

	ORIGINAL RESEARCH PAPER AN ECONOMIC IMPACT OF INTELLECTUAL DISABILITY: AN RURAL HOUSEHOLDS A CASE STUDY IN KARNATAKA.	Economics KEY WORDS: Employment, Families, Indirect, Costs Direct Costs, Education
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ABSTRACT	Intellectual disability (ID) is a significant socioeconomic issue that affects individuals, families, and communities, particularly in rural areas where access to education, healthcare, and employment opportunities is limited. This study examines the economic burden of intellectual disability on families. Using both primary data collected from 40 households and secondary sources, the study analyzes direct costs—including health, education, transportation, and training/skill development—and indirect costs, such as loss of productivity, family support, and emotional/psychological strain. Results reveal that indirect costs (4511.28) substantially exceed direct costs (1625.38), highlighting the disproportionate financial and emotional burden borne by families. Employment analysis shows that male and female respondents participate in similar cottage industry activities, with sandalwood stick production being the most common occupation. The findings underscore the need for targeted policy interventions, financial assistance, skill development programs, and caregiver support to alleviate the multidimensional economic impact of intellectual disability.	
INTRODUCTION	People with a good health status can produce more within a defined time interval. Higher productivity is originating from better physical and mental health. Intellectual Disability (ID) is not only a medical or psychological concern but also a significant socio economic issue that affects individuals, families, and society at large. From an economic perspective, intellectual disability influences patterns of education, employment, income generation, and social participation. Persons with intellectual disabilities often face barriers in accessing quality education, vocational opportunities, and sustainable livelihoods, which in turn restricts their economic independence and contributes to a cycle of poverty and social exclusion. The economic implications of intellectual disability extend beyond the individual to the household and community. Families often bear increased financial burdens due to healthcare costs, specialized education, and care-giving responsibilities, leading to reduced earning capacity and heightened economic vulnerability. At the macro level, the lack of adequate inclusion of persons with intellectual disabilities in the labor market translates into under utilization of human capital and reduced productivity, thereby impacting overall economic growth. In developing countries like India, where social security systems are limited and informal labor markets dominate, the economic challenges faced by persons with intellectual disabilities are even more pronounced. Policies and programs aimed at skill development, inclusive education, financial support, and employment opportunities become crucial to ensure economic empowerment and reduce dependency. Significance of the Study The present study is important as it addresses the limited research on the economic burden of intellectual disability in rural India, particularly in Karnataka, where evidence remains scarce. By examining direct costs and indirect costs the study provides a comprehensive understanding of the financial, social, and emotional challenges faced by families caring for individuals with intellectual disabilities. This study is important because it helps to understand the economic impact of intellectual disability on individuals and their families. By analyzing both direct and indirect costs, the study shows how disabilities affect family income, daily life, and access to education and healthcare	
	Review of Literature Research consistently shows that families of individuals with intellectual disabilities face a substantial economic burden, encompassing both direct and indirect costs. In India, Yadav et al. (2023) reported that households incur high healthcare expenses and experience loss of income, compounded by limited access to education, vocational training, and employment opportunities. Arora et al. (2020) highlighted in Australia that the economic impact extends beyond medical expenses to include education, social support, and reductions in parental productivity, creating financial strain for both families and society. In Canada, Lunskey et al. (2019) found that adults with intellectual disabilities are disproportionately high-cost healthcare users, reflecting unmet needs and systemic inefficiencies, while families in India face catastrophic out-of-pocket expenditures due to limited access to specialized services. Karande et al. (2015) further emphasized that lost income, care giving responsibilities, and additional expenses for therapy, adaptive equipment, and transportation contribute significantly to the financial strain. Collectively, these studies underline that intellectual disability imposes a multidimensional economic burden, highlighting the urgent need for comprehensive policy interventions, financial assistance programs, and social support mechanisms to reduce the economic and social challenges faced by affected families. Research Gap There is only little empiricism study having analysis financial and emotional pressure faced by rural households managing intellectual disability. Micro level case study is limited, particular regarding comparative analysis of direct and indirect cost and community contribution towards such people. This study address this gap by examining economic burden and employment opportunity associated with intellectual disability. The micro-level economic burden on families in rural settings, where poverty, lack of awareness, limited access to education, and insufficient government support mechanisms may intensify challenges. Very few studies have provided case-study-based analyses of particular institutions or communities caring for individuals with intellectual disabilities. The present studies look into the economic burden of intellectual disability. Objective of the Study - To analyze the employment opportunities available for persons with intellectual disability. - To examine the direct and indirect economic costs incurred by families of individuals with intellectual disabilities.	

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Hypothesis

1. There is no significant different among families in terms of employment opportunities available for individual with intellectual disabilities.
2. There no no significant different between direct and indirect economic cost incurred by families of individual with intellectual disabilities.

Research Methodology

Descriptive study based on both secondary and primary data.

1. **Secondary Data-** The secondary data is collected from the subject related data sources such as, Department of Empowerment of Persons with Disabilities (Divyangjan), WHO Reports, Census of India - and five-year plans, Science Direct, Journals, Research Papers, and conference volumes etc.
2. **Primary Data-** The research was connected in a rural community. Primary data were from collected from 40 rural households with intellectual debilitated persons. Purposive sampling method is used with the help of structured interview scheduled data were collected. A sample of 40 households was selected using purposive sampling, focusing on families directly affected by intellectual disabilities.

RESULTS AND DISCUSSION

To look in to the employment opportunities provided to individuals with disabilities. The role of community and NGO's is significant highlighted. The results of the below mention the table conform the same. The table-1 categorizes respondents based on the type of work they are engaged in, including flower making, cover packing, slipper's sales and sandalwood stick production. The table also includes Chi-square tests for goodness of fit and association to determine whether the observed employment distribution differs significantly from a uniform distribution and whether has a significant influence on employment type.

Table-1 Employment Status of Intellectual Disabilities

Description	Frequency	Percent
Flower Making	12	30.0
Cover packing	13	32.5
Slippers sales	1	2.5
Sandalwood Strick	14	35.0
Total	40	100.0
Chi-Square for Goodness of Fit: 16.200, df: 3, Sign: 0.001		

Source: Field Study

The results show that employment opportunities are limited and predominantly confirmed to informal, home based cottage industries majority It is found from the table that 30 percent of the children are engaged in flower making, 32.5 percent of the children are engaged in cover packing, 2.5 percent of the children are engaged in slippers sales and 35.0 percent of the children are engaged in sandalwood strict. The Chi- square for goodness of fit is significant (16.200) at one present level. The significance chi-square value indicates unequal participation across activities rejecting null hypotheses.

Table-2 Direct Costs of Disabled Child

Direct Costs	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Health	445.7500	70.08740	11.08179	400.00	860.00
Education	477.0000	40.07685	6.33671	450.00	700.00
Transportation	398.5000	20.32429	3.21355	350.00	480.00
Training/Skill Dev	323.2500	23.24755	3.67576	280.00	400.00
Total	411.1250	72.17194	5.70569	280.00	860.00

Sources: Field Study

The table presents data on the direct costs for four categories: Health, Education, Transportation, and Training/Skill Development. The average cost for Health is ₹445.75, with a relatively high standard deviation of ₹70.09, indicating significant variability in health-related expenses, ranging from ₹400 to ₹860. Education costs have an average of ₹477.00 and a lower standard deviation of ₹40.08, suggesting more consistent expenses, with costs ranging from ₹450 to ₹700. For Transportation, the average cost is ₹398.50, with a standard deviation of ₹20.32, reflecting less variation in costs, which range from ₹350 to ₹480. Training/Skill Development has the lowest average cost at ₹323.25 and the least variability (SD of ₹23.25), with costs ranging between ₹280 and ₹400.

Table-3 Comparison of Direct Costs of Disabled Children

Costs	Subset for alpha = 0.05			
	1	2	3	4
Training/Skill Dev	323.2500			
Transportation		398.5000		
Health			445.7500	
Education				477.0000
Sig.	1.000	1.000	1.000	1.000

Sources: Field Study

The comparison of direct costs among different categories for disabled children was tested using one-way ANOVA to assess whether there were significant differences in the mean costs across health, education, training/skill development, and transportation. The results from the ANOVA show a highly significant difference in the mean costs, leading to the rejection of the null hypothesis, which posited that there would be no significant differences between the categories.

Table- 4 Indirect Costs of Disabled Child

Descriptive	Mean	Std. Deviation	Minimum	Maximum
Loss of Productivity	2086.25	224.462	1800	3200
Family Support	543.75	106.931	400	800
Emotional/Psychological	295.00	42.667	200	450
Total	975.00	808.630	200	3200

Sources : Field Study

The analysis of indirect costs shows that loss of productivity is the largest contributor, with a mean of ₹2086.25, indicating that caregivers or family members spend significant time away from work or personal activities to support the disabled child. Family support costs average ₹543.75, reflecting the financial or resource contributions provided by relatives and close family. Emotional and psychological costs are the lowest, with a mean of ₹295.00, yet they represent a meaningful non-monetary burden affecting the well-being of both the child and family

Table-5 Comparison of Indirect Costs of Disabled Children

Descriptive	Subset for alpha = 0.05		
	1	2	3
Emotional/Psychological	295.00		
Family Support		543.75	
Loss of Productivity			2086.25
Sig.	1.000	1.000	1.000
ANOVA F Value: 1775.598, df : (2, 177), Sign : 0.000			

Sources: Field Study

The indirect costs of disabled children across three categories— emotional/psychological, family support, and loss of productivity were compared using one-way ANOVA to determine whether the mean costs differ significantly. The ANOVA results show a highly significant difference in indirect costs, leading to the rejection of the null hypothesis, which stated that no significant differences exist among these cost components.

Suggestions of the Study

- To disabled people thorough disabilities pensions and insurance coverage.
- Provide inclusive employment scheme and vocational training programmers suited to intellectual disabled.
- Encourage and established community support services and rehabilitation NGOs in rural areas. Provided awareness to avoid stigma and encourage social inclusion.

CONCLUSION

The study concluded that intellectual disability in imposes a significant economic burden on rural household with indirect cost significantly rescission direct cost, loss of product ivies emerges has the greater contributor to economic Strine, in-directing urgent need for government support. Employment opportunities remain limited low income earning informal leading to economic dependence. Restrstringing rural support system encouraging community and NGO's who are interested to support such people giving, disability friendly employment polities and providing financial subsidies are very essential to improve the socio economic well being of intellectuals disability individuals and their families. both through direct expenses and indirect costs such as loss of income and long-term dependency. While females show slightly higher costs, the differences between genders are not statistically significant, indicating that the financial impact affects all families similarly. These finding Highlight the need for supportive policies and interventions to reduce the economic and social challenges faced by families of individuals with intellectual disabilities.

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