

Original Research Article

A Study to develop and evaluate the Effectiveness of an Information Booklet in terms of the Knowledge and Attitude of the parents regarding Management of Mentally Challenged Children aged 3-12 years in Selected Centres /Schools of Delhi

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Abstract

A Pre-experimental study was conducted to develop the information booklet for the parents on management of mentally challenged children aged 3-12 years and to assess the knowledge and attitude of parents. The research design selected for present study is Pre-experimental one group pre-test post-test design. The study samples consisted 40 parents of aged 3-12 years in selected centres /schools of Delhi. The study participants were selected by non-probability purposive sampling technique. The data was collected by using structured knowledge questionnaire, attitude scale and opinionnaire. The study findings revealed that the mean pre-test attitude score was 101.25 against the maximum possible score of 150 indicating an unfavourable attitude of parents regarding management of mentally challenged children. The mean post-test attitude scores was 135.25, was higher than the mean pre-test attitude scores, 101.25 suggesting a positive increase of attitude of parents regarding management of mentally challenged children. The obtained "t" value of attitude score was found to statistically significant as evident from 16.91 for df 39 at 0.05 level of significance suggesting the effectiveness of information booklet in enhancing the attitude of parents regarding the management of mentally challenged children. The mean scores of the parents was 29.12 which was close to the maximum score of 30. This indicates high level of acceptance of the information booklet by the parents. The information booklet had high acceptability and utility among the parents.

Key words: Mentally challenged children, Structured knowledge questionnaire, Opinionnaire, Information Booklet.

1 Introduction

"Your children need your presence more than your presents". Jesse Jackson - Proverb 2:4

Every child is special to parents. But some children have special needs that challenge parents to find the ways to best prepare these children for the future and to handle any problem that may surface. Mentally challenged children are the children with special needs who pose a great challenge to the parents. Mentally challenged children are particularly vulnerable to a range of negative attributions.[1]

Mentally retarded children are socially marginalized and rejected by almost all sections of the community. Nearly 83 million of the world's population is estimated to be mentally challenged, with 41 million having long-term or permanent disability.[2]

Mental retardation ranks fourth in the list of leading causes of disability. At least 2 per cent of India's population is

said to be suffering from some kind of mental disability[3]. The overall prevalence of mentally challenged children is between 1-3%. It is more common in developing countries because of the higher incidence of injuries and anoxia during birth, and early childhood brain infections. Population studies have shown that overall prevalence of mild to severe mentally challenged ranges from 2.5 to 5 per thousand.[4]

According to an estimation, population with disability in India is about over 90 million, of these twelve million are blind, twenty nine million are with low vision, twelve million are with speech and hearing defects, six million orthopedically handicapped, twenty four million mentally challenged. The presence of a child is a source of strain for the members of the family, particularly for the parents.[6]

The interaction of a retarded child with his family is both more intense and more prolonged than if he were normal. As a result his or her parents need a great deal of help.[7] Parental reactions to the fact of having a mentally retarded child includes shock, realization, retreat and feeling of guilt, acknowledgement and so on. The child's condition can range from mild to profound; the family's stability and its ability

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to handle problems can range from weak to strong.[8]

2 Objectives of the study

1. To develop the information booklet for the parents on management of mentally challenged children aged 3-12 years.

2. To assess the knowledge of parents on management of mentally challenged children before and after the administration of information booklet.

3. To assess the attitude of parents on management of mentally challenged children before and after the administration of information booklet.

4. To determine the relationship between the post-test knowledge scores and post test attitude scores of parents on management of mentally challenged children aged 3-12 years after the administration of information booklet.

5. To determine the acceptability and the utility of information booklet by the parents of mentally challenged children.

3 Hypothesis

H1. The mean post test knowledge score of parents exposed to information booklet on management of mentally challenged children aged 3-12 years was significantly higher than their mean pre-test knowledge scores as measured by structured knowledge questionnaire at 0.05 level of significance.

H2. The mean post-test attitude scores of parents exposed to information booklet was significantly higher than the mean pre-test attitude scores as evident from an attitude scale at 0.05 level of significance.

H3. There was a significant relationship between post-test knowledge scores and post-test attitude scores of parents regarding management of mentally challenged children as evident from structured knowledge questionnaire and attitude scale, at 0.05 level of significance.

4 Material and methods used

Research approach: Evaluative research approach

Research design: Pre-experimental one group pre-test and post-test design.

Setting of the study sample: Masoom Special School, Timarpur and NIMH Model School, Kasturba Niketan, Lajpat Nagar.

Population: Sample comprised of the parents of mentally challenged children aged 3-12 years.

Sample size : 40 parents

Sampling technique: Purposive sampling technique .

Variables:

Independent variable: Information Booklet on management of mentally challenged children for parents.

Dependent variable: Knowledge and attitude scores of parents regarding management of mentally challenged children.

5 Sampling Criteria:

5.1 Inclusion criteria

1. Parents who have mentally challenged children in the age group of 3-12 years.

2. Parents who have the children with mild and moderate mental retardation.

3. Parents who are willing to participate in the study.

4. Parents who are available during the time of data collection.

5. Parents who can read and understand Hindi or English.

5.2 Exclusion criteria

1. Parents who are not available at the time of data collection.

2. Parents who have the children with severe mental retardation

3. Parents who are not residing in community area.

4. Parents who cannot read and understand Hindi or English.

6 Development and description of tools used in the study

The structured knowledge questionnaire consisted of two parts

Part I: It comprised of the items seeking information on background data of both the parents and their child, such as age of the child, sex of the parent and the child, I.Q.level of the child, birth order, general education and occupation of the parents, economic status, religion and type of family .

Part II : This contained 32 knowledge items covering the following areas :-

- Concept and incidence of mentally challenged
- Classification of mentally challenged
- Causes of mentally challenged
- Identification of mentally challenged
- Misconceptions regarding mentally challenged
- Management of mentally challenged children.

There were total 32 items. Out of 32 items, 21 were multiple choice questions and 11 questions were true or false type. Each item had a single correct answer. Every correct answer was accorded a score of one point and every wrong answer was assigned a zero score.

Description of Attitude scale

The attitude scale consisted of 30 items on five point scale – strongly-agree, agree, undecided, disagree, strongly-disagree. Positive and negative, both types of items were arranged symmetrically. There were 15 positive items and 15 negative items. Total score of the attitude scale ranged from 30-150. Maximum score was 150 and minimum score was 30. Neutral point was 75.

Description of Opinionnaire

The opinionnaire consisted of 10 items on three point scale – to great extent, to some extent and not at all. Total score of the opinionnaire ranged from 10 - 30. Maximum score was 30 and minimum score was 10. Neutral point was 15.

Development of information booklet

An information booklet was developed for the parents on the management of mentally challenged children. The booklet was developed based on the review of related research and non research literature and the objectives stated for the knowledge. An information booklet was structured for developing parents’ knowledge regarding management of mentally challenged children aged 3-12 years.

7 Data collection procedure

As the study aims at evaluating the effectiveness of Information Booklet, the following tools were constructed in order to obtain the data:

- A structured knowledge questionnaire to assess the knowledge of the parents on management of mentally challenged children.
- An attitude scale to assess the attitude of the parents towards management of mentally challenged children.
- An opinionnaire to check the acceptability and utility of information booklet

The proposed study was conducted after the acceptance of consolation committee of the college and a written permission was obtained from the concerned authorities. Data was collected from 40 samples that fulfilled inclusion and exclusion criteria. The consent of the participant was obtained before data collection and assurance was given to study participants regarding the confidentiality of data. Pre test was taken before giving interventions and then post test was done. The data was collected by using structured Knowledge questionnaire and attitude scale and opinionnaire. Formal administrative approval was obtained for conducting final study from Masoom Special School, Delhi and NIMH Model School, Delhi. Data was collected from 24th December 2010 to 15th January 2011. Structured knowledge questionnaire and attitude scale was used for collecting the data. Pretest was given on first day which was followed by administration of information booklet. Posttest was taken on seventh day which was followed by collecting the opinion with the help of opinionnaire. Confidentiality was maintained

8 Plan for data analysis

The data was analyzed by using both Descriptive and Inferential statistics. Plan for data analysis would be as follows :

- Analysis of background variables was done in terms of frequencies and percentage.
- Mean, median and standard deviation was computed to describe the pre-test knowledge and post-test knowledge scores.
- Mean, median and standard deviation was computed to describe the pre-test attitude and post-test attitude scores.
- Mean, Median and Standard deviation was computed to describe the acceptability and utility scores of the informational booklet on management of mentally challenged children.
- In order to determine the effectiveness of information booklet, “t” value was calculated to find out the significant difference between the mean of pre-test and post-test knowledge scores of parents on management of mentally challenged children.
- In order to determine the effectiveness of information booklet, “t” value was calculated to find out the significant difference between the mean of pre-test and post-test attitude scores of parents on management of mentally challenged children.
- Co-efficient of co-relation was computed between pre-test knowledge score and pre-test attitude scores.
- Co-efficient of co-relation was computed between post-test knowledge score and post-test attitude scores.

9 Data analysis and major findings

Section I: Description of sample characteristics This section describes the characteristics of parents in terms of number of fathers and mothers who participated in the study, age, religion, educational level, occupation, total income and type of family.

Section II: Evaluation of effectiveness of information booklet in terms of knowledge of parents regarding management of mentally challenged children.

TABLE 1: Mean, Median and Standard Deviation of Pre-test and Post-test Knowledge Scores of Parents. N=40

Knowledge Test	Mean	Median	SD
Pre-test	11.82	12	2.3
Post-test	26.05	26	1.64

Maximum score= 32

The data presented in the Table-1 indicated, the mean

post-test knowledge score (26.05) was higher than the mean pre-test knowledge scores (11.82). The standard deviation of the post-test knowledge Scores (1.64) was lower than the standard deviation of the pre-test knowledge scores (2.3) indicating that the group became more homogeneous in post-test in terms of their knowledge on management of mentally challenged children.

TABLE 2: Mean, Mean Difference, Standard Deviation of Difference, Standard Error of Mean Difference from Pre-test to Post-test Knowledge Scores and "t" value.

Knowledge Test	Mean	MeanD	SDD	SEMD	"t-value"
Pre-test	11.82	14.23	2.19	0.35	14.22
Post-test	26.05				

df (39)= 2.03 at 0.05 level of significance

* Significant at 0.05 level

Data presented in the Table – 2 showed that the mean post-test knowledge scores, 26.05, was higher than the mean pre-test knowledge scores, 11.82, with a mean difference of 14.23. The obtained mean difference was found to be statistically significant as evident from "t" value of 14.22 for degree of freedom 39 at 0.05 level of significance.

Section III: Evaluation of effectiveness of information booklet in terms of attitude of parents regarding management of mentally challenged children.

TABLE 3: Mean, Median and Standard Deviation of Attitude Scores obtained by parents N=40

Attitude Test	Mean	Median	SD
Pre-test	101.25	102	11.5
Post-test	135.25	136	4.28

Maximum score= 150

The data presented in the Table-3 shows that the mean of post-test attitude score 135.25 was higher than the mean pre-test attitude score, 101.25. The findings also revealed that the standard deviation of the post-test attitude scores (4.28) was lower than the standard deviation of the pre-test attitude scores (11.5) indicating that the group became more homogeneous in post-test in terms of their attitude on management of mentally challenged children.

Section IV: Relationship between post-test knowledge and posttest attitude scores of parents regarding management of mentally challenged children

*Significant at .05 level

The co-efficient of correlation between pre-test knowledge scores and attitude scores was 0.76 suggesting correlation between pre-test knowledge score and attitude scores of parents

TABLE 4: Correlation between Knowledge Scores and Attitude Scores obtained by Parents N=40

Knowledge Scores	Mean	S.D.	Attitude Scores	S.D.	R"
Pre-test	11.82	2.3	101.25	11.5	0.76
Post-test	26.05	1.64	135.25	4.28	0.85

r (df = 38) = .444 at 0.05 level

which indicates when knowledge was less, the attitude was less favorable

Section V: Findings related to the acceptability and utility of information booklet on management of mentally challenged children by the parents.

The mean score of parents was 29.12 which was close to the maximum score of 30. This indicated high level of acceptance of the information booklet by the parent.

10 Main findings of the study were:

- Out of 40, 52.5% parents were mothers and 47.5% were fathers.
 - Majority of parents were in the age group of 31-40 years
 - Majority of the parents were Hindus
 - Thirty five percent parents had education till higher secondary.
 - Out of 40, 47.5% were housewives, 27.5 % were private employees , 20% parents were govt. employees and rest 5% had their own business
 - Out of 40, 57.5% were living in the joint family and 42.5% had nuclear family.
 - Monthly income of 47.5% parents was between Rs.3001- 5000
 - Fifty five percent children were in the age group of 10-12 years.
 - Maximum children were males.
 - Majority of children were in the first birth order.
 - Majority of the children had mild mental retardation
 - The mean post-test knowledge score was significantly higher than the mean pre-test knowledge scores.
 - The maximum knowledge gain was in the area of concept and incidence of mentally challenged followed by the area of classification of mentally challenged and the least gain was in the area of identification of mentally challenged
 - The mean post-test attitude score was significantly higher than the mean pre-test attitude scores.
 - The co-efficient of correlation between post-test knowledge and post-test attitude scores was significantly higher than the co-efficient of correlation between pre-test knowledge and pre-test attitude scores.
 - There was the positive significant relationship between mean post-test knowledge scores and mean post-test attitude

scores.

- Booklet was highly acceptable by parents.

Thus the findings of the study revealed that the information booklet was effective in enhancing the knowledge as well as positive attitude of parents regarding management of mentally challenged children aged 3-12 years

Implication: - The findings of the study have implication for nursing in nursing practice, nursing education, nursing research and nursing administration

Nursing practice:

1. In the area of nursing practice nurses should help the family members to recognize and develop the positive attitude towards mentally challenged. It will provide mutual benefit to them and to their children.

2. Nurses should be able to provide the information to the parents related to the confirmation of diagnosis and other references and training facilities so that children can become self sufficient according to their I. Q. Level.

3. Home visits by the community health nurses are of paramount importance to assess the needs, to guide and provide need- based support to the families of the mentally challenged.

Nursing education:

1. Nursing curriculum should provide more opportunities to the students to plan and conduct health educational programs using various teaching strategies like planned teaching, pamphlets, information booklet etc, for the families of the mentally challenged children, with respect to their home management and rehabilitation services available in variety of settings, like special schools for the mentally challenged, guidance centres and other health care agencies.

2. Specialized courses on meeting the needs of this group of children can be organized.

Nursing research:

1. Researcher has not come across with many studies done in the Indian setting on the knowledge and attitude of the parents of mentally challenged children, so future research in this area is needed by the nursing personnel on its various aspects, like home care training, special education, etc.

2. Nursing researches need to be conducted on the stress levels and adaptability of the parents towards the presence of mentally challenged children in the family.

3. There is need to have more studies in developing and evaluating the effectiveness of information booklet for the parents on management of mentally challenged children.

Nursing administration:

In-service education should be provided for the nurses, community health workers, aganwadi workers so that they are able to identify the early signs of children who are different and refer them to appropriate agencies for help.

11 Recommendations

- A comparative study can be carried out to assess the knowledge and attitude of literate and illiterate parents of mentally challenged children.

- A similar study can be done to assess and evaluate the effectiveness of information booklet on the knowledge and attitude of the siblings of the mentally challenged children.

- A similar study can be conducted for health care providers in community settings

- A study can be conducted to compare the effectiveness of the information booklet with other teaching strategies like planned teaching program.

- Longitudinal study can be conducted to evaluate the effectiveness of information booklet on management of mentally challenged children..

- The information booklet can be updated from time to time

12 Conclusion

There was deficit in the knowledge regarding management of mentally challenged children in selected group of parents in all the content areas in varying degrees. The information booklet was found to be effective in enhancing the knowledge of parents regarding the management of mentally challenged children. There was less favorable attitude regarding management of mentally challenged children in selected group of parents. Information booklet enabled the parents to develop a favourable attitude towards their mentally challenged children. There was a significant correlation between the knowledge and attitude scores of parents regarding the management of mentally challenged children before and after the administration of information booklet. The information booklet had high acceptability and utility among the parents.

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