The Needs of women with epilepsy in Chennai, India

R Lakshmi Narasimhan, K Gowri Shankar, M Dhanaraj, A Vengatesan, RM Bhoopathy, A Murugesan

Department of Neurology, Government Stanley Medical College and Hospital, Chennai, India

Background and Objective: The estimated number of people with epilepsy in India was 5.5 million, with annual incidence of close to half a million. The number of people with epilepsy in rural areas was 4.1 million, three fourths of whom do not receive any modern antiepileptic drug treatment. Epilepsy affects sexual development, menstrual cycle, aspects of contraception, fertility, and reproduction in woman.

Epilepsy in women raises special reproductive and general health concerns. Seizure frequency and severity may change at puberty, over the menstrual cycle, with pregnancy, and at menopause. Estrogen is known to increase the risk of seizures, while progesterone has an inhibitory effect. Many antiepileptic drugs induce liver enzymes and decrease oral contraceptive efficacy. Also, women with epilepsy have legitimate questions and worries regarding the effect of epilepsy and use of antiepileptic drugs upon their pregnancies and their unborn babies. The objective of this study was to identify the needs of women with epilepsy in Chennai, South India that may be effectively addressed in community based epilepsy rehabilitation.

Methods: The study was conducted in the Government Stanley Medical College and Hospital, a tertiary care referral centre in Chennai. The design was a case control study. Consecutive 85 women with epilepsy who were on regular antiepileptic drugs were administered a validated 35 items need-based questionnaire spread across five key domains - education, job, marriage, pregnancy and motherhood. The results were compared with equal number of age-matched healthy women.

Results: In the educational domain, statistically significant women with epilepsy were illiterate ($\chi^2=21.6$, $p=0.001$), had lesser education, more school stigma and less scholastic performance. The reduction in scholastic performance was attributed to antiepileptic drugs intake by significant number of women.

In the job domain, more women with epilepsy were unemployed and had problems at the workplace due to seizures ($\chi^2=68.6$, $p=0.001$). In the marriage domain, 25% of the women with epilepsy had problems in getting married as against 1% in controls. Seventy percent of the women concealed epilepsy from their husbands, 28% had marital problems with increased incidence of divorce. In the pregnancy domain, more women with epilepsy were infertile. Only 35% of women with epilepsy took antiepileptic drugs and 12% had complications during pregnancy. In motherhood domain, the epilepsy group had statistically significant problems in breast-feeding, child rearing and fear of transmission to offspring ($\chi^2=14.1$, $p=0.001$).

Conclusion: Women with epilepsy in Chennai, South India faced significant problems in education, job, marriage, pregnancy and motherhood domains.

Reference