

A study to assess the effectiveness of structured teaching programme on knowledge of tics disorder among teachers in a selected primary school at Bangalore.

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Abstract—Education is one of the most important aspects of human resource development. Poor school performance not only results in the child having a low self-esteem, but also causes significant stress to the parents. There are many reasons for children to underperform at schools, are emotional problems, attention deficit hyperactivity disorder, behavioral problem, specific learning disability, poor socio-cultural home environment, and even environmental causes. The information provided by the parents, classroom teacher and school counselor about the child's academic difficulties guides the pediatrician to form an initial diagnosis. It is important to find the reason(s) for a child's poor school performance and come up with a treatment plan early so that the child can perform up to full potential. Pre-experimental, one group pretest post test design was used and the sample size was 40. Results revealed that paired “t” value 32.60 of pretest and posttest of the teachers were find to be significant at $p < 0.05$. Therefore, the findings revealed that the Structured Teaching Programme on knowledge of tics is an effective teaching strategy as revealed by statistical results.

Index Terms—knowledge, structured teaching programme, teachers, tics.

I. INTRODUCTION

Today children are tomorrow nation. Keeping in good health status for our school children is the wealth for future nation. School is a nonprofit educational academy designed to meet the much of student with special need. School concentrate on supplying emotional, physical and intellectual life experience which student require to gain confidence necessary to lead fuller lives. The goal of School is to provide quality education and circulate the best standard of learning among children with excellence.¹

Tics disorders are common during childhood. More than 18% of all children have a tic at some point in development. Sometimes students with Tics may say obscene words or make obscene gestures. These students should not be blamed or punished for that behavior.³

Tic disorders are characterized by the persistent presence of tics, which are abrupt, repetitive involuntary movements and sounds that have been described as caricatures of normal physical acts. Tics disorder increase in frequency when a person is under any form of mental or physical stress, even if it is of a positive nature.⁴ Common Tics are Eye blinking, Neck jerking, Shoulder shrugging, Facial grimacing, Coughing, Grunting, Sniffing, Snorting, Barking, Facial gestures, Grooming behaviors, Jumping, Touching, Stamping, smelling. Complex Tics are Coprolalia, Repeating words or phrases out of context. Palilalia, Repeating one's own sounds or words. Echolalia, Repeating the last-heard sound, word, or phrase. Echokinesis, Imitation of some else's movements.⁶

Tourette syndrome should be considered by medical and educational professionals as a group of children and adolescences with special needs. Teachers as well as their parents should be informed an update about the non-voluntary symptoms of Tourette's syndrome. They should have special learning programmers. When diagnosed and treated early, many of the associated learning, physical, emotional and social disabilities it produces can be lessened or dealt with more effectively. Study concludes that educate the teachers how she/he can assess children with Tourette's syndrome and is to assist in their learning and their interacting productively in school and society⁸.

II. NEED FOR THE STUDY

Tics disorder is characterized by stereotyped, purposeless and irregularly repetitive movements and usually can be classified as chronic motor or vocal tic disorders, transient tic disorders or Tourette syndrome. A special type of chronic disorder is Gilles de la syndrome or Tourette's syndrome. This is characterized by multiple motor and vocal tics with duration of more than one year, onset is usually before 11yrs Education of the patient, family and teachers and support from the physician and other care providers are essential elements of effective management.⁹

The estimated incidence of tics ranges widely but is probably 10-15/10,000 population. It occurs 2-3 times more frequently in males. Undoubtedly, there are number of other students with symptoms who have not been diagnosed. When diagnosed and treated early, many of the associated learning, emotional, behavioral and social disabilities it produces can be lessened or dealt with more effectively. The goal of any programme with tics is to assist the person in learning and interacting productively in school and society.¹⁰

Education is one of the most important aspects of human resource development. Poor school performance not only results in the child having a low self-esteem, but also causes significant stress to the parents. There are many reasons for children to underperform at schools, are emotional problems, attention deficit hyperactivity disorder, behavioral problem, specific learning disability, poor socio-cultural home environment, and even environmental causes. The information provided by the parents, classroom teacher and school counselor about the child's academic difficulties guides the pediatrician to form an initial diagnosis. It is important to find the reason(s) for a child's poor school performance and come up with a treatment plan early so that the child can perform up to full potential²¹

With hard work and the proper help, children with tics can learn more easily and successfully. For school-aged children, special education and related services are important sources of help. Child's parents can work with the school staff to develop an Individualized Education Program (IEP). This document describes the child's unique needs. It also describes the special education services that will be

provided to meet those needs. These services are provided at no cost to the child or family²¹

From many studies it is proved that Tics disorders are common among school children (6-12yrs) and causes significant distress to the children, reduces their self-esteem and leads to behavioral problems. It also causes significant distress to parents as well as teachers. As school teachers are in contact with children (6-12 years) the researcher focuses on the need to educate teachers of school children on tics disorder in their children as early as possible and help them in coming out of it.

III. REVIEW OF LITERATURE

A study was conducted on children with Tourette disorder (TD). This study intended to examine the impact of TD on adult psychosocial functioning. A 29-item self-report questionnaire was mailed to 180 former and current adult TD patients. Adult TD patients reported relatively good psychosocial adjustment although many continued to be dependent upon their families for living and financial support. For adults with TD, personal acceptance and medication use were the most important factors in coping with the disorder. The severity of vocal tics had a much greater influence on adult functioning than the severity of motor tics.²⁷

A study was conducted on prevalence of tics disorder among school children 7 to 15yrs in Swedish school population. A total population of 4479 children and their parents were asked to fill in a questionnaire covering both motor and vocal tics. A three-stage procedure was used, screening, interview, and clinical investigation. 5.7% was found to have tics as per DSM, another 0.8% had chronic motor tics, and 0.5% had chronic vocal tics. Further, 4.8% of the children had transient tics. All together 11.6% of 7 to 15yrs children currently had or had experienced some kind of tics disorder during the last year. Study conclude that the prevalence of tics was higher than previously thought but other tic disorders were more common in this childhood population.³⁰

A study was conducted on the prevalence of Tourette Syndrome (TS) among children in 13 to 14-years-old in school in 918 children, A three-stage ascertainment procedure was used to identify those who had TS. Tics were identified in 189 pupils. Seven young people were identified as fulfilling the

criteria for TS, giving a minimum prevalence rate amongst 13–14-year-olds of 0.76% and a more realistic estimate of 1.85%. These findings lend further support to the contention that the prevalence of TS in the community has hitherto been underestimated, though the symptoms may be generally milder than cases of TS presenting to clinics.³¹

A study was conducted on Prevalence of tic disorders among primary school students in the city of Pavia; the study population comprised 2347 primary school children from the city of Pavia. All children with motor or vocal tics occurring intermittently and unpredictably out of a normal activity were accepted. School performance was correlated to the presence of tics. Result concludes a total of 68 children aged 6–11 years were identified with tic disorders. The prevalence was 4.4% in boys and 1.1% in girls, with no detectable trends at age 6–11. Motor tics were present in 46 cases, vocal tics in 6, and motor and vocal tics in 16. Situation related tics were noted in 37 cases. A significant correlation was found between the presence of tic disorders.³²

A study was conducted on knowledge and attitude of teachers towards children with Tourette's syndrome. 99 pupils participate in study, they completed a questioner concerning knowledge and attitude towards children with Tourette's syndromes. Result concludes that the score of their knowledge was at level of 45.9%. Half of the pupil not knew and they expressed non tolerant attitude towards Tourette syndrome, study conclude that the teaching programme is required to improve the knowledge and attitude of teacher towards children with Tourette syndrome.³³

A study was done on teacher's knowledge of children exposure to family risk factors: accuracy and usefulness. The study involved 756 children indicated that teachers had accurate knowledge of children exposure to factors such as adverse life events and family socio economic status, which predicted children mental health problem at 1 year follow up. The study concluded that asking teachers to report children exposure to particular family risk factors is feasible method for identifying children for selective interventions.³⁴

A study was conducted on parents and family carers of people with emotional disorder. 29 participants took part in the 4 groups and semi structured

interviews were held with further 4 participants these were taped, the data transcribed and transcripts read by two members of research team to identify emerging things. The study revealed that participants highlighted difficulties such as lack of information, the need to proactive and having to fight for service³⁸ A pilot study was done on college credit model of in-school consultation: a functional behavioral training programme. The study included 50 teachers and data was collected before and after classes for teachers in mental health principles and techniques. The teacher was trained in the implementation of functional-behavioral intervention skills. The study concluded that teachers post test score was significantly higher than pretest score. The study suggested that teachers gained knowledge on functional behavioral skills³⁹

IV. STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured teaching programme on knowledge of tics disorder among teachers in a selected primary school at Bangalore.

V. OBJECTIVES & HYPOTHESIS

1. To assess the existing knowledge of teachers regarding tics disorder.
2. To assess the effectiveness of structured teaching programme regarding tics disorder among teachers.
3. To find out the association between knowledge score regarding tics disorder with demographic variables.

HYPOTHESIS:

H₁: There will be significant difference between pre and posttest knowledge Score regarding tics disorder among teachers.

H₂: There will be significant association between knowledge score regarding tics Disorder among teachers with selected demographic variables.

VI. RESEARCH METHODOLOGY

An evaluative research approach was accomplished for the present study. One group pre-test, post-test research design, which belongs to pre-experimental

design was selected to assess the knowledge of teachers regarding tics disorder. The study was conducted in Royal English Medium School, Rajajinagar, Bangalore & Goutham Public School Kamalanagar Bangalore. The sample size for the present study is 40 teachers of the primary school. Non-Randomized Purposive sampling technique was used to draw the samples.

Selection and Development of Tool

Tools were prepared on the basis of objectives of the study. A self-administered structured knowledge questionnaire selected to assess the knowledge of Teachers regarding tics disorder. It was considered to be the most appropriate instrument to elicit the response from Teachers.

Development of Tool

The Following Steps Were Carried Out In Preparing the Tools: -

- Review of Literature
- Consultation & Discussion with Nursing Experts
- Personal Experience & Discussion with Colleagues

Description of the Tool

Part I - Demographic dat consists of 10 items which includes age, gender, religion, marital status, type of family, residency, education, family income, experience and source of information.

Part II: - Consists of 35 items of Self-administered structured Knowledge questionnaire on tics disorder which prepared based on the following aspects.

Pilot Study

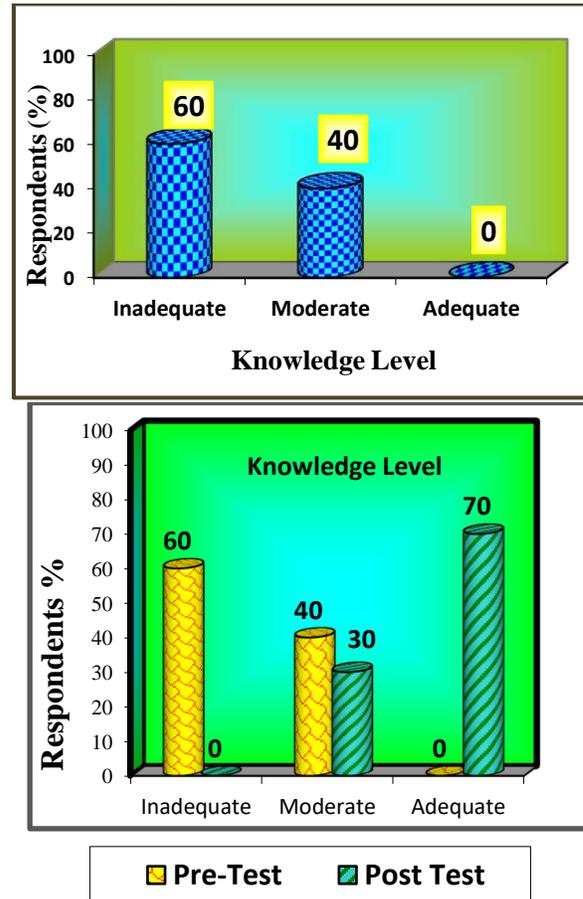
A pilot study was conducted in the month of October 2010 in East west school Subramanyanagar, Bangalore, among 4 teachers. An administrative approval was obtained from the principal to conduct the study. On the first day the purpose of the study was explained and informed consent was taken from teachers. A pretest was conducted by self-administration of structured knowledge questionnaire to each sample. Duration of 40 minutes was given for each sample to complete the tool. On the same day the Structured Teaching Programme was administered on knowledge of tics disorder for 60

minutes using the A.V Aids. Post test was conducted by using the same structured knowledge questionnaire on 7th day of the structured teaching programme. The purpose of the pilot study was to find out the feasibility of conducting the study.

The pilot study results showed that the overall post-test mean knowledge score was higher 70.25% with SD of ± 2.35 , when compared with overall pre-test mean knowledge score value which was 32.30% with SD ± 1.97 and paired ‘t’ test value was 6.58. The pilot study showed that the setting, samples and tool was feasible enough to conduct the main study.

VII. RESULTS

Figure 1 represents Pre-Test Knowledge Level of Respondents on Tics Disorder.



1. Frequency and Percentage Distribution of Respondents on Pre-Test Knowledge Level of Tics Disorder.

N=40

Sl. No.	Knowledge level	Category	Frequency and Percentage of Respondents	
			Pre-Test	
			n	%
1	Inadequate	< = 50% score	24	60
2	Moderate	51-75% score	16	40
3	Adequate	>75% score	0	0
	Total		40	100

Table 1 depict that classification of respondents on pretest knowledge level on tics di4sorder. In the pretest knowledge level, It was shown that 24(60%) of the respondents had inadequate knowledge and 16(40%) of the respondents had moderate knowledge and none of them respondent had adequate Knowledge.

2.Frequency and Percentage Distribution of Respondents on Post Test Knowledge Level of Tics Disorder

N=40

Sl. No.	Knowledge level	Category	Frequency and Percentage of respondents	
			Post Test	
			n	%
1	Inadequate	< = 50% score	0	0
2	Moderate	51-75% score	12	30
3	Adequate	>75% score	28	70
	Total		40	100

Table 2 depict that classification of respondents on posttest knowledge level on tics disorder. In the posttest knowledge level, It was shown that 28(70%) of the respondents had adequate knowledge and 12(30%) of the respondents had moderate knowledge and none of them respondent had inadequate Knowledge.

3.Over All Pre and Post Test Mean Knowledge Scores of Teachers on Tics Disorder.

N=40

Aspects	Statements	Knowledge Score			Paired 't' Test
		Mean	Mean (%)	SD	
Pre test	40	15.90	39.70	3.91	32.60*
Post test	40	28.90	72.25	2.97	
Enhancement	40	13	32.55	0.94	

* Significant at 5% level

Table 3 revealed that the mean post test score was 72.25% which was significantly higher than the pretest score of 39.70%, the difference in the mean enhancement score was observed as 32.55%.

4. Association Between Demographic Variables and Knowledge Scores of Pre Test on Tics Disorder Among Teachers.

N=40

Sl. No.	Demographic Variables	Category	Sample (n)	Knowledge Scores				χ^2 value	p-value
				Inadequate		Moderate			
				n	%	n	%		
1	Age	20-30 years	20	17	65	3	35	11.62*	<0.05
		31- 40 years	10	6	60	4	40		
		41-50years	6	3	50	3	50		

		>51	4	0	0	4	100		
2	Gender	Male	10	5	50	5	50	1.31 NS	>0.05
		Female	30	21	70	9	30		
3	Religion	Hindu	32	22	69	10	31	3.91 NS	>0.05
		Muslim	2	2	100	0	0		
		Christian	6	2	33	4	67		
4	Marital status	Unmarried	14	8	57	6	43	0.58	>0.05
		Married	26	18	69	8	31		
5	Type of family	Nuclear	30	20	67	10	33	0.14 NS	>0.05
		Joint	10	6	60	4	40		
6	Residency	Urban	34	25	74	9	26	7.24*	<0.05
		Rural	6	1	17	5	83		
7	Education	D.Ed	4	1	25	3	75	8.40*	<0.05
		Graduate	26	21	81	5	19		
		Post graduate	10	4	40	6	60		
8	Family income	<5,000	4	3	75	1	25	0.25 NS	>0.05
		5,001-10,000	24	15	62	9	38		
		>10,001	12	8	67	4	33		
9	Experience	<5yrs	14	10	71	4	29	0.40 NS	>0.05
		5-10yrs	16	10	62	6	38		
		>10yrs	10	6	60	4	40		
10	source of information	Radio/ TV/Internet	26	14	54	12	46	4.27 NS	>0.05
		Books/ Magazine	12	10	83	2	17		
		Friends/ Relative	2	2	100	0	0		

* Significant at 5% Level,

NS: Non-significant

Table 4 depicts Association between demographic variables and knowledge score of pretests on tics among teachers of primary school. Age, Residency and Education is found to be significant in pretest at $p < 0.05$ level, hence research hypotheses H_2 is accepted.

VIII. CONCLUSION

The study was to assess the effectiveness of structured teaching programme on knowledge of tics disorder among teachers in selected primary schools at Bangalore.

The findings of the present study revealed that overall post test mean percent knowledge score was 72.25% which was significantly higher than the pretest score of 39.70%, which was statistically significant as observed between pre and post test score with paired 't' test 32.60 at $P < 0.05$ level.

From the above statistical analysis, it was clear that there is significant increase in knowledge level of

teachers after the administration of structured teaching programme.

IX. IMPLICATIONS OF THE STUDY:

The findings of the study can be used in the following areas of nursing profession.

1. Nursing practice:

- Nurses are key persons of the health team, who play a major role in health promotion and maintenance; the teaching programme can be conducted by the nursing personnel on knowledge of tics disorder in all psychiatric wards which will improve the knowledge of nurses.

- As a nurse counselor, she can conduct individual counseling and group counseling for children tics disorder and to their family.
2. Nursing education:
- The nursing curriculum can include all the tics disorder of children and can be taught using different methods of teaching.
 - Teachers can be demonstrated assessment of tics disorder so that it helps in early identification among school children.
 - The student nurses from school of nursing and college of nursing should be encouraged to attend workshops and seminars regarding tics disorder.
3. Nursing administration:
- The nursing administrators should take part in planning of curriculum and clinical experience to be provided for nursing students on tics disorder.
 - The nurse administrator need to plan, organize and conducts health education programme by considering cost effectiveness and carry out successful education programme.
 - The nurse administrator should explore their potential and encourage innovative ideas in preparation of appropriate teaching material and usage of man power.
4. Nursing research:
- The study helps the nurse researchers to develop appropriate health education tools for educating the teachers on tics disorder.
 - Research should be conducted tics disorder to reduce the number of childhood psychiatric disorders.

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