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EFFECTIVENESS OF A STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EPILEPSY AMONG PRIMARY SCHOOL TEACHERS IN BANGALORE URBAN DISTRICT

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ABSTRACT

Epilepsy is a brain disorder where a person has recurring seizures. The seizures are triggered by changes in the electrical and chemical activity in the brain. Seizures can be caused by anything that injures the brain, including head injurious, infections, poisoning or even brain development problems prior to birth.

Background: Epilepsy is a neurological disorder that can affect children's safety and participation in school. Teachers need adequate knowledge to identify seizures and provide appropriate support.

Objective: To assess the knowledge of primary school teachers regarding epilepsy among school children and evaluate the effectiveness of a structured teaching programme.

Methods: An evaluative approach with a pre-experimental one-group pre-test and post-test design was used. The study included 50 primary school teachers from Government Primary Schools in the Jalahalli PHC area, Bangalore Urban District, selected by convenient sampling. Data were collected using a structured knowledge questionnaire. A structured teaching programme was administered after the pre-test, followed by a post-test after 8 days.

Results: The mean pre-test knowledge score was 59.3%, which increased to 83.5% in the post-test, showing a mean enhancement of 24.20%. The paired t-test value was 13.78, which was statistically significant at the 5% level ($p < .05$).

Conclusion: The findings showed that the structured teaching programme was effective in improving primary school teachers' knowledge regarding epilepsy among school children.

Keywords: *Epilepsy; Children; Primary school teachers; Knowledge; Structured teaching programme; School health education.*

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INTRODUCTION

The wealth of a nation is not so much in its of economical and natural resources but it lies more decidedly in the kind and quality of the wealth of its children and Youth. It is they who will be the creators and shapers of a nation's tomorrow. The children of a nation are its power- house. They have boundless stores of energy, will, capability, zeal, and enthusiasm and have the power to mould the destiny of the nation.

Children are an important asset to the family, society and nation. They are said to be the building blocks for the future of any nation. It is essential to provide improved health, nutrition, education social welfare and child protection of all the children in the country. Good nutrition is essential for survival, physical growth, mental development, performance, productivity, health & well-being across the life span. Positive health both in mind and the body is an inevitable factor to be considered in human resource development. Thus improving the health, especially that of a child will be a cost effective way for the nation development.

Childhood is a period when the immune is being developed. This vulnerability explains the large number of diseases like malnutrition, infectious diseases, and intestinal parasites, diseases of skin, eye, ear, dental carries and behavioural problems.

Epilepsy is a brain disorder where a person has recurring seizures. The seizures are triggered by changes in the electrical and chemical activity in the brain. Seizures can be caused by anything that injures the brain, including head injurious, infections, poisoning or even brain development problems prior to birth.

Various research studies shows that child with epilepsy also have psychosocial problems along with psychiatric problems like personality changes, maladjustment, and poor academic performance. So teachers should be encouraged to give special attention towards child with epilepsy so that the child can come up with better life in future.

NEED FOR THE STUDY

Scientists believe that among all neurological conditions, epilepsy is the fourth commonest condition, in terms of the number of people affected. Epilepsy is a common health problem which carries with it a variety of medical, social, psychological and economic burdens. The impact of the disease is felt, noticed and experienced in all spheres of the patient's life and by the patient's family. Various research studies have shown that teachers have inadequate knowledge regarding epilepsy in school children. Hence the researcher feels the need for bringing about awareness among school teachers regarding the first aid for children with epilepsy. Further this study will help the school teachers to gain confidence in managing children with epilepsy.

REVIEW OF LITERATURE

A study conducted by Aydin and Yildiz (2007) assessed teachers' perceptions regarding epilepsy and examined the short-term effect of a brief educational programme on their perceptions. The study found that teachers had several misconceptions and negative perceptions regarding children with epilepsy before the educational intervention. Following the brief education programme, a significant positive change was observed in teachers' perceptions of epilepsy and their acceptance of children with epilepsy in the school environment. The study demonstrated that appropriate educational programmes can improve teachers' understanding and perceptions regarding epilepsy and may contribute to better support for children with epilepsy in schools.

Bekiroglu et al. (2004) conducted a study in Istanbul to assess the awareness and attitudes of teachers towards epilepsy. The study used pre- and post-seminar assessments among teachers. The findings showed that although many teachers had previously heard about epilepsy or had witnessed a seizure, misconceptions were still present. Some teachers considered epilepsy to be contagious or associated with psychological illness. Following the educational seminar, teachers demonstrated improved knowledge and awareness, and negative attitudes towards the participation of children with epilepsy in sports and social activities were reduced. The study indicates that educational seminars can be useful in improving teachers' knowledge and attitudes towards epilepsy.

A study by Thacker et al. (2008) examined knowledge, awareness, and attitudes regarding epilepsy among schoolteachers in India. The findings indicated that teachers had inadequate knowledge regarding epilepsy, particularly concerning its clinical manifestations and appropriate first-aid measures during seizures. Misconceptions regarding epilepsy were also identified among teachers. The study emphasized the importance of providing accurate information and appropriate training to schoolteachers so that they can respond appropriately when a child experiences a seizure at school.

The findings provide support for conducting structured educational programmes to improve teachers' knowledge and awareness regarding childhood epilepsy.

Bishop and Boag (2006) conducted a national survey to assess teachers' knowledge about epilepsy and their attitudes towards students with epilepsy. The study identified gaps in teachers' knowledge and preparedness for managing epilepsy in the school setting. The findings indicated that teachers may experience uncertainty regarding the appropriate management of seizures and the educational and social needs of students with epilepsy. The study highlighted the importance of improving teachers' knowledge and preparedness through appropriate educational interventions. Such findings support the need for structured teaching programmes aimed at increasing teachers' knowledge regarding epilepsy in children.

Millogo and Siranyan (2004) conducted a study among schoolteachers in Bobo-Dioulasso, Burkina Faso, to assess their knowledge of epilepsy and attitudes towards children with the condition. The study found that although most teachers had heard about epilepsy, their knowledge regarding the causes, clinical manifestations, and first-aid management of seizures was inadequate. Misconceptions such as epilepsy being contagious or hereditary were also reported, and some teachers expressed reservations about having children with epilepsy in their classrooms. The findings indicate the need for health education and training programmes to improve teachers' knowledge and reduce misconceptions and negative attitudes towards children with epilepsy.

OBJECTIVES OF THE STUDY

1. To assess the knowledge of primary school teachers regarding epilepsy among school children.
2. To assess the effectiveness of a structured teaching programme on the knowledge of primary school teachers regarding epilepsy among school children.
3. To determine the association between the level of knowledge of primary school teachers and selected demographic variables.

RESEARCH METHODOLOGY

An evaluative research approach was adopted using a pre-experimental, one-group pre-test and post-test design. The study was conducted among primary school teachers working in Government Primary Schools in the Jalahalli PHC area of Bangalore Urban District. A total of 50 primary school teachers were selected using a convenient sampling technique.

Data were collected using a structured knowledge questionnaire to assess the teachers' knowledge regarding epilepsy among school children. A pre-test was conducted initially, followed by the administration of a structured teaching programme on epilepsy. A post-test was conducted after 8 days using the same structured questionnaire to assess the effectiveness of the teaching programme.

The collected data were analyzed using descriptive and inferential statistics. The effectiveness of the structured teaching programme was assessed by comparing the pre-test and post-test knowledge scores using the paired *t*-test. The association between knowledge scores and selected demographic variables was also assessed using appropriate statistical tests.

RESULTS

Table 1

Distribution of Participants According to Selected Demographic Variables (N = 50)

Sl. No.	Demographic Variable	Category	Percentage (%)
1	Age	31–40 years	36
2	Gender	Female	64
3	Teaching experience	6–10 years	36
4	Marital status	Married	84
5	Observed/provided first aid during seizure	No	56
6	Observed a child with epilepsy on treatment	No	64
7	Source of information	TV and social media	52

Note: N = 50.

Table 2

Comparison of Pre-test and Post-test Knowledge Scores Regarding Epilepsy (N = 50)

Test	Mean Knowledge Score (%)	Mean Enhancement (%)
Pre-test	59.3	—
Post-test	83.5	24.20

The overall mean knowledge score increased from 59.3% in the pre-test to 83.5% in the post-test, showing a mean enhancement of 24.20% following the structured teaching programme.

Table 3

Effectiveness of Structured Teaching Programme on Knowledge Regarding Epilepsy (N = 50)

Comparison	Paired *t* Value	*p* Value	Level of Significance	Result
Pre-test vs. Post-test	13.78	< .05	Significant at 5% level	Significant improvement

The calculated paired *t* value of 13.78 was statistically significant at the 5% level ($p < .05$), indicating a significant improvement in the knowledge of primary school teachers following the structured teaching programme.

DISCUSSION

The findings shows a clear improvement in teachers' knowledge following the intervention.

In the present study, the mean knowledge score increased from 59.3% in the pre-test to 83.5% in the post-test, with a mean enhancement of 24.20%. The calculated paired *t* value was 13.78, which was statistically significant at the 5% level ($p < .05$). This indicates that the structured teaching programme was effective in improving the knowledge of primary school teachers regarding epilepsy among school children.

The findings of the present study are consistent with recent research on epilepsy education among school teachers. Khotani et al. (2022) reported that health education improved primary school teachers' knowledge regarding seizure first aid. Similarly, Sulena et al. (2023) reported that an educational intervention among school teachers improved knowledge, attitudes, and practices related to epilepsy. These findings support the importance of providing structured health education to school teachers to strengthen their knowledge and preparedness to respond appropriately to epilepsy-related situations in the school setting.

The demographic findings of the present study showed that 36% of the teachers were in the age group of 31–40 years, 64% were female, and 36% had 6–10 years of teaching experience. A majority (84%) were married. Regarding previous exposure to epilepsy-related situations, 56% had not observed or provided first aid during a seizure, while 64% had not observed a child with epilepsy receiving treatment. Television and social media were reported as the source of information by 52% of the participants. These findings indicate the importance of providing reliable and structured information to teachers regarding epilepsy and appropriate seizure first aid.

The improvement in post-test knowledge observed in this study highlights the potential role of structured teaching programmes in school health education. Adequate knowledge among teachers may help them understand epilepsy, respond appropriately during seizures, and provide supportive care to children with epilepsy within the school environment. It may also contribute to better understanding and reduce misconceptions and negative attitudes towards children with epilepsy.

CONCLUSION

The overall findings of the study clearly showed that the structured teaching programme was significantly effective in improving the knowledge scores of school teachers regarding epilepsy among school children. The significant improvement in post-test knowledge scores indicates that structured health education can be an effective approach to strengthening teachers' knowledge and preparedness to respond appropriately to epilepsy-related situations in the school setting.

REFERENCES

1. Aydin, K., & Yildiz, H. (2007). Teachers' perceptions in central Turkey concerning epilepsy and asthma and the short-term effect of a brief education on the perception of epilepsy. *Epilepsy & Behavior, 10*(2), 286–290. https://doi.org/10.1016/j.yebeh.2006.09.012
2. Bekiroglu, N., Ozkan, R., Gurses, C., Arpaci, B., & Dervent, A. (2004). A study on awareness and attitude of teachers on epilepsy in Istanbul. *Seizure, 13*(7), 517–522. https://doi.org/10.1016/j.seizure.2003.12.007
3. Thacker, A. K., Verma, A. M., Ji, R., Thacker, P., & Mishra, P. (2008). Knowledge awareness and attitude about epilepsy among schoolteachers in India. *Seizure, 17*(8), 684–690. https://doi.org/10.1016/j.seizure.2008.04.007
4. Bishop, M., & Boag, E. M. (2006). Teachers' knowledge about epilepsy and attitudes toward students with epilepsy: Results of a national survey. *Epilepsy & Behavior, 8*(2), 397–405. https://doi.org/10.1016/j.yebeh.2005.11.008
5. Millogo, A., & Siranyan, A. S. (2004). Knowledge of epilepsy and attitudes towards the condition among schoolteachers in Bobo-Dioulasso (Burkina Faso). *Epileptic Disorders, 6*(1), 21–26. https://doi.org/10.1684/j.1950-6945.2004.tb00045.
6. Khotani, A. M., Alharbi, A. A., Alzahrani, A. A., et al. (2022). Effect of health education on female primary school teachers' knowledge of seizure first aid: An interventional study. *Epilepsy & Behavior, 127*, 108523. https://doi.org/10.1016/j.yebeh.2021.108523
7. Sulena, S., Singh, G., Tyagi, D., Bansal, N., Padda, P., Garg, R., Kumar, R., Kaur, K., Kaur, H., & Kumar, N. (2023). Epilepsy Smart Schools: Educational intervention improves knowledge, attitude, and practices regarding epilepsy among school teachers. *Epilepsy & Behavior, 141*, 109138. https://doi.org/10.1016/j.yebeh.2023.109138