

A STUDY ON COGNITIVE DEVELOPMENT AND BEHAVIOURAL PROBLEMS AMONG SPECIAL NEEDS CHILDREN

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Abstract

BACKGROUND: Special needs children have various health problems and most common is impaired cognitive development and behavioural problems. The cause and management of behavioural problems in special needs children have not been established. It has been previously reported that some behavioural problems may be related with cognitive development.

OBJECTIVE: To assess the cognitive development and behavioural problems of the special needs children and assess the health seeking behaviour of the special needs children.

METHODS: The study was conducted among 46 special needs children at Special children home. After collecting basic socio demographic details, they were assessed for cognitive development and behavioural problems using 5-15R questionnaire for 2-5yrs & 5-17yrs and their health seeking behaviour using a semi structured questionnaire followed by General and Clinical Examination.

RESULTS: Out of these 46 special needs children, 69.5% were male and 30.5% were female. The mean age was 11.69 + 4.62 years. In Cognitive development, problem in motor skills were present in 39.13% of children; lack of attention present in 45.65% of children; lack of perception present in 60.86% of children; lack of memory present in 63.04% of children; problem in language present in 52.17% of children; problem in learning & problem solving skills present in 67.39% of children. In Behavioural problems, problem in social skills present in 52.17% of children and emotional problems present in 17.39% of children. Among them 37% seek Government healthcare facility for cognitive development and behavioural problems. A referral advice was provided to necessary children.

CONCLUSION: A high proportion of the special needs children were having problems in motor skills, attention, perception, memory, language, learning & problem solving skills, social skills and emotional problems which needed to be addressed. Interventions should be aimed at improving the cognitive development and behavioural problems of the special needs children.

KEYWORDS: Cognitive development, Behavioural problems.

INTRODUCTION

Special needs children are those who have problems in physical, developmental, behavioural and emotional conditions. These children require utmost care and attention, continuous monitoring of their health and wellbeing when compared to normal children. Historically programs and prevention efforts for these children were limited.

The programs covering these special needs children under Maternal and Child Health (MCH) and Children With Special Health Care Needs (CSHCN) were responsible for planning and developing health care systems and providing health services to them. So health plans serving the purpose of monitoring and quality assurance of these special needs children should be developed.¹

In India, there are 2.19 crore disabled individuals in India constituting 2.13 % of the total population according to 2001 Census and UNICEF reports that around 30 million children in India suffer from disability. But the actual number of special needs children may increase two or three times from the recent available data.

The Government has great challenges like shortage of trained manpower for the empowerment of the special needs

children. The Government in collaboration with supportive organizations working under CSR / NGOs / DPOs & also with the help of Special Schools and parents can fulfil the needs of the special needs children.²

Health Seeking Behaviour is a decision making process to seek perfect treatment for health (J. Olenja, 2003). It is governed by multiple factors. The Special needs children are at increased risk of having unmet health needs when compared to normal children.^{3,4} Health seeking behaviour has emerged as a tool to tackle ill health by taking remedial actions and people are being encouraged to learn and use health promoting behaviours.⁵

OBJECTIVES

- To assess the cognitive development and behavioural



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problems of the special needs children.

- To assess the health seeking behaviour of the special needs children.

MATERIALS AND METHODS

STUDY DESIGN : Cross sectional study

STUDY AREA : The study was conducted among the special needs children attending a special children home at the Rural health training center field practice area of Sri Ramachandra Medical College & Research Institute.

STUDY PERIOD : The study was conducted during August and September 2022.

SAMPLE SIZE : As the study was conducted among the special needs children who comes under special group, the study was decided to be conducted at the Rural health training center field practice area of Sri Ramachandra Medical College & Research Institute. The number of special children home at the Rural health training center field practice area of Sri Ramachandra Medical College & Research Institute was surveyed and found to be only one special children home. After obtaining permission from the special children home and informed consent from the parents/guardians, all the special needs children were included in the study. Based on this, the Sample size of the study was 46.

INCLUSION CRITERIA : All clinically confirmed and certified special needs children attending the special children home.

EXCLUSION CRITERIA :

- No exclusion criteria.

ETHICAL CONSIDERATIONS : Study was initiated after obtaining Ethics approval from the Institutional Ethics Committee of Sri Ramachandra University of Higher Education and Research. Permission was obtained from the special children home for conducting the study. After obtaining informed consent from the parents/guardians of the special needs children, the data was collected on basic socio demographic details using a semi structure questionnaire. The special needs children were assessed for cognitive development and behavioural problems using 5-15R questionnaire for 2-5yrs & 5-17yrs. The health seeking behaviour of the special needs children were collected from the parents/guardians using a semi structured questionnaire followed by General and Clinical Examination. The information collected from the participants was kept confidential.

PLAN FOR ANALYSIS : The data was collected and entered using Microsoft Excel. Statistical analysis was done using Statistical Package for Social Science (SPSS) version 16 software and the results were tabulated.

HEALTH SEEKING BEHAVIOUR

The parent/guardian of each study participant was enquired individually regarding their health seeking behaviour. They were asked about whether they seek healthcare services for their health needs.

If they seek healthcare facility then they were asked about their preference of healthcare facility for health problems like general ailments or sick, respiratory problems, gastrointestinal problems, severe neurological illness like seizures, problems in cognitive development including motor skills, attention, perception, memory, language, learning & problem solving skills, behavioural problems including social skills and emotional problems.

If they seek public healthcare facility, then they were asked about government hospital or government primary health centre. If they seek private healthcare facility, then they were asked about private hospital or private clinic.

They were also enquired about getting the drugs over the counter from pharmacy directly and also whether they seek other system of traditional medicine like ayurvedha, siddha, homeopathy, unani, etc.

If they do not seek healthcare facility for health problems then they were asked about whether they were able to manage the health problems themselves through home remedies or they consider it was not a major problem or they were not aware or they were not affordable or other issues for not seeking healthcare facility and their responses were recorded.

RESULTS

The study participants were 46 special needs children, out of which 69.5% were male and 30.5% were female. The mean age was 11.69 + 4.62 years.

In Cognitive development, problem in motor skills were present in 39.13% of children; lack of attention present in 45.65% of children; lack of perception present in 60.86% of children; lack of memory present in 63.04% of children; problem in language present in 52.17% of children; problem in learning & problem solving skills present in 67.39% of children.

In Behavioural problems, problem in social skills present in 52.17% of children and emotional problems present in 17.39% of children.

Among them 37% seek Government healthcare facility for cognitive development and behavioural problems but could not obtain the details of the same.

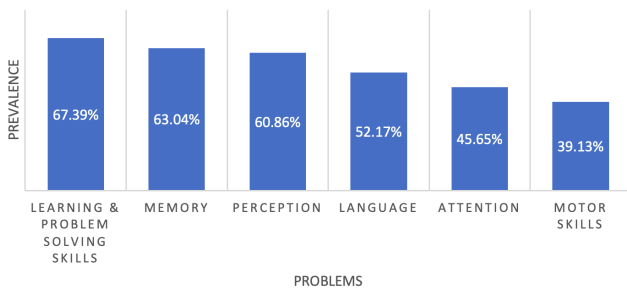


Figure 1: Prevalence of Cognitive Developmental Problems

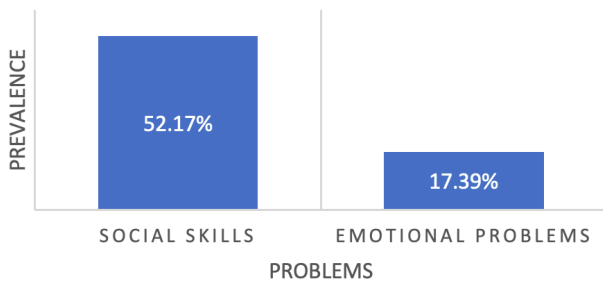


Figure 2: Prevalence of Social and emotional Problems

DISCUSSION

The study mainly focused on cognitive development, behavioural problems and the health seeking behaviour of the special needs children. The domains of cognitive development assessed were motor skills, attention, perception, memory, language, learning & problem solving skills. In behavioural problems, social skills and emotional problems were assessed. The results of the study showed that majority of the special needs children have problems in cognitive development and behavioural problems. A referral advice was provided to necessary children. As our objective was to assess the cognitive development and behavioural problems we have limited to descriptive analysis. The study can be further extended to association analysis in future.

The literature search regarding health seeking behaviour of the special needs children showed that they have greater frequency and length of hospital admission when compared to normal children (Mahon and Kibirige, 2004). It was considered important to identify the needs of the special needs children and provide necessary training environments and services so that they become independent and productive members of the society (Kircaali-Iftar, 1998; Sahbaz, & Kalay, 2010). The Government primary health centres being the public health care facility for rural population were most often located at a distance from villages. The education status and awareness of the parents/guardians determine their health seeking behaviour. The healthcare infrastructure

and healthcare utilisation determines the health-seeking behaviour of the population and was found to be significantly lower in the rural area.⁶⁻¹⁰

Most commonly, mothers are the primary caregivers to the special needs children and they need sufficient knowledge to recognize the danger signs earlier for effective health outcomes. Hence giving health education to mothers has better health outcomes as they take utmost care of the special needs children.

The limitations of this study were the cause and management of behavioural problems in special needs children have not been established and it has been previously reported that some behavioural problems may be related with cognitive development which can be studied further. As the study was conducted in one special children home, it can be further extended to two or more such special children homes for generalisability.

CONCLUSION

A high proportion of the special needs children were having problems in motor skills, attention, perception, memory, language, learning & problem solving skills, social skills and emotional problems which needed to be addressed. Interventions should be aimed at improving the cognitive development and behavioural problems of the special needs children. Health education to mothers has better health outcomes.

ACKNOWLEDGEMENT

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CONFLICT OF INTEREST

There is no conflict of interest to be declared.

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