



ISSN: 2230-9926

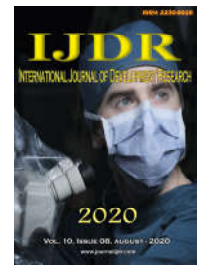
Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research

Vol. 10, Issue, 08, pp. 39121-39130, August, 2020

<https://doi.org/10.37118/ijdr.19183.08.2020>



RESEARCH ARTICLE

OPEN ACCESS

EFFECTIVENESS ON KNOWLEDGE AND INVOLVEMENT CARE OF MENTAL RETARDATION CHILDREN AMONG PARENTS ATTENDING SPECIAL TRAINING SCHOOL LIFE HELP CENTRE, CHENNAI

¹Shaini, G.S, ²Dr. Ramaswamy and ³Dr. Menaka

¹Ph.D. Scholar, Saveetha Institute of Medical and Technical Sciences, Chennai.

²Research Guide, Professor, Dept. of Medicine, Saveetha Institute of Medical and Technical Sciences, Chennai

³Research Co-Guide, Principal, Padmasree College of Nursing, Kanchipuram

ARTICLE INFO

Article History:

Received 19th May 2020

Received in revised form

13th June 2020

Accepted 17th July 2020

Published online 30th August 2020

Key Words:

Effectiveness, Knowledge, Mental retardation, Intellectual disabilities, Involvement care and Special training school.

*Corresponding author: Shaini, G.S.

ABSTRACT

Effective mental retardation education and involvement care of mental retardation children to remain continuum care involvement activities of mentally challenged children for the foreseeable future.

Objective: This experimental study aimed to explore how parents acquire knowledge and skills in assessing and managing involvement care of mentally challenged children. **Method: Research Design:** A quasi experimental pre-test-post-test control group design. **Setting:** Auditorium hall at Life Help Centre, Chennai. **Participants:** parents whose children attended Life Help Centre. **Intervention:** Structured teaching knowledge about mental retardation and involvement care of mentally challenged children. **Results:** Majority of the parents in study group Post-test (80%) of them have gained adequate knowledge, whereas the Control group Post-test (60%) of them had inadequate knowledge. Study group Mean and Standard Deviation on involvement care of mental retardation children among parents in the post test was higher than that of in the pre-test. The difference was found to be statistically significant at $P < 0.001$ level which indicates the effectiveness on involvement in the care of mental retardation children. **Conclusion:** Effectiveness of knowledge and involvement care of mentally challenged children support parents help to develop their knowledge and skills practice to gain confidence in assessing mentally challenged children.

Copyright © 2020, Shaini et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Shaini, G.S, Dr. Ramaswamy and Dr. Menaka. "Nutritional status of schoolchildren at a municipal school in the interior of piau", *International Journal of Development Research*, 10, (08), 39121-39130.

INTRODUCTION

Children with profound cognitive impairment are a heterogeneous group who often experience frequent and persistent pain. Health professionals need to support parents and care givers to develop their knowledge and skills and to gain confidence in knowledge and practice assessment and they should recognize and act on the parents and care givers concerns (Sullivan, 2018). A secure attachment with one or more caregivers is one of the most important predictors of cognitive development and emotional wellbeing. Persons with intellectual disabilities (ID) have extra need for secure relationships with primary caregivers but can find making connections difficult (VanWingerden, 2018). Findings from the semi-structured interviews also showed parent's articulation of the extent of reciprocal care manifest between them and their son or daughter with an intellectual disability, as well as an awareness of the fragility of their own emotional well-being.

A Mental Retardation child approaches to care and interventions that are adapted to their needs. The approaches to care that are promoting impairments in cognitive, communicative or other adaptive functioning. People with intellectual abilities have less favourable outcomes in among care givers and parents to provide targeted support to parents /care givers of M.R.children, knowledge of their distress and everyday problems in crucial for this purpose knowledge and practice among care givers/parents (Sullivan, 2018). Can be a valuable addition to routine practice (Marchal, 2017). Understanding the difficulties and needs of the family cares in taking care of the person with intellectual disability can facilitate the development of appropriate interventions programmers and services to strengthen their caring capacity and empower them to continue with their caring roles. This study aims to explore family cares 'care giving experiences and the plans they have to provide care for themselves and their children with mild and moderate intellectual disability (Low, 2017). Research suggests that the number of intellectually

disabled people with children is increasing. Intellectual disabilities do not inevitably cause parenting difficulties, but it may impact on an individual's capacity to parent a child effectively. Children of parents with intellectual disabilities may be at increased risk of neglectful care, which could lead to health, developmental and behavioural problems, or increased risk of intellectual disability. Compared with other parents, those with intellectual disabilities are more likely to be involved in care proceedings (Gant, 2014). 240 study subjects consisting of 120 each of siblings of mentally disabled and normal, healthy children (control group) matched for age and gender were selected by convenience sampling. Oral health was assessed using the WHO-1997 proforma the siblings of mentally disabled children also showed good oral health knowledge (mean 7.1 ± 1.4) and a positive attitude ($p < 0.05$). They exhibited favourable attitudes and involvement in helping their sibling to maintain oral health (Chauhan, 2018). The study implemented an intervention to initiate, increase, or maintain physical activity, and quantitative or qualitative data were used to report the effectiveness of the intervention (Frey, 2017). A quasi-experimental study that was conducted at a specialized education school in a city in Turkey for the purpose of evaluating the effectiveness of a structured supported education program for the parents of children with intellectual disability (ID). The education program was conducted with a total of 8 groups attending 3 sessions. These differences were statistically significant. It was found that the supported education of parents of individuals with ID made an impact on the family's knowledge and level of hopelessness (Cenk, 2016). Increasing life expectancy for people with intellectual disability is resulting in greater need for end-of-life care services (10). Little is known about the health and well-being of the 'hidden majority' of parents with mild intellectual disability (ID), who are less likely to be in contact with disability services (Emerson, 2015). Knowledge and occupation plays a major role as determinants of disability (Ganesh, 2008). Monosomy 1p36 is one of the most frequent subtelomeric microdeletion syndromes characterized by distinct craniofacial features and developmental delay/mental retardation (Isidor, 2008). Children with profound cognitive impairment (PCI) are a heterogeneous group who often experience frequent and persistent pain. Those people closest to the child are key to assessing their pain (Carter, 2017). Despite advances in the assessment and management of children's pain, children with profound special needs are especially vulnerable to poor pain management. Intellectual disability affects more than 1.5% of the population of children in developing countries about the daily lives and support services available for them and their caregivers (Lim, 2013). Families had larger unmet service needs when mothers were married, received less assistance from their children without mental retardation, and reported higher levels of subjective burden (Smith, 1997). Adults with ID had a significantly poorer understanding of the concept of death (Stancliffe, 2016). Report on a mentally retarded female with behavioural problems, microcephaly, mild facial dysmorphisms, short stature and small hands with thin fingers due to a de novo partial duplication within the long arm of chromosome 13(q14.1q21.3) (Verhoeven, 2009). The penile health needs of men and boys with intellectual disabilities are being compromised by a lack of guidance, training, knowledge and limited gender-sensitive care (Wilson, 2009). People with intellectual disabilities require access to compassionate, quality, and effective palliative and end-of-life care when facing serious, life-limiting illness (Stein, 2008)

More than a billion people have some form of disabilities worldwide (Mohebbi, 2014). As primary care providers care givers/parents, play a vital role in promoting the health and well-being of mental retardation children (Sullivan, 2018). Few studies to report on the use of knowledge and practice among care givers/parents in that inquire about specific problems and the wish for referral can play an important role in archiving this (Marchal, 2017). Allowed for the subjective experience knowledge and practices of care givers towards assisting practitioners in understanding the dynamics surrounding care-giving that may influence holistic interventions (Barr, 2016). Consideration that the attitude of the community may help to bring about the feeling of marginalization and unacceptability with the mentally ill. (Godan, 2008). The investigation of patients with congenital anomalies or intellectual disability with modern genetic methods allows the recognition of an increasing number of cases with these chromosomal rearrangements (Schwemmie, 2014). Adults with intellectual disabilities have low levels of physical activity and higher than average rates of related chronic health conditions (Bodde, 2013). National and international policies promote the acceptance, integration and inclusion of people with intellectual disabilities into mainstream society (Coles, 2012). 'Someone to talk to about my feelings and worries' and 'someone to support the rest of my family' was voted the most helpful support strategies (Tuffery, 2012). Crude prevalence of ICF severe/complete and moderate disability among the community-dwelling population aged ≥ 6 years was 0.9%-2.2% respectively, and that of severe/complete disability among persons living in sheltered accommodation was 0.3%. Prevalence of severe/complete disability was: higher in women than in men, 0.8% vs. 0.4%; increased with age; and was particularly high in domains such as "Domestic Life", 3.4%, "Mobility", 1.8%, and "Self-care", 1.9%, in which prevalence decreased when measured by reference to performance (Maierhofer, 2008).

The study objectives are;

- To assess and compare the level of knowledge on mental retardation children among parents control and study group before and after structured teaching.
- To assess and compare the involvement care on mental retardation children among parents control and study group before and after structured teaching.
- To find out the association between the knowledge and involvement care and selected socio demographic variables.

The hypothesis formulated for the study includes;

Ho 1. There is a significant difference between the pre-test and post-test level on knowledge and involvement care of mental retardation children among parents with study and control group

Ho 2. There is a significant association between demographic variables on knowledge and involvement care of mental retardation children among parents with study and control group

Theoretical Model: The theoretical framework adapted for this study is based on Orem's Self-Care Deficit Theory (1971) (Dorothea Orem, 1971)

MATERIALS AND METHODS

An evaluate approach with quasiexperimental pretest-posttest control group design was adopted for the current study .The target population was parents who attended in Life Help Centre Neelangarai.Chennai. The study was conducted in Life Help Centre Neelangarai.Chennai.Life Help Centre for the Handicapped is a Voluntary Organization devoted to serve and empower the disabled as well as the poor & needy since 1977. After the registration under the Tamil Nadu Societies Act-27-of-1975 it's services has been reflected in every sector like Disability, Education, Rehabilitation, Training, Employment, Health services, Rural development, Disaster responds and the support for the Vulnerable group. It is located in the City of Neelangarai, Chennai.Samples from parents who met the inclusion criteria were included in the study. By using purposive sampling method 50 samples are selected .The Data Collection Process done for one month. The tool is prepared based on the objectives of the study. Permission is obtained from theLife Help Centre Headmistress. Fifty parents(25 parents were allocated to study group and 25 parents to control group respectively). The inclusion criteria for selection of parents were whose children attended special school training, parents who were willing to participate, parents who are not participating any other training programme about mentally challenged children. Parents whose children were severely retarded were excluded. Content validity of the instruments was obtained from two medical experts and three nursing experts in the field of medical surgical nursing. The reliability of the tool was elicited by using test-retest method Pilot study was done to confirm feasibility and practicability. Karl Pearson's correlation was computed to find out the reliability. The score was 0.86. No modifications were made in the tool and data collection procedure for the main study.

Data collection procedure: Ethical permission for conduction of the study was obtained from Life Help Centre Chennai.Permission was obtained from Life Help Centre Headmistress for arrangement of hall for intervention. Prior collection of data, the investigator introduced self to the parents and established rapport with them. The parents who met the inclusion criteria were chosen.Written consent was obtained to the parents. The purpose of the study was explained to each subject in the language known to them (Tamil/English).Adequate privacy was ensured throughout the study. First week – Identify the sample selection Study group-25 and Control group-25 respectively .Second-third week-Pre-test was given to assess the parents both Study and Control group with the Socio demographic data, structured teaching knowledge questionnaire and involvement in the care of mentally challenged children in checklist observation. After was explained to the parents in Study group Structured teaching knowledge about mental retardation and involvement in the care of mentally challenged children given at 45mts. The parents in the Control group received knowledge and routine care about mentally challenged children. Forth week-Post test was given both the parents were assessed with structured interview schedule with structured questionnaire and assessment and activities of Involvement of parents in Care of the Mentally Challenged Children it include (1)Personal Hygienic activities, 2) Nutritional Activities and 3)Educational Activities were assessed with checklist. Data collection procedure was done in four weeks.

Instruments: The instrument used for three sections.

Section A- Demographic variables that included Age of the mother, Age of the child, Sex of the child, Occupation, Type of family, Educational status, Monthly family income and Family history of Mental Retardation.

Section B-Assessment of awareness about mental retardation questionnaire it consists of six multiple choice questions with four responded options includes that Define Mental Retardation, Causes of Down's Syndrome; Mental age is determined by, Type of mental retardation, Signs/Symptoms of Mental Retardation and Tertiary prevention. Total score-6 (Inadequate (0-50%), Moderately adequate (51-75%), Adequate (>75%).

Section C-Assessment of involvement activities of parents in care of the mentally challenged children it includes total 3 activities.1.Hygienic activities it consists of 16 items total score 48, score interpretation 38-48-no involvement,28-37-partial involvement and 0-27-total involvement 2.Nutritional activities-total number of items -21,17-21-no involvement,12-16-partial involvement ,0-11-total involvement .3.Educational activities –total number of items-15.score interpretation 12-15-no involvement ,9-11-partial involvement ,0-8-total involvement .Each respond is given a numerical scale and the scores(Always, Sometimes and Not at all) are totalled to measure the respondents to practice

Statistical Analysis: Descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (paired t test) and Chi square test were used to investigate the data and to test thestudy hypotheses. In all the tests value less than .05 were interpreted as statistically significant.

RESULTS

Table-1 reveals that the Demographic variables of Parents indicated that 40% of the parents both in study and control group were in the age group 31-40,the child in both group were in the age group 45%.In the study group 71% were in male 21% were in female, whereas in the control group 80% in male 20% in female. In the study group 85% were working, 15% were non-working whereas in the control group 90% were working 10% were non-working. 68% and 80% of the parents had nuclear family in the study and control group respectively. 40% and 38% of the parents had degree holder in the study and control group 52% and 36% had monthly family income above 11,000 in the study and control group. Family history of Mental Retardation30% of them had mothers in the study group, whereas in the control group had 24%. Table-1 reveals that Frequency and Percentage Distribution of Demographic variables of Parents(Age in years, Age of the child, Sex , Occupation, Type of family Educational status, Monthly family income and Family history of Mental Retardation. The data in table 2 is revealed that a majority of the Parents had poor knowledge in the pre-test (60%). Post-test (80%) of them have gained adequate knowledge, after the structured teaching programme where as the Control group majority of the parents had poor knowledge in the pre-test (50%). Post-test (60%) of them had inadequate knowledge.

Table-1 reveals that Frequency and Percentage Distribution of Demographic variables of Parents(Age in years, Age of the child, Sex , Occupation, Type of family Educational status, Monthly family income and Family history of Mental Retardation.

Demographic variables	(N=50)			
	Study Group(25)		Control Group (25)	
	Frequency	Percentage	Frequency	Percentage
1. Age in years				
1. 15-20	2.5	8%	2.5	8%
2. 21-30	8	32%	8	32%
3. 31-40	9	40%	9	40%
4. 40-50	5.5	20%	5.5	20%
2. Age of the child				
1.3-5	10	20%	10	20%
2.6-10	5	35%	5	35%
3.11-15	10	45%	10	45%
3. Sex				
1.Male	16	71%	20	80%
2.Female	9	29%	5	20%
4. Occupation				
1.Working	21.5	85%	19	90%
2.Non working	3.5	15%	6	10%
5. Type of family				
1.Nuclear	17	68%	21	80%
2.Joint family	8	32%	4	20%
6.Educational status				
1.Elementary	2	4 %	2	4 %
2.High School	5	22%	8	35%
3.Higher Secondary	8.5	34%	5	23%
4.Degree	9.5	40%	10	38%
7. Monthly family income				
1.<5000	9.5	35%	5	30%
2.6,000-10,000	5.5	13%	8	34%
3.>11,000	10	52%	12	36%
8. Family history of Mental Retardation				
1.Father		20%		20%
2.Mother	6	30%	5	24%
3.Sibling	7.5	20%	6	20%
4.Paternal grand parent	4	15%	5	13%
5.Maternal grand parent	3	15%	3.5	23%
	4.5		5.5	

Table 2. Frequency and percentage distribution of level of knowledge for Parents regarding mental retardation children (No-50)

Level of knowledge	Study Group (25)				Control Group (25)			
	Pre-test		Post-test		Pre-test		Post-test	
	N	P	N	P	N	P	N	P
Inadequate (0-50%)	15	60%	-	-	19	50%	20	60%
Moderately adequate (51-75%)	9	36%	5	20%	5	40%	3	30%
Adequate (>75%)	1	4%	20	80%	1	10%	1	10%

Table 3. Comparison of Mean and Standard Deviation of Pre-test and Post- test level of knowledge on parents regarding mental retardation children

Level of knowledge	Pre-test		Post-test		't' and p value
	M	SD	M	SD	
Experimental Group(25)	19.50	4.67	30.06	3.45	12.91** **P<0.001
Control Group (25)	28.17	8.55	27.16	8.51	1.04 0.299(NS)

**P<0.001, NS-Non Significant

Table 4. Mean and Standard Deviation of Pre-test and Post- test level of assessment of knowledge about mental retardation children among parents

Knowledge Aspects	Study Group (25)					Control Group (25)					't'
	Pre-test		Post-test		't'	Pre-test		Post-test			
	M	SD	M	SD		M	SD	M	SD		
1. Define mental Retardation	2.24	1.01	3.53	0.79	6.67**	2.22	1.01	3.45	0.69	6.59**	
2. The causes of Down's Syndrome	1.43	1.03	3.1	0.87	10.02**	3.12	1.79	3.21	0.81	0.31	
3. Mental age is determined by	1.92	1.41	3.5	1.05	6.22**	3.11	1.78	3.20	0.80	0.30	
4. Severe (Dependent retarded)	2.44	1.45	4.62	1.05	9.49**	4.18	1.06	3.06	0.87	4.95**	
5. Signs/Symptoms of Mental Retardation	2.36	1.14	3.76	0.82	7.65**	3.14	1.80	3.22	0.82	0.30	
6. Defined Tertiary prevention	3.14	1.80	3.22	0.82	0.30	3.12	1.79	3.21	0.81	0.29	

The data in table 3 reveals that the study group mean knowledge score on knowledge and involvement in the care of mental retardation children among mothers in the post test ($M=30.6, SD=3.45$) was higher than that of in the pre-test ($M=19.50, SD=4.67$). The difference was found to be statistically significant at $P<0.001$ level which indicates the effectiveness of structured teaching programme on knowledge and involvement in the care of mentally challenged children. Whereas Control group in the post test ($M=27.16, SD=8.51$) was non-significant in the pre-test ($M=28.17, SD=8.55$). Table 4 reveals that the study group parents had a significant improvement ($P<0.05$) in their mean post-test knowledge scores in relation to all the aspects of involvement in the care of mentally challenged children, except on tertiary prevention is defined. Whereas the control group had no significant improvement in their mean post-test knowledge score in relation to all the aspects of involvement in the care of mentally challenged children, except on defined mental retardation and Severe (Dependent retarded). The data in table 5 reveals that the Study group mean on involvement in the care of mental retardation children among mothers in the post test ($M=30.04, SD=3.40$) was higher than that of in the pre-test ($M=19.54, SD=4.57$). The difference was found to be statistically significant at $P<0.001$ level which indicates the effectiveness on involvement in the care of mentally challenged children. Compare to Control group in the post test ($M=26.15, SD=8.35$) was non-significant in the pre-test ($M=27.18, SD=8.30$). This H_0 is accepted. Table-6 reveals that the study group parents had a significant improvement ($P<0.05$) in their mean post-test knowledge scores in relation to all the aspects of involvement activities in care of the mental retardation children, except Cleaning after toilet, Folding the cloth, Remove shoes, Washing own plate and Arranging the table or chair and Bringing book and stationary items safety from school.

(NS)- Non Significant: Table-7 reveals that the control group parents had non-significant improvement in their mean and Standard Deviation of post-test knowledge scores in relation to all the aspects of involvement activities in care of the mental retardation children, except Taking bath, Use towel to wipe the body, Combing the hair, Putting on shoes, Loosening the button and zip Remove shoes, Taking food in the plate, Eating from the plate, Closing the cap of the bottles Arranging books and Turning the pages of a book. Table-8 reveals that there was no significant association between socio demographic variables with the post-test knowledge and involvement care in relation to the Age, Sex, Occupation, Type of family, Educational status, Monthly family income and Family history of Mental Retardation.

DISCUSSION

This study will capture family care giving experiences and the process of cares in addressing care giving needs; support received and plans to continue to provide care for themselves and their relatives with intellectual disability in their later life. The knowledge and practice generated will be highly practical and useful in generating knowledge about factors that influence and, tracking the care giving journey at different time points to clearly delineate areas to implement practice changes. In this way it was highly useful in guiding timely and appropriate interventions to target at the actual needs of family cares as they themselves are aging and need to continue to take care of their family members with intellectual

disability in the community (Barr, 2016). Professionals involved in providing training and support to direct-care staff could expect positive outcomes from multicomponent training programs that include opportunities for practice and feedback (Van der Meer, 2017). An article reports on an evaluation of four family support programmes in Ireland for families of people with a physical or an intellectual disability or autism. Findings suggest that participation in the programmes enhanced knowledge, attitudes, and competencies of families and also impacted their ability to advocate for their family member and to connect with the community (Daly, 2015). Healthcare professionals require skills and knowledge to effectively provide palliative care for people with learning disabilities and should also work in partnership with their family carers who have expertise from their long-term caring role (McLaughlin, 2015). The psychological situation of parents with disabled children is an issue of particular concern, and psychological consultancy and guidance should be provided to such families to enable them to overcome their negative emotions and the consequent problems (Ergun, 2012). The underpinning philosophy of the Care Act is to streamline the previous legislation and offers a framework for carers and people in receipt of care, to enable a more personalized approach to care and support (Gant, 2019). The lack of appropriate structured education programmes and educational materials for this population leads to secondary health conditions and may lead to premature deaths (Taggart, 2015).

The parents indicated feeling of love toward the child notwithstanding the diagnosis (Barr, 2016). There is a greater need for formative and situation-related knowledge to manage risks (Eriksson, 2012). The nursing and social work goals were to make an assessment, support and use comprehensive bio psychosocial family monitoring to enable the child to grow and develop in the best possible conditions, to monitor child protection and try to improve the living conditions of the home (Berlanga-Fernandez, 2012). Children of parents with intellectual disabilities may be at increased risk of neglectful care, which could lead to health, developmental and behavioural problems, or increased risk of intellectual disability (Coren, 2018). Children with intellectual disabilities are common and are increasing in number as more children survive globally. In stark contrast to the 1-3% prevalence of intellectual disability in children globally reported by WHO (Masulani-Mwale, 2018). Mothers of children with a disability are at increased risk of poor mental health compared with mothers of typically developing children (Gilson, 2018). Maternal depression is a major public health problem. This may affect a mother's ability to provide adequate care for the child (Husain, 2017). The study has found need of "care givers' support group". The professionals can help parents in establishing positive thinking towards care giving. There is need of provision of comprehensive and latest rehabilitation/support resources & information (Ansari, 2016). The health education and genetic counselling program improved mothers knowledge, attitude, and practices toward child-rearing practices of mentally challenged children (Lakshminarayana, 1991). The acquisition of self-help skills, learned effortlessly by more intelligent children, is a crucial aspect of the overall development of the mentally handicapped child (Mehta, 1991). Mothers and other family members, traditional birth attendants, community health workers, as well as nurse midwives and physicians should be involved in prevention and intervention activities (Shah, 1991).

Table 5. Comparison of Mean and standard deviation of pre-test and post-test of involvement activities of parents in care of the mental retardation children

Involvement activities of parents	Pre-test		Post-test		't' and p value
	M	SD	M	SD	
Study Group(25)	19.54	4.57	30.04	3.40	12.85** **P<0.001
Control Group (25)	27.18	8.30	26.15	8.35	1.02 0.289(NS)

**P<0.001, NS-Non Significant

Table 6. Mean and Standard Deviation of Pre-test and Post- test of the parents and assisting them involvement activities in care of the mental retardation children.(Study Group)

Activities	Involvement activities of parents Study Group (25)												't'	
	No Involvement				Partial Involvement				Total Involvement					
	Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD		
Hygienic Activities														
1.Keep paste on the brush	2.26	1.01	3.53	0.79	2.25	1.0	3.52	0.78	2.23	1.02	3.55	0.78	6.68**	
2.Brushing the teeth	1.46	1.03	3.16	0.87	1.44	1.02	3.15	0.85	1.43	1.01	3.11	0.86	10.02**	
3.Going to the toilet	1.98	1.41	3.5	1.05	1.96	1.40	3.06	1.06	1.94	1.42	3.05	1.43	6.22**	
4.Cleaning after toilet	3.14	1.80	3.22	0.82	3.12	1.81	3.21	0.81	3.15	1.80	3.20	1.79	0.30 (NS)	
5.Taking bath	3.14	1.79	3.20	1.79	3.12	1.78	3.21	1.78	3.11	1.76	3.19	0.80	0.31	
6.Use towel to wipe the body	1.67	1.10	3.21	0.70	1.68	1.12	3.20	0.79	1.68	1.78	3.21	0.70	7.43**	
7.Combing the hair	2.44	1.45	4.63	1.05	2.43	1.51	4.62	1.05	2.41	1.50	4.61	1.06	9.49**	
8.Wearing own clothes	2.36	1.14	3.76	0.82	2.34	1.13	3.74	0.81	2.35	1.12	3.75	0.80	7.65**	
9.Putting the belt	2.25	1.02	3.54	0.78	2.24	1.02	3.55	0.77	2.23	1.01	3.53	0.76	6.68**	
10.Putting on shoes	1.46	1.01	3.14	0.84	1.45	1.02	3.12	0.82	1.44	1.01	3.11	0.81	10.02**	
11.Tie the shoe lace	4.18	1.06	4.06	0.85	4.17	1.05	4.04	0.82	4.15	1.04	4.05	0.81	4.95**	
12.Loosening the button and zip	1.97	1.42	3.6	1.05	1.96	1.40	3.5	1.06	1.95	1.43	3.7	1.03	6.22**	
13.Remove shoes	3.12	1.76	3.21	0.82	3.11	1.75	3.20	0.81	3.11	1.75	3.20	0.81	0.29 (NS)	
14.Remove the cloth	1.96	1.40	3.2	1.03	1.97	1.42	3.3	1.02	1.94	1.39	3.4	1.02	6.20**	
15.Folder the cloth	3.14	1.78	3.22	0.83	3.12	1.76	3.20	0.82	3.11	1.77	3.21	0.82	0.30**	
Nutritional Activities														
1.Taking food in the plate	1.43	1.03	3.15	0.86	1.42	1.04	3.16	0.87	1.40	1.02	3.12	0.87	10.02**	
2.Eating from the plate	1.68	1.10	3.2	0.70	1.65	1.11	3.21	0.71	1.65	1.12	3.1	0.72	7.43**	
3.Pouring water in the glass	1.98	1.40	3.5	1.05	1.96	1.41	3.32	1.04	1.97	1.42	3.4	1.06	6.22**	
4.Closing the cap of the bottles	2.33	1.12	3.74	0.81	2.31	1.11	3.76	0.80	2.32	1.16	3.75	0.82	7.63**	
5.Drinking from glass	1.41	1.03	3.12	0.84	1.44	1.02	3.14	0.83	1.40	1.02	3.13	0.83	10.01**	
6.Arranging the table or chair	1.67	1.10	3.21	0.82	1.68	1.11	3.22	0.81	1.69	1.10	3.20	0.80	7.43**	
7.Washing own plate	3.11	1.75	3.21	0.82	3.10	1.73	3.20	0.81	3.11	1.76	3.20	0.80	0.29 (NS)	
Educational Activities														
1.Arranging books	2.24	1.01	3.53	0.75	2.23	1.02	3.51	0.76	2.25	1.03	3.51	0.74	6.67**	
2.Sharpening the pencil	1.43	1.02	3.14	0.85	1.42	1.03	3.13	0.84	1.46	1.04	3.13	0.82	10.01**	
3.Covering the note book	2.31	1.11	3.72	0.81	2.30	1.12	3.71	0.80	2.32	1.10	3.71	0.80	7.62**	
4.Turning the pages of a book	2.44	1.45	4.62	1.05	2.43	1.43	4.61	1.04	2.41	1.44	4.60	1.03	9.48**	
5.Bringing book and stationary items safety from school	3.11	1.75	3.20	0.81	3.12	1.76	3.22	0.80	3.14	1.78	3.24	0.80	0.28 (NS)	

The mothers' knowledge of child-rearing had also improved (Grantham, 1975). A study to revealed that assessing the role of parents in the care of mentally challenged children as perceived by parents and care takers. It was found that there is a significant difference between the perception scores of parents and care takers. They had perceived the presence of mentally challenged children in their families positively (Maryline Flinsi).

The present study reveals that the study group mean on involvement in the care of mentally challenged children among parents in the post test (M=30.04, SD=3.40) was higher than that of in the pre-test (M= 19.54, SD=4.57).The difference was found to be statistically significant at P<0.001 level which indicates the effectiveness on involvement in the care of mentally challenged children. Compare to Control group in the post test (M=26.15, SD=8.35) was non-significant in the

Table 7. Mean and Standard Deviation of Pre-test and Post- test of the parents and assisting them involvement activities in care of themental retardation children. (Control Group)

Activities	Involvement activities of parents Control Group (25)												t'
	No Involvement				Partial Involvement				Total Involvement				
	Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test		
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
<u>Hygienic Activities</u>													
1.Keep paste on the brush	3.12	1.76	3.21	0.83	3.11	1.75	3.22	0.82	3.11	1.75	3.20	0.82	0.29 (NS)
2.Brushing the teeth	3.14	1.78	3.22	0.83	3.13	1.75	3.21	0.81	3.13	1.77	3.21	0.81	0.30 (NS)
3.Going to the toilet	3.12	1.76	3.21	0.82	3.11	1.74	3.20	0.81	3.12	1.78	3.19	0.80	0.28 (NS)
4.Cleaning after toilet	3.15	1.78	3.23	0.84	3.12	1.77	3.20	0.79	3.14	1.76	3.20	0.81	0.31 (NS)
5.Taking bath	4.17	1.06	4.05	0.86	4.16	1.05	4.03	0.84	4.14	1.07	4.04	0.85	4.95**
6.Use towel to wipe the body	1.96	1.40	3.2	1.03	1.95	1.41	3.1	1.04	1.97	1.42	3.3	1.04	6.20**
7.Combing the hair	2.26	1.01	3.54	0.78	2.25	1.02	3.53	0.76	2.24	1.04	3.51	0.79	6.68**
8.Wearing own clothes	3.12	1.76	3.21	0.82	3.11	1.75	3.20	0.81	3.13	1.75	3.20	0.80	0.29 (NS)
9.Putting the belt	3.12	1.79	3.21	0.82	3.13	1.78	3.21	0.80	3.14	1.78	3.22	0.76	0.30 (NS)
10.Putting on shoes	1.97	1.40	3.3	1.03	1.96	1.39	3.2	1.02	1.98	1.39	3.4	1.05	6.20**
11.Tie the shoe lace	3.12	1.78	3.21	0.82	3.11	1.79	3.20	0.81	3.13	1.79	3.20	0.81	0.31(NS)
12.Loosening the button and zip	2.31	1.11	3.72	0.81	2.30	1.13	3.71	0.79	2.33	1.12	3.69	0.80	7.60**
13.Remove shoes	2.25	1.02	3.53	0.77	2.23	1.01	3.52	0.78	2.26	1.03	3.52	0.79	6.64**
14.Remove the cloth	3.11	1.75	3.20	0.81	3.13	1.76	3.21	0.77	3.14	1.77	3.18	0.68	0.27 (NS)
15.Folder the cloth	3.14	1.79	3.18	0.78	3.12	1.78	3.19	0.77	3.11	1.76	3.17	0.79	0.28 (NS)
<u>Nutritional Activities</u>	1.68	1.10	3.2	0.70	1.65	1.11	3.06	0.72	1.67	1.09	3.1	0.72	7.40**
1.Taking food in the plate													
2.Eating from the plate	1.98	1.40	3.3	1.03	1.94	1.43	3.2	1.01	1.97	1.39	3.5	1.04	6.20**
3.Pouring water in the glass	3.13	1.80	3.21	0.81	3.12	1.75	3.18	0.79	3.15	1.84	3.20	0.80	0.32 (NS)
4.Closing the cap of the bottles	1.69	1.10	3.6	0.70	1.68	1.12	3.3	0.73	1.65	1.14	3.41	0.76	7.43**
5.Drinking from glass	3.10	1.79	3.21	0.81	3.12	1.75	3.20	0.76	3.13	1.74	3.24	0.78	0.29 (NS)
6.Arranging the table or chair	3.15	1.74	3.22	0.85	3.13	1.76	3.19	0.84	3.12	1.73	3.20	0.86	0.32
7.Washing own plate	3.12	1.77	3.19	0.80	3.11	1.78	3.18	0.83	3.15	1.75	3.18	0.82	0.29 (NS)
<u>Educational Activities</u>	2.27	1.02	3.53	0.76	2.26	1.04	3.52	0.75	2.25	1.04	3.52	0.74	6.67**
1.Arranging books													
2.Sharpening the pencil	3.12	1.76	3.21	0.82	3.13	1.75	3.19	0.76	3.14	1.78	3.17	0.79	0.33 (NS)
3.Covering the note book	3.15	1.76	3.22	0.85	3.13	1.75	3.19	0.84	3.14	1.78	3.21	0.83	0.31 (NS)
4.Turning the pages of a book	4.17	1.05	4.03	0.86	4.16	1.04	4.02	0.85	4.13	1.03	4.01	0.84	4.94**
5.Bringing book and stationary items safety from school	3.21	1.75	3.20	0.81	3.19	1.74	3.18	0.79	3.19	1.76	3.18	0.79	0.28 (NS)

Table -8. Shows that the Association between selected socio demographic variables with the Post- test of knowledge and involvement in the care of mental retardation children among Parents (N=50)

S.No	Level of knowledge and involvement in the care among parents.	Level of knowledge and involvement in the care activities				Chi-square
		Moderately Adequate (51-75%)		Adequate (>75%)		
		N	P	N	P	
1.	Age in years					
	1. 15-20	5	33.3	6	17.2	4.388
	2. 21-30	4	26.7	8	22.8	
	3. 31-40	5	33.3	7	20.0	
	4. 40-50	1	6.7	14	40.0	
2.	Sex					
	1.Male	8	53.3	17	48.6	0.097
	2.Female	7	46.7	18	51.4	
3.	Occupation					
	1.Working	5	33.4	15	42.8	2.087
	2.Non working	10	66.6	20	57.2	
4.	Type of family					
	1.Nuclear	9	60	24	69	0.344
	2.Joint family	6	40	11	31	
5.	Educational status					
	1.Elementary	4	26.5	8	22.8	4.382
	2.High School	2	6.6	6	40.0	
	3.Higher Secondary	5	33.4	11	17.2	
	4.Degree	5	33.5	9	20.0	
6.	Monthly family income					
	1.<5000	7	27.2	7	23.4	0.093
	2.6,000-10,000	6	26.1	15	25.2	
	3.>10,000	5	46.7	10	51.4	
7.	Family history of Mental Retardation					
	1.Father	5	30.3	5	18.2	4.386
	2.Mother	4	29.7	7	21.8	
	4.Paternal grand parent	4	30.3	8	19.0	
	5.Maternal grand parent	2	9.7	15	41.0	

pre-test ($M=27.18$, $SD=8.30$). This (H_0) is accepted. Current study shows reveals that the parents had a significant improvement ($P<0.05$) in their mean post-test knowledge scores. Whereas the control group parents had non-significant improvement in their mean and Standard Deviation of post-test knowledge scores. The study results depicted that there was no significant association between socio demographic variables with the post-test knowledge and involvement care in relation the Age, Sex, Occupation, Type of family, Educational status, Monthly family income and Family history of mental retardation in the study group and in the control group.

Conclusion

From the above it is clear that the parents, therefore, should be aware of the wide essential care aspects for the mental retardation care in order to enhance quicker recovery and improved long term prospects. After all, the parents in care of mentally challenged children in particular are a key player in the wider rehabilitation team. Current intervention study shows that the different was found to be statistically significant at $P<0.001$ levels which indicates knowledge and involvement in the care of mentally challenged children is effective in post-test study group.

Recommendation

A similar study can be undertaken on a larger scale for more valid generalization. The study can be replicated in different settings. Similar study can be conducted with different audio visual aids like video films, filmstrips on involvement care of mentally challenged children of parents and caregivers.

Acknowledgement

Author express sincere thanks to all the experts for their valuable suggestions. Dr. Ramaswamy Prof & HOD of Medicine dep., Dr. R. Vijayaraghavan, Director research and Dr. S. Senthil kumar Saveetha Medical college and Hospital, Saveetha university, Chennai.

REFERENCES

Ansari NJ, Dhongade RK, Lad PS, Borade A, YgS, Yadav V et al. Study of Parental Perception on Health and Social Needs of Children with Neuro-Developmental Disability and Its Impact on the family. 2016;10:16-20.

Barr MD, Govender P, Rencken G. Raising a child with Down's syndrome: Perspectives from South African urban care-givers. 2016;16:929-935.

Barr MD, Govender P, Rencken G. 2016. Raising a child with Down's syndrome: Perspectives from South African urban care-givers. 16:929-935.

Barr MD, Govender P, Rencken G. Raising a child with Down's syndrome: Perspectives from South African urban care-givers. 2016;16:929-935.

Berlanga-Fernandez S, Gonzalez-Lopez N, Cujo-Lopez E, Lopez-Parada AM. 2012. Biopsychosocial approach in a multidisciplinary intervention: a report of a case of a newborn with mentally disabled parents. 22:159-65.

Bodde AE, Seo DC, Frey GC, VanPuymbroeck M, Lohrmann DK. Correlates of moderate-to-vigorous physical activity participation in adults with intellectual disabilities. 2013;14:663-70.

Carter B, Amott J, Simons J, Bray L. 2017. Developing a sense of knowing and Acquiring the Skills to Manage Pain in Children with Profound Cognitive impairments Mothers' Perspectives.

Cenk SC, Muslu GK, Sarlak D. 2016. The effectiveness of Structured Supported Education Programs for Families with Intellectually Disabled Children; 30:704-709.

Chauhan A, Nagarajappa S, Dasar PL, Mishra P. 2018. Impact of having a Mentally Disabled Child in the Family on the Oral Health of the Healthy Sibling A Comparative Study. 16:43-49.

Coles S, Scior K. Public attitudes towards people with intellectual: a qualitative comparison of white British & South Asian people. 2012;25:177-88.

Coren E, Ramsbotham K, Gschwandtner M. 2018. Parent training interventions for parents with intellectual disability.

Daly L, Sharek D, DeVries J, Griffiths C et al. 2015. The impact of four family support programmes for people with a disability in Ireland. 19:34-50.

Dorothea Orem. Self-Care Deficit Theory Model. Google.com, 1971.

Emerson E, Liewellyn G, Hatton C, Hindmarsh, et al. 2015. The health of parents with without intellectual impairment in the UK. 59:1142-54.

Ergun S, Ertem G. Difficulties of mothers living with mentally disabled children. 2012;62:776-80

Eriksson BG, Hummelvoll JK. 2012. To live as mentally disabled in the risk society. 19:594-602.

Frey GC, Temple VA, Stanish HI. 2017. Intervention to promote physical activity for youth with intellectual disabilities. 59:437-445.

Ganesh KS, Das A, Shashi JS. 2008. Epidemiology of disability in a rural community of Karnataka. 52:125-9.

Gant V, Bates C. 2019. Cautiously optimistic: Older parent-carers of adults with intellectual disabilities-Responses to the Care Act. 2014. 23:432-445.

Gant V, Bates C. Cautiously optimistic: Older parent-carers of adults with intellectual disabilities-Responses to the Care Act. 2014. 2019;23:432-445.

Gilson KM, Davis E, Johnson S, Gains J, et al. Mental health care needs and preferences for mothers of children with disability. 2018;44:384-391.

Godan A, Brajkovic L, Fortuna V, Godan L et al. Attitudes and Stereotypes of supporting fields towards the persons with disabilities. 2008; 32:783-91.

Grantham-McGregor SM, Desai P. A home-visiting intervention programme with Jamaican mothers and children. 1975;17:605-13.

Husain N, Zulqernain F, Cater LA, Chaudhry IB, Fatima B. Treatment of maternal depression in urban slums of Karachi Pakistan: A Randomized controlled trial (RCT) of an integrated maternal psychological and early child development intervention. 2017;29:63-70.

Isidor B., LeCunff M., Boceno M., Boisseau, P., Thomas C, Rival JM et al. 2008. Complex constitutional subtelomeric 1p36.3 deletion /duplication in a mentally retarded child with neonatal neuroblastoma. 51:679-84.

Lakshminarayana P, Ibrahim S, Venkataraman P, Jagatheesan T, Kamala KG. KAP study on mothers of children with Down Syndrome. 1991;29:997-1001.

- Lim F, Downs J, Li J, Bao XH, Leonard H. 2013. Caring for a child with severe intellectual disability in China the example of Rett syndrome. 35:343-51.
- Low LP, Chien WT, Lam LW, Wong KK. A qualitative study protocol of ageing carers' caregiving experiences and their planning for continuation of care for their immediate family members with intellectual disability. 2017;17:81.
- Maierhofer S, Almazan-Isla J, Alcalde-Cabero E, de Pedro-Cuesta J. Prevalence and features of ICF-disability in Spain as captured by the 2008 National Disability Survey. 2011;11:897.
- Marchal JP, Van Oers HA, Maurice-Stam H, et al. 2017. Distress and everyday problems in Dutch mothers and fathers of young adolescents with Down syndrome. 19-27.
- Marchal JP, Van Oers HA, Maurice-Stam H, et al. Distress and everyday problems in Dutch mothers and fathers of young adolescents with Down syndrome. 2017;19-27.
- Maryline Flinsi. A study to assess the role of parents in the care of mentally challenged children as perceived by parents and care takers. researchgate.net/publication.
- Masulani-Mwale C, Kauye F, Gladstone M, Mathanga D. 2018. Prevalence of psychological distress among parents of children with intellectual disabilities in Malawi. 18:146.
- McLaughlin D, Barr O, McIlpatrick S, McConkey R. Service user perspectives on palliative care education for health and social care professionals supporting people with learning disabilities. 2015;5:531-7.
- Mehta M., Pande P, Bhargava M. Behavioral training for mothers of mentally handicapped children: teaching of self-help skills. 1991;28(8):909-15.
- Mohebbi E, Baneshi MR, Haji-Maghsoudi S, Haghdoost AA. The application of network scale up method on estimating the prevalence of some disabilities in the southeast of Iran. 2014;14:272-5.
- Schwemmmie C, Rost I, Spranger S, Junghim M, Ptok M. A boy with mild mental retardation, mild sensorineural hearing loss and mild facial dysmorphism caused by a 19p 13.2 deletion: a case report and review of the literature. 2014;78:1190-3.
- Shah PM. Prevention of mental handicaps in children in primary health care, Bull World Health Organ. 1991;69(6):779-89.
- Smith GC. 1997. Aging families of adults with mental retardation patterns and correlates of service use need and knowledge. 102:13-26.
- Stancliffe RJ, Wiese MY, Read S, Jeltos G, Clayton JM. 2016. Knowing, Planning for and fearing death: Do adults with intellectual disability staff differ; 47-59.
- Stein GL. 2008. Providing palliative care to people with intellectual disabilities: services, staff knowledge, and challenges. 11:1241-8.
- Sullivan WE, Diepstra, Heng, et al. 2018. Primary care of adults with intellectual and developmental disabilities Canadian consensus. 64:254-279.
- Sullivan WE, Diepstra, Heng, et al. 2018. Primary care of adults with intellectual and developmental disabilities Canadian consensus.; 64:254-279.
- Sullivan WE, Diepstra, Heng, et al. Primary care of adults with intellectual and developmental disabilities Canadian consensus. 2018; 64:254-279.
- Taggart L, Coates V, Clarke M, Bunting B et al. 2015. A study protocol for a pilot randomised trial of a structured education programme for the self management of type 2 diabetes for adults with intellectual disabilities. 16:148.
- Tuffery-Wijne I, Giatras N, Butler G, Cresswell A. People with intellectual disabilities who are affected by a relative or friend with cancer: a qualitative study exploring experiences and support needs. 2012;16:512-9.
- Van der Meer L, Matthews T, Ogilvie E, Berry A et al. Training Direct-Care Staff to provide Communication Intervention to Adults with Intellectual Disability. 2017;26:1279-1295.
- Van Wingerden E, Sterkenburg PS, Wouda M. 2018. Improving empathy and self-efficacy in caregivers of persons with intellectual disabilities using m-learning-(HisenseAPP-ID): Study protocol for a randomized controlled trial. 19:400.
- Verhoeven W, Ruiters M, Egger J, Tuinier et al. 2009. A novel duplication of chromosome (13)(q14.1q21.3) in a patient with mental retardation and microcephaly. 20:45-51.
- Wark S, Hussin R, Muller A, Ryan P. 2017. Parmenter T. Challenges in providing end-of life care for people with intellectual disability: Health services access. 30:1151-1159.
- Wilson NJ, Cumella S, Parmenter TR, Stancliffe et al. 2009. Penile hygiene puberty paraphimosis and personal care for men and boys with an intellectual disability. 53:106-14.
