk, 1984) but rare in telephone exchange (Ralph and Joseph, 1986). We are reporting an epidemic in female telephone operators of Calcutta.

CASE REPORT

The Telephone Bhavan in Calcutta is a thirty-five years old exchange building of eight storyes. Two modern electronic automatic exchanges were installed in August and Dec. 1986 immediately prior to the onset of the epidemic. There are about 1300 female telephone operators who perform heavy and monotonous task in shifts of eight hours, at comparatively low pay scales. When back home from office they have to perform routine household chores.

The epidemic commenced on 8th Jan. 87 when a lady telephone operator suddenly felt giddy and experienced tingling sensation with weakness of limbs. She told to her collegues that her illness was due to discharge of electricity from the head set. She was a science graduate, therefore, other ladies believed it. She proceeded on sick leave. Another lady was made to work in her posi-

tion. She also experienced a shock in her left ear from the head set and fell down, leading to hospitalisation. This was followed by reports of mild shock every day till a lady known to be an outstanding champion in sports received an acoustic shock from head set and electric shock from the socket and fell unconscious on 21st Jan.'87. She developed monoplegia of left upper limb, left hemianaesthesia and loss of urinary control. After discharge from hospital she remained confined to bed at home. This lady's case spread fear, apprehension and a feeling of insecurity among all the lady operators. They started getting electric and acoustic shocks one after another in quick succession. When the authors investigated eighty-six ladies and one male had experienced shocks, most operators were afraid to even touch the equipments and a panic had gripped the entire lot of operators paralysing the telephone services.

The common symptoms among the victims were pain and numbness on left side of face, weakness left upper and lower limbs, giddiness and loss of urinary control. Four of these victims, all ladies, remained confined to bed at homes after initial hospitalisation. Clinical examination and all investigations including CSF were normal.

The worker's union had suspicion that after installation of electronic exchange their services were not required and the management was deliberately discharging electricity into the system to scare them to leave their job. While the administrators did not get

• 5

Director, Regional Medical Research Centre for Tribals (Indian Council of Medical Research), Medical College, Jabalpur-482 003.

^{2.} Classified Specialist in Psychiatry, Command Hospital, Calcutta.

^{3.} Graded Specialist in Psychiatry, Command Hospital, Calcutta.

any shock when tested on themselves and had doubts about the genuineness of the sickness. Investigations by technical experts did not find any fault in the system and the environment (Hocking, 1987 and Bhattacharya et al., 1987). All efforts failed and the epidemic continued unabated. Media gave wide publicity to the epidemic describing it as "electrocution" and "Ghost Virus" etc.

The clinical examination of the victims by the authors did not reveal any abnormality except a state of anxiety. All the patients talked of the episode involving the athelete who was still confined to bed. Considering this lady as a key person in the spread of the epidemic, it was decided to manage her first and then the others. This unmarried lady aged 36 years was in a state of anxiety and presented with left sided monoplegia (left upper limb) midline anaesthesia of left half and loss of urinary control. She had relative indifference towards her physical disability and was concerned more about accusing the management. The authors treated her with aversive stimuli using low voltage electrical current by "Sedac" behavioural therapy equipment along with intense persuation and psychotherapy. This resulted in instantaneous cure of the monoplegia and hemianaesthesia. The remaining three serious patients were also subjected to similar therapy with equally gratifying results. The cure of these ladies had tremendous impact on the entire affected as well as panic gripped operators. All resumed work, fresh cases stopped and thus within few hours four month old epidemic of illness was eliminated.

DISCUSSION

All important leads for the diagnosis of epidemic psychogenic illness are present in the outbreak (Levine and Sexton, 1974). The telephone operators are largely female work force, relatively less educated and doing routine repetitive work. This also conforms to other reports of epidemic psychogenic illness (Robinson and Szewegyk, 1984 and Smith et al., 1978). Thus the clinical setting, symptom complex and miraculous cure proves beyond doubt the diagnosis of "conversion reaction" and epidemic psychogenic illness.

The nonspecific symptoms of the first victim may not at all be related to telephonic noise or shock but simply to fatigue and stress. She being a science graduate, related her illness to discharge of electricity from telephone equipments and other women believed it. Thus, an affect laden situation was created and in such circumstances the thinking pattern is dominated by the prevailing moods (Cavener et al., 1979). Next lady who worked on the same position with preconceived ideas and apprehension also suffered similar but more severe symptoms. Thus an epidemic of psychogenic illness was initiated and the work environment of "Telephone Bhavan" as described earlier, may have contributed to the rapid spread. Lady workers under such stress and strain of life and work are considered more likely to be suggestible to disruptive influences (Boxer et al., 1984).

Management of such mass psychogenic reaction is difficult. Any suggestion that the illness is psychiatric, arouses hostile reactions. The prime contributors to the continuation of the epidemic were the four bedridden ladies suffering from 'conversion reaction' particularly the athelete women. All investigating and treating agencies made no serious attempt to treat these ladies confined to their homes and they continued to act as catalyst. Miraculous cures are known in hysterical paralysis. The same was achieved by the authors leading to the rapid control of the epidemic.

Other factors causing escalation of the epidemic were wide publicity in media, specches of the union leaders. and communication gap between the management and the employees. Hysterical symptoms are not under conscious control and the managers were explained these facts. The containment of such contributory factors may help in preventing spread of the epidemic.

Acknowledgement

The authors thank Major General P. Suri, Commandant, command hospital, Calcutta for extending the hospital facilities to examine and treat the operators.

REFERENCES

- Bhattacharya, S. K.; Bondal, K. K.; Ghosal, A. K. and Dutta, R. C. (1987). Study of environmental conditions in various exchanges of Calcutta telephones located in Telephone Bhavan, Report by Directorate of Factories, Govt. of West Bengal.
- Boxer, P.; Mitchell, S. and Richard, W. (1984). An epidemic of psychogenic illness in an electronic plant. J. Occup. Med., 26, 381-385.

- Cavener, J. O., Sullivan, J. L. and Maltabie, A. A. (1979). A clinical note on hysterical psychosis. Am. J. Psychiat., 136, 830-832.
- Hocking, C. (1987). Epidemic of illness in the Calcutta telephone exchange, occupational health and safety, Telecom, Australia.
- Levine, R. J. and Sexton, D. J. (1974). Outbreak of psychosomatic illness in a rural elementary school. Lancet, 2, 1500-1503.
- Moss, P. D. and Band, M. J. (1982). A chronic epidemic of Hyterical black outs in a comprehensive school. Br. Med. J., 284, 961-962.
- Ralph, W. and Joseph, F. (1986). Epidemic psychogenic illness in a telephone operator's building. J. J. Occup. Med., 28, 42-45.
- Robinson, P. and Szewegyk, M. (1984). Outbreak of itching and rash : Epidemic hysteria in an elementary school. Arch. Intern. Med., 144, 1959-1962.
- Smith, M. J., Colligan, M. J. and Hurrell, J. J. (1978). Three incidents of industrial mass psychogenic illness, A preliminary report. J. Occup. Med., 26, 399-400.