

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING ATTENTION DEFICIT HYPERACTIVITY DISORDER IN CHILDREN AMONG TEACHERS OF SELECTED PRIMARY SCHOOLS IN DISTRICT SRI MUKTSAR SAHIB, PUNJAB

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Abstract

Attention deficit hyperactivity disorder is one of the most commonly diagnosed psychiatric childhood disorders. Teachers play a major role in the identification and assessment of children's academic and behavioural problems and make primary decision how to help them. The aim of the study is to assess the effectiveness of Structured Teaching Programme on knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in selected primary schools of district Sri Muktsar Sahib, Punjab. Quasi experimental, non-randomized control group design was used. Total 60 school teachers i.e. 30 in experimental group and 30 in control group were selected by non-probability convenience sampling technique from selected government primary schools of district Sri Muktsar Sahib, Punjab. Data was collected using structured knowledge questionnaire. In the control group, pretest knowledge score was 10.67 and posttest knowledge score was 11.7. The difference between pretest and posttest knowledge score was found statistically non-significant. In experimental group, pretest knowledge score was 11.63 and posttest knowledge score was 18.65. Statistically significant difference in the mean pre-test and post-test knowledge of school teachers regarding ADHD in children in the experiment group structured teaching programme is effective in improving the knowledge of school teachers. So there is need to update the knowledge of school teachers through in-service training programmes and school health programmes.

Keywords

Structured teaching, Hyperactivity Disorder, Primary Schools.

INTRODUCTION AND BACKGROUND OF THE STUDY

Life is a wonderful gift but it is also challenging and sometimes heart wrenching, we can all use a little motivation and inspiration from time to time to help us navigate the small and large hurdles we encounter on our journey. Education is one of the most important aspects of human resource development. The inability to successfully navigate the educational system can cause serious problems for children, their parents. There are many reasons for children to underperform at school such as, medical problems, below average intelligence, specific learning disability, attention deficit hyperactivity disorder, emotional problems, poor socio-cultural home environment, psychiatric disorders and even environmental causes. ADHD is diagnosed 2 or 4 times as frequently in boys as in girls, though study suggests that discrepancy may be due to subjective bias of referent teachers. The prevalence of *Attention Deficit Hyperactivity Disorder* in India is about 4-20% of school-age children and is more frequent in boys than in girls. Males are 6-8 times more often affected. The onset occurs before the age of 7 years and a large majority of patients exhibit symptoms by the 4th years of age. *Attention Deficit Hyperactivity Disorder* affects school performance and interpersonal relationships. According to IAP text book of pediatrics the incidence of *Attention Deficit Hyperactivity Disorder* are highest among all development disabilities 75/1000. Difficulties associated with *Attention Deficit Hyperactivity Disorder* are

most often school related or academic. Family and social relationships can also be affected if aggressive behavior and mood liability interfere with peer relationships cause difficulties in social interaction or make disciplining difficult. The diagnosis of *Attention Deficit Hyperactivity Disorder* comes only after there has been a significant decline in the performance at school both academically and socially. The worldwide prevalence of ADHD is 5.29%.²¹ The prevalence of ADHD found among school age group in Saudi Arabia was (16.4%), hyperactivity-impulsivity (12.4%) and inattention disorders (16.3%).⁵ Among Greek school age children, the prevalence of symptoms of hyperactivity was found to be (7%), inattention (9.5%), and impulsivity (7%). The prevalence of adult ADHD was estimated to be 3.8%. Men when compared with women were more likely to have ADHD (5.5 % in men versus 2 % in women). The study concluded that the prevalence of adult ADHD in this region of Iran seems to be substantially higher than expected or treated

OBJECTIVES

1. To assess the pre-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers of selected primary schools, in experimental and control group.
2. To prepare and implement Structured Teaching Programme regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental group
3. To assess the post-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group.
4. To compare pre-test and post-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group.
5. To find out association of level of knowledge regarding Attention Deficit Hyperactivity Disorder in children with selected demographic variables.

MATERIAL AND METHODS

Research approach and design

A Quantitative research approach, quasi-experimental in which non randomized control group design was found to be appropriate for the study.

VARIABLES OF STUDY

Independent variable

Structured teaching programme. **Dependent variables**

Knowledge of primary school teachers.

Research Setting

The setting for the present study for the experimental and control group was selected primary schools of District Sri Muktsar Sahib, Punjab which was selected by convenience sampling technique.

Target Population

Target population includes primary school teachers working in selected primary schools of District Sri Muktsar Sahib, Punjab.

SAMPLE SIZE AND SAMPLING TECHNIQUE

The sample size of the study comprises of 60 primary school teachers out of which 30 were in experimental group and 30 were in control group from selected primary schools of district Sri Muktsar Sahib. Non probability convenience sampling technique was used to select the samples

Inclusion criteria

- School teachers who were willing to participate in the study
- School teachers who were present during the data collection

Exclusion criteria

- Can't understand English and Punjabi language.
- Teachers who have previously participate in any training programme of Attention Deficient Hyperactivity Disorder.

SELECTION AND DEVELOPMENT OF TOOL

A structured teaching questionnaire was prepared for assessing the knowledge of primary school teachers regarding learning disabilities in children before and after the administration of structured teaching programme.

It was divided into two sections:

Section A: Demographic data of the study participants

Section B: Structured knowledge questionnaire to assess the knowledge of primary school teachers.

It comprised of 30 knowledge questions which were multiple choice items. Each item has a single correct answer. Every correct answer was awarded a score of 'one' and every incorrect answer was awarded a score of 'zero'. Thus the maximum possible score was 30 and minimum possible score was 'zero' on the structured knowledge questionnaire.

Criterion measure for classification of level of knowledge

Level of Knowledge	Range of Score
Good	21-30
Average	11-20
Below Average	0-10

Minimum Score: 0

Maximum Score: 30

DEVELOPMENT OF INTERVENTION

Structured teaching programme was given as intervention comprised of information regarding ADHD in children among primary school teachers. The structured teaching programme comprised of teaching regarding general information, types and strategies for teaching learning disabled children.

DATA ANALYSIS

Data analysis was based on the objectives stated in the study by using descriptive and inferential statistics by calculating the frequency, percentage, Chi-Square.

RESULTS

In age group wise distribution of experimental group, majority of the school teachers belong to the group, 36-40years i.e.15(50%) whereas in control group majority of school teachers belong to the group, 36-40years i.e.16(53.33%). In relation to gender wise distribution of school teachers of primary schools in experimental group , the table reveals that majority of school teachers are belongs to female group i.e 21(70%) where as in control group the table reveals that majority of school teachers are belongs to female group i.e 24(80%). In relation to education status wise distribution of school teachers of primary schools in experimental group , the table reveals that majority of school teachers are belongs to B.Ed group i.e 15(50%) whereas in control group , the table reveals that majority of school teachers are belongs to E.T.T group 12(40%). In relation to area of working wise the distribution of the school teachers in experimental group belong to Govt. schools 30(100%) and private school 0(0%). in control group belong to Govt. schools 30(100%) and private school 0(0%). relation year of teaching experience wise the distribution of school teachers in experimental group majority of them belong to >5years i.e. 17(56.66%), in control group majority of them belong to >5years

i.e 22(73.33%), followed by <1 year 0(0%). In relation to previous exposure wise the distribution of the school teachers in experimental group belong to yes 30(100%) and no 0(0%). in control group belong to Govt. schools yes and no 0(0%). In relation to medical personal in family wise the distribution of the school teachers in experimental group belong to yes 30(100%) and no 0(0%). in control group belong to Govt. schools yes and no 0(0%). In relation to source of information wise the distribution of the school teachers in experimental group belong to television ,radio , computer i.e 24(80%) followed by books and newspaper 6(20%) and in family & friends 0(0%). in control group belong to television ,radio , computer i.e 22(73.33%) followed by books and newspaper 8(26.67%) and in family & friends 0(0%). In relation family history related to ADHD wise the distribution of the school teachers in experimental group belong to yes 30(100%) and no 0(0%). in control group belong to Govt. schools yes and no 0(0%).

To assess the pre-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers of selected primary schools, in experimental and control group.

N=60

Level of knowledge	Score	Experimental group (n=30)		Control group (n=30)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Good	21-30	0	0%	1	3.33
Average	11-20	18	60%	13	43.33
Below average	0-10	12	40%	16	53.34

Table 1 represent that during pre-test no school teacher had good knowledge, in experiment group whereas 18(60%) have average knowledge and 12(40%) below average knowledge. in control group during pre-test 1(3.33) have good knowledge whereas 13(43.33%) have average knowledge and 16(53.34%) below average knowledge.

To assess the post-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group

N=60

Level of knowledge	Score	Experimental group (n=30)		Control group (n=30)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Good	21-30	17	56.67%	1	3.33%
Average	11-20	9	30%	16	53.34%
Below average	0-10	4	13.33%	13	43.33%

Table 2 represent that during post-test in experiment group 17(56.67%) school teacher had good knowledge, whereas 9(30%) have average knowledge and 4(13.33%) below average knowledge. in control group during pre-test 1(3.33) have good knowledge whereas 16(53.34%) have average knowledge and 13(43.33%) below average knowledge.

To compare pre-test and post-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group

N=60

Group	Pre test			Post test			Chi square
	GOOD (f)	AVERAGE (f)	BELOW AVERAGE (f)	GOOD (f)	AVERAGE (f)	BELOW AVERAGE (f)	
Experimental group n=30 (%)	0	18	12	17	9	4	24.0915* df=2
Control group n=30 (%)	1	13	16	1	16	13	0.60 ^{NS} df=2
Chi square (df)	2.86 ^{NS} df=2			20.78* df=2			

In Table 3 show the comparison of pretest and posttest level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group. In this experimental group comparison of pretestposttest chi square value found to be 24.0915*,

df=2, which is significant at the level of 0.05. In this control group comparison of pretestposttest chi square value found to be 0.60^{NS} with df=2, which is non-significant at the level of 0.05. and in experiment and control group pretest comparison chi square value found to be 2.86^{NS}, df =2 at the level of 0.05. experiment and control group posttest comparison chi square value found to be 20.78*, df =2 at the level of 0.05.

To find out association of level of knowledge regarding Attention Deficit Hyperactivity Disorder in children with selected demographic variables

The association of pretest level of knowledge with the selected demographic variables of experimental group. In this there is no significant association of posttest level of knowledge with selected demographic variables of school teachers. The association of pretest level of knowledge with the selected demographic variables of control group. In this there is significant association of pretest level of knowledge with gender of school teacher as statistically analyzed by a χ^2 value of 6.21 at df 2 and 0.05 level of significance and there is significant association of pretest level of knowledge with area of school of school teacher as statistically analyzed by a χ^2 value of 6.01 at df 2 and 0.05 level of significance There is no significant association of pretest level of knowledge with age, year of experience, source of information, family history.

DISCUSSION

To assess the pre-test level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers of selected primary schools, in experimental and control group.

Findings of the study revealed that during pre-test no school teacher had good knowledge, in experiment group whereas 18(60%) have average knowledge and 12(40%) below average knowledge. in control group during pretest 1(3.33) have good knowledge whereas 13(43.33%) have average knowledge and 16(53.34%) below average knowledge. In experiment group mean knowledge score of pretest of school teacher is 11.63 and standard deviation is 3.74 and whereas the mean of control group is 10.67 and standard deviation is 4.06, it is supported by the study done by Bos, C. S, et al (2007) assessed that 77.6% teachers believes that students with attention deficit hyperactivity disorder experiences difficulty in making relation with the class mates, and knowledge of teachers about this disease was relatively low.

To assess the posttest level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group.

The present study reveals that during posttest test in experiment group 17(56.67%) school teacher had good knowledge, whereas 9(30%) have average knowledge and 4(13.33%) below average knowledge. in control group during pretest 1(3.33) have good knowledge whereas 16(53.34%) have average knowledge and 13(43.33%) below average knowledge. it is supported by the study done by **Shajisimi,(2008)** found that the sample size of this study is 60 school teachers from a selected schools: it concluded that most of the teachers had poor or average knowledge (n=60.28%) regarding ADHD in children, after the administration of teaching programme knowledge of majority of teachers in the experimental group considerably increased a higher score (50%) whereas in the control group the pretest and post test scores remarked approximately similar. This clearly indicates that STP was effective in increasing the knowledge of teachers regarding ADHD.

To compare pretest and posttest level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental and control group.

Findings of the study revealed that the comparison of pretest and posttest level of knowledge regarding Attention Deficit Hyperactivity Disorder in children among teachers in experimental

and control group. In this experimental group comparison of pretestposttest chi square value found to be 24.0915*, $df=2$, which is significant at the level of 0.05. In this control group comparison of pretestposttest chi square value found to be 0.60^{NS} with $df=2$, which is non-significant at the level of 0.05. and in experiment and control group pretest comparison chi square value found to be 2.86^{NS}, $df =2$ at the level of 0.05. Experiment and control group posttest comparison chi square value found to be 20.78*, $df =2$ at the level of 0.05. it is supported by Prashant B Patil, (2013) who conducted the study in which the result showed that the STP was effective in increasing the knowledge and attitude of the teachers ($t = 14.34$, $t = 7.57$). The mean post-test knowledge and attitude scores ($X_2 = 43.17$, $X_2 = 52.72$) higher than the mean pre-test knowledge and attitude scores ($X_1 = 30.40$, $X_1 = 44.52$).

To find out association of level of knowledge regarding Attention Deficit Hyperactivity Disorder in children with selected demographic variables.

The present study shows the association of pretest level of knowledge with the selected demographic variables of experimental group. In this there is no significant association of posttest level of knowledge with selected demographic variables of school teachers. Hence there is no significant association of knowledge of teacher with selected demographical variables. so research hypothesis is H₂ is rejected whereas the association of pretest level of knowledge with the selected demographic variables of control group. In this there is significant association of pretest level of knowledge with gender of school teacher as statistically analyzed by a χ^2 value of 6.21 at $df 2$ and 0.05 level of significance and there is significant association of pretest level of knowledge with area of school of school teacher as statistically analyzed by a χ^2 value of 6.01 at $df 2$ and 0.05 level of significance. Hence there is significant association of knowledge of teacher with selected demographical variables. so research hypothesis is H₂ is accepted. This result is supported by the study Pham HD¹, et al (2015) who conducted cross-sectional study to determine the prevalence of ADHD in primary school children in the South of Vietnam. 600 children were chosen randomly from primary schools .ADHD Rating Scale-IV used for parents/caregivers and teachers. 1200 reports were collected from parents/caregivers and teachers. The prevalence rate of ADHD was 7.7%. The rate of the predominantly inattentive type, predominantly hyperactive type and combined type were 1.7%, 5% and 1% respectively. It concluded that the prevalence of ADHD in urban children was 2.2 times more than that in rural children.

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