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Knowledge, Attitude and Practices of Inclusive Education among Indian School Teachers: An Interventional Pilot Study (Paper B)

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Abstract

Background: Disability in children is not uncommon and is known to significantly affect the learning of school- going children. Despite several programs to address the special needs of these children is in place, it is common knowledge that the attitudes, especially of the teachers affect the learning of children at school.

Objectives: To assess the knowledge, attitude and practices of inclusive education among school teachers. To understand predominant attitude towards inclusion of special children in the regular classroom and to assess the effectiveness of the intervention for school teachers in improving their knowledge, attitude and practice of inclusive education.

Methods: Consecutive consenting teachers of Vedavalli Vidyalaya School, Ranipet willing to participate were recruited. A survey was conducted including pre-test (KAP), an ATPD scale, followed by an educational program and a final post- test (KAP) after six months to assess the effectiveness of the program in influencing the Knowledge, Attitude and Practice of inclusive education. The collected data was further analyzed using SPSS.

Results: Our study revealed a negative attitude among teachers pre intervention. However, the change in scores following the educational program was significantly increased.

Conclusions: Our study concludes that teachers are receptive and educational programs can influence the knowledge and attitude of Inclusive Education among schoolteachers. Further follow- up studies has to be conducted to understand the change in practice among schoolteachers. These results should encourage more mental health professionals to involve in designing systems of education.

Keywords: Intellectual Disability; Inclusive Education; Educational Intervention

Introduction

Inclusive Education (IE) is a new approach towards educating the children with disability and learning disabilities. UNCIEF 2007 defines IE as a process of addressing the diverse needs of all learners by reducing barriers to, and within the learning environment. It means attending the age appropriate class of the child's local school, with individually tailored support. It brings all students (normal and the disabled) together in one classroom and community, regardless of their strengths or weaknesses in any area, and seeks to maximize the potential of all students. Several studies suggest Inclusive education can reform children' education and learning [1]. It is one of the most effective ways to promote an inclusive and tolerant society with an effort to make sure that the child becomes a diverse learner, has a larger social network, positive self esteem while imbibing multicultural and multilingual skills.

How far are we in the implementation of IE in India?

As of today, we still lag far behind in promoting inclusive education services to Children with Intellectual Disability (CWID), with only few schools practicing IE. Although the Government of India has attempted to create policies since 1974, that are inclusive for CWID, their efforts have not resulted in an inclusive system of education, with about 94% of CWID not receiving any special educational services [2]. On the contrary, most developed countries have implemented intensive educational interventions for normal children such as children with personality issues, also known as Tier 1 education intervention [2]. Educational interventions in these countries has successfully progressed to the next step which is monitoring response of a child's perception and behavior through a process known as Response To Intervention (RTI) [3]. We have barely progressed to incorporating IE in our education system [2]. This is mainly because of the numerous challenges we face.

The following are the numerous factors that have hindered progress. (2) The predominant negative attitude of teachers and parents towards CWID in India (Reference Paper A) is the most important challenge that we currently face. A recent review reported

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Table 1:

Knowledge	Pre -test	Post-test
No. of disabilities known	6	9
A child with disability can go to school	5(yes)	9(yes)
The child can learn new skills with stepwise training	6 (yes)	10 (yes)
Attitude	Pre- test	Post- test
Would you allow your child and disabled child to be in same classroom?	4(yes)	13(yes)
Practice	Pre-test	Post-test
Refer a child with ID to a doctor or a psychiatrist or a psychologist?	3 (yes)	14 (yes)
How would you handle behavioral problems in a child with ID?	4 (help understand)	7 (help understand)

that nearly 70% of the regular school teachers in India had neither received training in special education nor had any experience teaching students with disabilities [2]. Teachers' and parents' attitude towards disability is known to significantly affect learning in children and alters the success and the effectiveness of the intervention [4-9]. The second main challenge we currently face is the lack of access to mainstream education with about 80% of CWID stemming from rural India. Scarcity of adequate human (child psychiatrists, social workers, special education teachers etc.) and material resources (special education schools) are other issues we face. The majority of schools in India are poorly designed and few are equipped to meet the unique needs of students with disabilities. Large class sizes present another challenge for the implementation of IE. Diversity of the students (diverse culture, religion, language, socio-economic and caste) also presents another significant challenge in the successful execution of IE.

We decided to focus on studying the attitudes of teachers towards CWID at a local school in two parts-the first one as an observational study (Paper A) while the second one as an educational intervention study (Paper B). In this pilot interventional study, the primary and secondary objectives are highlighted as below.

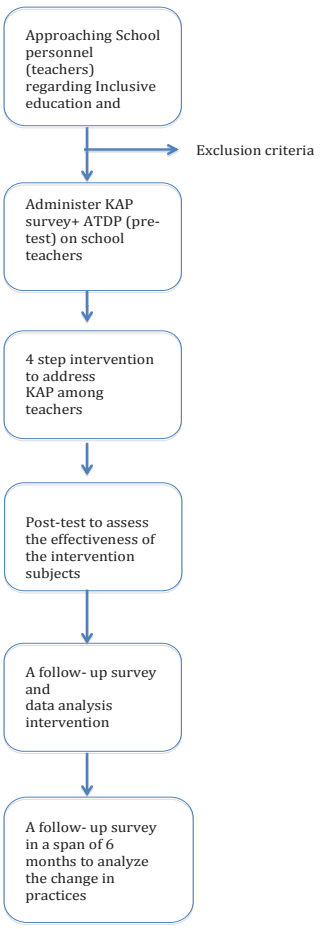
Primary objective: To assess the effectiveness of the intervention in improving the knowledge, attitude and practice of inclusive education for school teachers.

Secondary objectives: To derive score for attitude and to calculate predominant attitude towards inclusion of special children in the regular classroom.

Methodology

Consecutive consenting teachers of Vedavalli Vidyalaya School, Ranipet willing to participate were recruited. All English speaking school teachers at all levels of teaching willing voluntarily to participate were eligible for the study.

A KAP (Knowledge, Attitude and Practice) survey was conducted as pre-test along with an attitude scale (ATPD Scale), followed by an educational program and a final post- test to assess the effectiveness of the program in influencing the Knowledge, Attitude and Practice of Inclusive education. The KAP questionnaire with 17 items comprising of cultural beliefs, medical, educational, social and behavioral care) was used for the study. The ATDP scale comprised of 20 items, was scored on a 6-point Likert scale (I disagree very much, disagree pretty much, disagree a little, agree a little, agree pretty much, agree very much). Higher scores have a positive attitude, highest total score being 120 and the lowest total score being 20. The scale has excellent internal consistency, Cronbach's alpha coefficients of 0.90, test-retest reliability coefficients median value of 0.73; split half equivalence reliability of 0.73 to 0. 89, median stability equivalence reliability of 0.7 and high construct validity [10].



Flow chart:

The educational program was a four-step protocol that included educating the teachers regarding common disabilities, identification of CWID, screening and treatment along with use of audiovisual aids. We enabled this by bringing the teachers to our developmental disorders unit for one visit. During this visit, we taught them how

Table 2: ATDP scale.

S.No	Item	Item Response Mean*	
		Pre-test	Post-test
1	Parents of disabled children are less strict than other parents.	4.3	5.4
2	Physically disabled people are just as intelligent as non-disabled people.	2.5	3.85
3	Disabled people are generally easier to get along with than non disabled people.	2.7	3.5
4	Most disabled people feel sorry for themselves.	3.65	4.2
5	Disabled people are the same as anyone else.	2.85	3.05
6	There shouldn't be special schools for disabled people.	3.6	4.15
7	It would be best for disabled people to live and work in special communities.	2.8	3.5
8	It is up to the government to take care of disabled persons.	3.6	3
9	Most disabled people worry a great deal.	3.7	4.15
10	Disabled people should not be expected to meet the same standards as non disabled children.	3.7	4.15
11	Disabled people are as happy as non-disabled ones.	2.55	3.15
12	Severely disabled people are no harder to get along with than minor disabilities.	3.2	4.15
13	It is almost impossible for disabled people to lead a normal life.	3.35	3.3
14	You should not expect too much from disabled people.	3.55	4.35
15	Disabled people tend to keep to themselves much of the time.	3.85	4.25
16	Disabled people are more easily upset than non-disabled people.	4.1	4.05
17	Disabled persons cannot have a normal social life.	3.25	3.15
18	Most disabled people feel that they are not as good as other people.	3.45	3.7
19	You have to be careful of what you say when you are with disabled people.	5.2	5.5
20	Disabled people are often grouchy.	4.1	3.8

*Response mean is the mean score from the Likert scale of 1 to 6.

Table 3: ATDP Subdomains.

SUBDOMAINS	ITEMS	MEAN*	
		Pre-test	Post-test
Communication and Interpersonal	1,3,5,12,14,15,17,19	3.6	4.16
Work	7	2.8	3.5
Self-Care	None	None	None
Education	2,6,10	4.9	4.16
Emotional strength of disabled	4, 9, 11, 13, 16, 18, 20	3.55	3.98
Societal	8	3.6	3

*Mean is the mean score from the Likert scale of 1 to 6.

to identify the clinical features of CWID. The treatment part of the protocol was focused on the use of audiovisual aids, emotional regulation and behavior modification techniques. A follow- up survey was conducted with- in a period of 6 months to analyze the change in practices among the schoolteachers who have attended the educational program. The collected data was further analyzed using SPSS.

The sample size was estimated using the formula $n= (Z \sigma/E)^2$, where $\sigma=15$ taken from the σ of Yukers book on ATDP [10]. The required sample size was 35. We recruited 20 for this pilot study.

Results

Few striking results from the KAP questionnaire are listed in Table 1,2. Results of individual data are shown below in the 9 bar graphs.

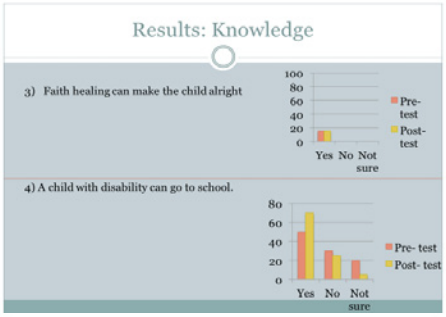
Attitude Towards Disabled Persons Scale (ATDP)

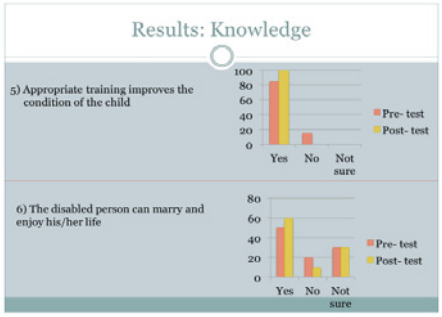
- Mean of pre- test score=69.8, SD of 5.27
- Mean of post- test score=78.35, SD of 5.94
- Total change in score =8.55
- Percentage change in score=7.19% [(78.35/120)- (69.8/120); 120 being the total score of the ATDP scale, score above 60 indicating a favorable attitude, higher scores indicating a better attitude].

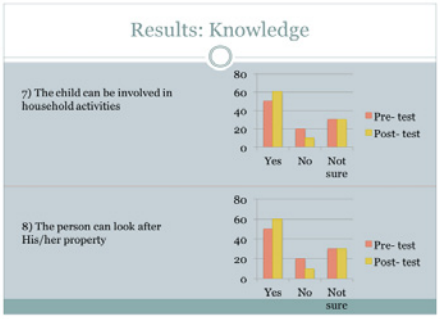
Discussion

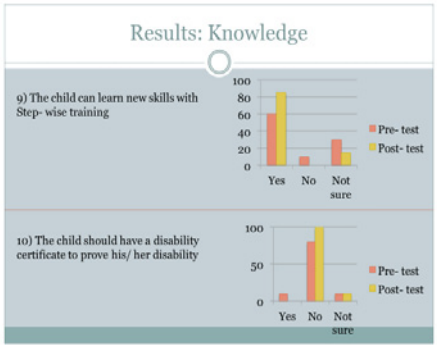
This study serves as pilot for larger studies. In Paper A of our pilot study, a favorable attitude of about 96 teachers towards CWID was found, with a mean ATDP score of 77.1; SD of 9.58. The total scores of the ATDP scale is 120. A score above 70 suggests a favorable attitude.

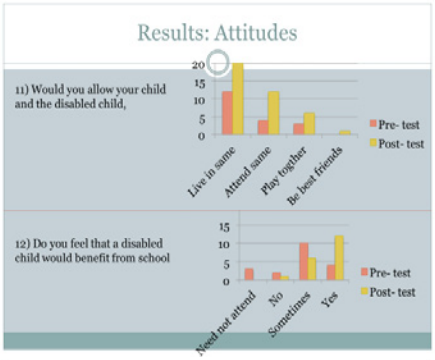

Results: Knowledge
1. Hearing impairment
2. Visual impairment
3. Physically challenged
4. Intellectual disability
5. Specific Learning Disability
6. Autism
7. Attention Deficit Hyperkinetic Disorder
8. Seizure disorder
9. Emotional/ Psychological disorder
10. Chronic diseases
No. of disabilities known
Pre- test
Post- test
Birth related
Karma
Bad luck
Black magic
Parenting
Genetics
Environment

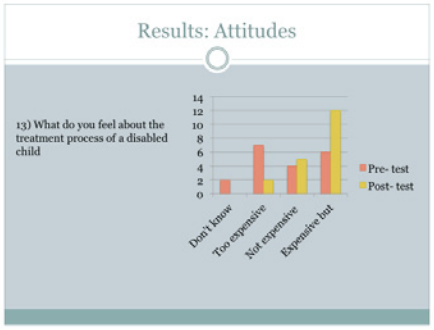

Results: Knowledge
3) Faith healing can make the child alright
Pre- test
Post- test
Yes
No
Not sure
4) A child with disability can go to school.

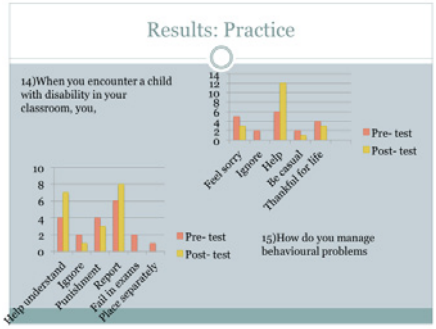

Results: Knowledge
5) Appropriate training improves the condition of the child
Pre- test
Post- test
Yes
No
Not sure
6) The disabled person can marry and enjoy his/her life

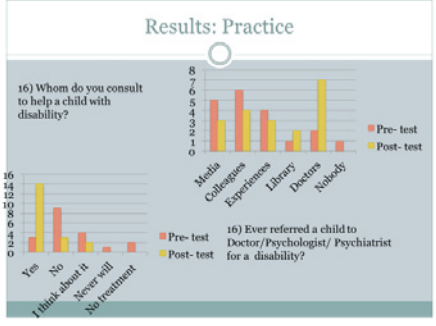

Results: Knowledge
7) The child can be involved in household activities
Pre- test
Post- test
Yes
No
Not sure
8) The person can look after His/her property


Results: Knowledge
9) The child can learn new skills with Step- wise training
Pre- test
Post- test
Yes
No
Not sure
10) The child should have a disability certificate to prove his/ her disability


Results: Attitudes
11) Would you allow your child and the disabled child,
Pre- test
Post- test
Live in same
Attend same
Play togther
Be best friends
12) Do you feel that a disabled child would benefit from school
Need not attend
No
Sometimes
Yes


Results: Attitudes
13) What do you feel about the treatment process of a disabled child
Pre- test
Post- test
Don't know
Too expensive
Not expensive
Expensive but


Results: Practice
14)When you encounter a child with disability in your classroom, you,
Pre- test
Post- test
Feel sorry
Ignore
Help
Be casual
Thankful for life
Help understand
Ignore
Punishment
Report
Fail in exams
Place separately
15)How do you manage behavioural problems


Results: Practice
16) Whom do you consult to help a child with disability?
Pre- test
Post- test
Media
Colleagues
Experiences
Library
Doctors
Nobody
Yes
No
I think about it
Never will
No treatment
16) Ever referred a child to Doctor/Psychologist/ Psychiatrist for a disability?

Bar Graphs:

Factors that bring about the positive outlook are mentioned in Paper A and will not be elaborated here. Our study showed a negative attitude among the 20 teachers, with the pre- intervention mean ATDP score of 69.8, SD of 5.27. However, with intervention, there was a significant positive change by 7% on the ATDP with intervention. (Mean of post- intervention score=78.35, SD of 5.94) which suggests that intervention can help bring about successful implementation of IE. The KAP questionnaire also had positive results (Refer Table 1 and bar graphs) with intervention with reduced cultural and religious stigma held against CWID (Bar graph 1) and increased positive attitudes in the areas of communication, interpersonal skills and educational needs of CWID (Table 3) in practice. This indicates the importance of conducting Focus Group Discussions (FGD) to bring about such changes.

However, not many intervention studies in CWID exist in India. Intervention studies that have been done are family interventions [11-13]. Thus, there is a need for educational intervention studies in those schools that practice IE. Educational interventions benefit in lessening the negative attitudes of teachers and parent significantly, reducing stigma and aiding with provision of better care to CWID. Interventions can be done by child psychiatrists, child psychologists and trained social workers. In addition, school liaising can be extended to government authorities who help with law making or designing educational systems for CWID in order to incorporate IE in schools.

It is equally important to re-assess attitudes every few months. In our study, the post intervention results were remarkable despite the intervention being done 6 months ago, suggesting that bi-annual school liaisons suffice in raising community awareness.

Limitations

Relatively smaller sample size in our study affects results for generalization. Lack of demographic details was a shortcoming for elaborate analysis of data. Limitations of self-report scales, response bias and measurement bias are applicable here, as they haven't been corrected. Other bias includes measurement bias like socially desirable responses in an attempt to make good impression.

Conclusion

Our study noted that pre- intervention revealed poor to average knowledge about disabilities among teachers. However, the change in scores in all domains following the educational program was significant. Inclusive education practices can be easily influenced and needs frequent follow-up. To meet the challenges, the involvement of educators, parents, community leaders with the assistance of the government is vital for the creation of better inclusive schools. We need to develop an inclusive design of learning to make the education joyful for all children so that the education for them is welcoming, learner friendly, beneficial and they feel being part of it, not apart from it.

References

1. Bates H, Mc Cafferty A, Quayle E, McKenzie K. Review: typically-developing students' views and experiences of inclusive education. Disability and Rehabilitation. 2015; 37: 1929-1939.
2. JD Singh. Inclusive Education in India-Concept, Need and Challenges. Research Gate. An international peer reviewed and referred scholarly research journal for humanity science and English language. 2016; 3/13: 3222-3232.
3. Understanding Response to Intervention (RTI): KU Education Online." Understanding Response to Intervention (RTI) | KU Education Online, educationonline.ku.edu/community/what-is-response-to-intervention.
4. Cassady JM. Teachers' Attitudes Toward the Inclusion of Students with Autism and Emotional Behavioral Disorder, Electronic Journal for Inclusive Education. 2011; 2.
5. Chabra S, Chopra V, Dutta I. Attitude of Prospective Teachers towards Inclusive Education. An International Multidisciplinary Peer Reviewed E Journal. Vol I Issue- I March-April, 2012 Page 1.
6. Parasuram K. Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India, Disability & Society. 2006; 21: 231-242.
7. Sharma U, Moore D, Sonawane. Attitudes and concerns of pre-service teachers regarding inclusion of students with disabilities into regular schools in Pune, India. Asia-Pacific Journal of Teacher Education. 2009; 37: 319-331.
8. Moothedath S, Narasimha VM. Attitude of Primary School Teachers towards Children with Learning Disabilities. Journal of Indian Association for Child & Adolescent Mental Health. 2016; 12: 323-335.
9. Shamim M, Osman AAM. Parental attitudes towards children with mental retardation: Across sectional study from NGOs in Northern India. International Journal of Research in Health Sciences. 2015; 3: 267-273: 2321-7251.
10. Yuker HE, Block JR, Young JH. Measurement of attitudes toward disabled persons. Albertson, NY: INA Men Institute at Human Resources Center; 1970.
11. Paul SS Russell, John JK, Lakshmanan JL. Family intervention for intellectually disabled children: Randomized controlled trial. 1999; 174: 254-258.
12. Narayanan HS, Girimaji SR, Gandhi DH, Raju KM, Rao PM, Nardev G. Brief in-patient family intervention in mental retardation. Indian J Psychiatry. 1988; 30: 275-281.
13. Varma VK, Seshadri M. Intervention programmes for parents of mentally retarded children. Annals of the National Academy of Medical Sciences (India). 1989; 25: 309-318.