A Study on Knowledge about Epilepsy in Primary School Teachers in Selected Schools of Chitradurga Taluk

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ABSTRACT

Objectives: To assess the baseline knowledge regarding Epilepsy among the school teachers. Materials and Methods: An interventional study was carried out among the teachers in selected primary schools of both English and Kannada medium in Chitradurga taluk for a period of six months. 100 teachers were enrolled into the study. Results: The knowledge about epilepsy in primary school teachers were low but has significantly increased to a certain level after the intervention. Female teachers had better knowledge compared to their male counterparts. Conclusion: The school teachers in Chitradurga had, at the time of the investigations, a relatively low level of awareness, and understanding of certain aspects of epilepsy, and a minority of the study population demonstrated unfair discriminatory behavior toward children with epilepsy. Schools should offer information on epilepsy and assistance by the health services and physicians must ensure that teachers have sufficient knowledge of the condition. In addition, education campaigns of the public on epilepsy should be encouraged.
1. INTRODUCTION

Epilepsy is one of the commonest neurological disorders affecting the children; it is a common illness occurring approximately in one percent of the general population in South India. Epilepsy is the second most common chronic neurological condition seen by neurologists among worldwide.¹

As children are in growing period of life and spend most of their days in school, have frequent attacks of convulsions, larger doses of anti-convulsive drugs may affect the ability to learn. It can lead to impaired growth and development, frequent hospitalization, increased absenteeism from school and poor quality of life. Poor school performance not only results in the child having low esteem but also causes significant stress to parents and teachers.²

The teacher should have the basic knowledge about the management of convulsion to provide first care to the child and save the life.³ It is important to assess the knowledge and attitude of teachers on childhood epilepsy and first aid management.⁴

Public knowledge and attitudes towards epilepsy have been repeatedly investigated in developed and developing countries. Large gaps have been found in awareness of the causes of the disease, and, even worse, widespread negative attitudes were documented, mainly associated with educational level, age, and sex. Large population surveys in people with epilepsy (PWE) in developing countries involve obvious difficulties; nevertheless, studies have been done even in sub-Saharan Africa, where socially deprived groups and selected occupational categories could be investigated in particular. However, to our knowledge, few studies have compared the opinions and attitudes towards epilepsy of neighboring urban and rural populations. One study that focused on the functional status of PWE in rural versus urban areas found that the burden of the disease was greater in the former. This was explained by hypothesizing a “downward drift” of more impaired PWE towards their families of origin in rural areas, as families in these areas are possibly more willing to care for their disabled members than their counterparts in urban areas. Whether this attitude coexists with a lack of awareness or with stigma towards epilepsy was not clarified.⁵

It is unfortunate that a common disease like epilepsy carries the strong social stigma. The social attitude leading to stigma and discrimination against epileptics is often more distressing than the disease itself. Teachers' attitude based on their knowledge and beliefs
plays an immense role in the upbringing of epileptic children. Misbeliefs cause social discrimination against epileptics since childhood.\(^6\)

The analysis of the representations of the health of their students by teachers is key to the understanding of the attitudes and behaviors that, in general, take place inside the school community and the educational processes. In fact, social attitudes by teachers and individual within the school environment are often the result of simple categorization and stereotypes, which hinder the process of evolutionary change.\(^7\)

Children spend a lot of time at school, and in those with a chronic condition such as epilepsy, the severity of that condition can influence their school experience\(^1\). Studies have shown that children with epilepsy are more prone to difficulties in school and to behavioral problems. However, it is difficult to say whether these difficulties are related to seizures to antiepileptic drugs or to social relationships with their teachers and friends or multifactorial.\(^8\)

It is well established that children with epilepsy have a higher incidence of school underachievement because of many factors, including the seizures themselves, the medications that are used to treat seizures, the psychosocial difficulties, and behavioral problems, not to mention the social stigmata and discrimination experienced by persons with epilepsy (1). Among these multifaceted factors, some patients find that the social attitude, the stigmata, and discrimination against epilepsy are probably more devastating than the disease itself (2). Social discrimination against persons with epilepsy is mainly the result of an incorrect idea that persons with epilepsy are helpless, more fragile, and mentally retarded, or simply because of fear of being confronted with seizures.\(^9\)

Teachers knowledge about and attitudes toward epilepsy can have a direct impact on students with epilepsy in terms of school performance, social skill development, and post-school success in the areas of employment, social skills, and social network development. However, despite the significant affect of teachers' knowledge about and attitudes toward persons with epilepsy, very little research has been conducted in the United States in the last two decades either to assess the degree to which teachers have accurate knowledge and information about epilepsy or to gauge teachers' attitudes toward students with epilepsy.\(^10\)

Therefore, this study was conducted to assess the knowledge, evaluate the effect of education regarding prevention and management of epilepsy in primary school teachers of selected schools in Chitradurga taluk
2. MATERIALS AND METHODS:

A community-based observational prospective study was approved by the Institutional Ethics Committee, of SJM College of pharmacy, Chitradurga, Karnataka. The study was carried out at primary schools of Chitradurga taluk. Demographics details of the teachers were obtained and documented in suitably designed teachers data collection form. A Survey was conducted in the selected school of until desired sample is met. The teachers were educated regarding epilepsy and its prevention measures by means of educational leaflets, charts, and other suitable resources (both in English and Kannada versions). The study was conducted over a period of 6 months. i.e. November 2016 to April 2017.

The teachers were educated regarding epilepsy and its prevention measures by means of educational leaflets, charts, and other suitable resources (both in English and Kannada versions).

2.1 Statistical analysis: The collected data was entered in Microsoft Excel 2007 and results are analyzed using Epi info, pre-test and post-test the impact of the study was analyzed by means of suitable statistical method such as "paired t-test". Statistical analysis: Using the Statistical Package for Social Service (SPSS) 20 version, the results were calculated and analyzed by “Paired t-test”.

3. RESULTS:

1. Showing the number of participants/ teachers from selected schools: About 22% of the participants were from BPS, 16% were from GAS, 15% from RFS, 11% from MCS, 15% from KKNS, 10% from SPPSK and 11% of them were from JMS.

![Fig 01: Showing number of participants/ teachers from selected school.](image-url)
2. Distribution according to the gender of the teachers:

A total of 100 teachers were included in the study, out of which 79% [79] were females and 21% [21] were males.

![Distribution according to the gender of the teachers](image)

**Fig 02. Distribution according to the gender of the teachers**

3. Distribution of schools according to medium wise

A total of 100[100%] teachers were included in the study, out of which 79% [79] were English medium and 21% [21] were Kannada medium.

![Medium wise distribution of school](image)

**Fig no.03: Medium wise distribution of school**

4. Response for the Have you heard about epilepsy Table no: 4 and graph no.04 presented, Among 100 (n=100) teachers 80 (80%) teachers had previously aware of epilepsy and 17(17%) teachers were not aware of epilepsy
5. The response was given by the teachers for do you think epilepsy is a contagious disease?

During the pretest among 100 (n=100) teachers 6% teachers said epilepsy is a contagious disease, 67% teachers said epilepsy is not a contagious disease and 27% of them did not know whether epilepsy is contagious or not. During the post-test, 80% of the teachers said that epilepsy is not contagious, 15% said that epilepsy is contagious and 5% of the participants were still not aware whether epilepsy is contagious or not.

Fig. 05 The response was given by the teachers for do you think epilepsy is a contagious disease?
6. The response was given by the teachers for would you allow children to play or sit in the same class with a child with epilepsy?

In pretest among 100 (n=100) teachers 70 (70%) teachers said that they would allow their children play or sit in same class with epileptic child, 21 (21%) teachers said that they would not allow and 9 (9%) teachers did not know whether their children can mingle with an epileptic child but, during posttest 87% of them knew that they can allow their child to mingle with an epileptic child as tabulated.

![Fig. 6: Response given by the teachers for would you allow children to play or sit in the same class with a child with epilepsy?](image)

7. The response given by the teachers for have you ever performed first aid epilepsy management before?

Response for the question have you ever performed first aid epilepsy management before, Among 100 (n=100) teachers 46 (46%) teachers said that they had performed first aid for epilepsy, 51 (51%) teachers said that they had not performed first aid and 3(3%) said that they did not know about first aid management of epilepsy as tabulated.
DISCUSSION

Epilepsy is one of the most common neurological diseases with prevalence rate varying from 2.8 to 19.5 per 1,000 general population and it prevails more especially among school children.

This study was done among the primary school teachers of selected schools in Chitradurga taluk. The main objective of this study to assess the knowledge and attitude about epilepsy among the primary school teachers. Among the 7 selected schools around 100 primary school teachers were selected and the questionnaire was administered by the interviewer.

Fabio Galvao Dantas et al. conducted a study on knowledge and attitudes towards epilepsy among primary, secondary and tertiary level teachers in Brazil around 98% of primary school teachers had heard about epilepsy. In our study, 80% teachers were previously aware of epilepsy.

Anup K. Thacker et al. conducted a study on Knowledge awareness and attitude about epilepsy among schoolteachers in India around 97% of primary school teachers had heard about epilepsy. In our study, 80% teachers were previously aware of epilepsy.

Fabio Galvao Dantas et al. conducted a study on knowledge and attitudes towards epilepsy among primary, secondary and tertiary level teachers in Brazil around 85% of them knew that epilepsy was not contagious. In our study, 67% teachers said epilepsy is not a contagious disease.
Anup K. Thacker et al. conducted a study on Knowledge awareness and attitude about epilepsy among schoolteachers in India around 38.4% of them told that they would not let their child play with an epileptic child. In our study, 21% of the teachers told that they would not let their child play with an epileptic child.

Anup K. Thacker et al. conducted a study on Knowledge awareness and attitude about epilepsy among schoolteachers in India around only 54% had performed first aid on epileptic child. In our study, 49% of teachers had performed first aid to an epileptic child.

CONCLUSION

The school teachers in Chitradurga had, at the time of the investigations, a relatively low level of awareness, and understanding of certain aspects of epilepsy, and a minority of the study population demonstrated unfair discriminatory behavior toward children with epilepsy. Schools should offer information on epilepsy and assistance by the health services and physicians must ensure that teachers have sufficient knowledge of the condition. Also, education campaigns of the general public on epilepsy should be encouraged.

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