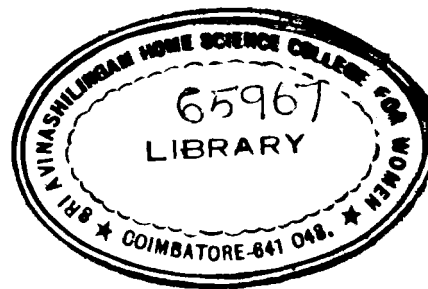


# Cost of Rearing Infants from Birth to Six Months

BY

Ayshathul Munavara Beham A.



A Dissertation Submitted to the Bharathiyar University,  
in Partial Fulfilment of the Requirements for  
the Degree of Master of Science

MAY 1985

## **A C K N O W L E D G E M E N T**

The investigator conveys her deep sense of gratitude to Dr.(Tnt.) M. Jaya Nutha, M.Sc., Ph.D.(Madras), Professor of Child Development Department Sri Avinashilingam Home Science Autonomous College for Women, Coimbatore, for the much valued guidance and help received throughout the study. The investigator expresses her sincere gratitude to Dr.(Tnt.) Rajammal P. Devadas, M.A., M.Sc., Ph.D.(Ohio State), D.Sc.(Madras), Director of Sri Avinashilingam Home Science Autonomous College for Women, Coimbatore, for her suggestions and guidance in accomplishing the study successfully.

The investigator also expresses her grateful thanks to all the mothers who participated in this study for their continued help in maintaining the records and making the study successful.

## TABLE OF CONTENTS

CHAPTER	PAGE NO.
LIST OF TABLES	
LIST OF FIGURES	
LIST OF APPENDICES	
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	5
A. Needs of infants(Birth to six months)	5
B. Child rearing practices	7
C. Cost of rearing and infant	8
III. METHODOLOGY	13
A. Selection of the area	13
B. Sample characteristics	13
C. Collection of the data	14
D. Analysis of the data	15
IV. RESULTS AND DISCUSSION	16
A. Family background of the selected infants	16
B. expenses incurred on various items for infants at three income levels	28
C. Total cost of rearing infants	30
V. SUMMARY AND CONCLUSION	50
BIBLIOGRAPHY	54
APPENDICES	58

## LIST OF TABLES

TABLES	PAGE No.
I. FAMILY BACKGROUND OF THE SELECTED INFANTS	17
II. FOOD EXPENSES INCURRED	19
III. CLOTHING EXPENSES INCURRED FOR INFANTS	21
IV. EXPENSES INCURRED FOR INFANT'S COSMETICS	23
V. MEDICARE EXPENSES INCURRED	25
VI. EXPENSES INCURRED ON SPECIAL FURNITURE	27
VII. ORNAMENTAL EXPENSES INCURRED FOR INFANTS ORNAMENTS	29
VIII. EXPENSES ON SERVANTS MAIDS	31
IX. EXPENSES INCURRED ON PLAY MATERIALS	33
X. EXPENSES ON CEREMONIES	35
XI. SAVINGS FOR INFANTS	37
XII. TOTAL EXPENSES INCURRED SEX WISE	39
XIII. COST OF REARING INFANTS - ORDINAL POSITION WISE	41
XIV. TOTAL EXPENSES INCURRED IN RELATION TO EDUCATIONAL STATUS OF THE FATHERS	43
XV. TOTAL EXPENSES IN RELATION TO OCCUPATIONAL STATUS OF THE FATHERS	45
XVI. TOTAL EXPENSES INCURRED IN RELATION TO INCOME	47
XVII. SLEEPLESS NIGHTS SPENT BY THE MOTHERS DUE TO THE INFANTS	49

**LIST OF FIGURES**

<b>FIGURE</b>	<b>PAGE NO.</b>
<b>1. COST OF REARING INFANTS-ORIGINAL POSITION WISE</b>	<b>41a</b>
<b>2. TOTAL EXPENSES INCURRED IN RELATION TO INCOME</b>	<b>47a</b>

**LIST OF APPENDICES**

**APPENDIX**

**PAGE NO.**

**A. RECORD GIVEN TO MAINTAIN THE COST  
OF HEARING INFANTS**

**58**

**B. STATISTICAL APPRAISALS**

**73**

## I. INTRODUCTION

Children are the mirror of the nation and of the world itself (Indira Gandhi, 1981). Human resource is a key factor in development. The foundations of man's physical, mental and social development are laid in early childhood. Provision of such services to meet the biological, emotional and intellectual needs of young children can make a positive contribution to the socio-economic development of the country by preventing or minimising the wastage arising from infant mortality, physical handicaps, malnutrition, stagnation in schools and inadequate development of mental capacities (Dayal, 1980).

In any programme of human development there should be focus on the child as he is the future adult. Therefore what affects the interest of our children affects the well-being of the entire community of which the child is but one member. On the welfare and satisfaction of needs of children depends not only the health and well-being of a community, but the claim of the nation to civilization itself (Chowdhry, 1980).

Care for its children must be the primary concern of any country striving for a higher standard of living. Unless this problem is given high priority, the future will be compromised and any material advancement will all be in vain. It takes a lot of imaginative effort in areas of education, professional training nutrition and health to bring up a child and to prepare him for the complex world that he will be entering (Butt, 1980).

Among primates, the human child takes the longest to mature physically, mentally and emotionally. No doubt parents invest in the care of the child a great deal of energy and material resources (Advani, 1980). Children are the wealth of the family and the nation and a concentrated effort has to be made to improve their living conditions, and their general upbringing (Anandhan, 1981).

Asserting the fact that children are a valuable asset Saxena et al (1979) points out that their welfare strengthens social and economic development <sup>and</sup> so they have to be protected and well looked after if the country is to thrive and prosper in all spheres of human activity. Children of today are the potential parents of tomorrow. The quality of life which they enjoy today would ultimately determine the quality of future population.

The biggest business in the world and the most important business which overweighs all other values in the world, is the business of rearing children (Brown, 1957). In the words of Isaac (1976) "If one understands the slow growth of the infants he is more likely to give him the gentle care and patient friendliness which he most needs to carry him on from one phase to the next, and to avoid the harsh and hasty methods which may make him fear and hate adults. A child is the happiest and grows best when there is a kind but firm background of order and routine".

Shamsuddin (1984) points out that "Home is the eternal school of life". It has always been a source of <sup>e</sup> peace and happiness. As soon as a child comes into being, she/he has to take shelter in home and enjoy the loving care offered by parents. The child lives in a family which provides the best ground for training in social life with opportunities to develop himself physically, mentally and culturally.

The family as the carrier of culture, transmitting rules for social living, moral norms and the language of the community, is responsible for equipping children to participate in social life. The cradle of the personality is the family in which the child learns to respond to the outside world (Souza, 1979).

Bhoota (1980) says that the family is the primary unit in most societies which has traditionally been expected not only to meet the basic family requirements and its members, but in rearing its children fulfill their needs and transmit the heritage and culture of the society from one generation to the next. Sinha (1973) also stresses that the family is the primary social institution for the care and protection of the child fulfilling its obligation in terms of nutrition, education, health care and social well being of the child.

Shewak (1982) asserts that home is the first and foremost place which influences the formation of character where parents provide opportunities so that the children thrive well in a good environment.

Food, water, fresh air and sunshine, regularity, exercise, cleanliness, sleep and rest, mothering, clothing, bathing and warmth are the essentials of a child which cost something but necessary to keep a 'baby' well (Mehta, 1981).

Barnabas (1980) reports that it is not possible to get an accurate estimate of the cost of child rearing from the data available in surveys because of the limitations of the data and the methodological problems involved in such an estimation. Not only for India, but even for developed countries, accurate estimates of the cost of children are not available.

There are no research studies indicating the cost of child rearing in terms of nutrition, clothing health care and recreation and so the present study was undertaken to find out the cost of rearing a child from birth to six months.

## II. REVIEW OF LITERATURE

The related literature pertaining to this study on "Cost of Rearing Infants From Birth onwards to Six Months" is reviewed under the following heads.

- A. Needs of Infants (Birth to six months)
- B. Child rearing practices and
- C. Cost of rearing an infant

### A. Needs of Infants

Mussen (1979) defines needs as permanent trends of human nature which underlie human behaviour from birth to death under all circumstances and in all kinds of societies. The term need is commonly used in circumstances in which there is assumed to be both an object or organism with certain requirements and an environment or a society which can contribute to satisfy those requirements. According to Sachana Garg(1993) the requirements of children are breast feeding, supplementary feeding, clothing, bedding, immunisation, play equipment and toilet accessories.

A study in Colombia identifies three particular needs of children. In this study three groups of children from families in which one member was malnourished were compared with an elite <sup>Control</sup> group. All three groups of children received adequate comprehensive medical care. Two groups were provided with very

adequate nutrition and finally one group was placed in a loving and stimulating environment for much of the day. It was assessed that children who had good medical care showed no change in their growth or intellectual development. Those children who had medical care and nutrition caught up in their growth with the elite control group. Perhaps this study points that the three requirements of children namely nutrition, medical care and loving and stimulating environment show that even the children who have been in an adverse environment have the reserve in their brain and other organs to catch up if only they can be provided with the right environment (Souza, 1979).

The Child's first need is truly the need for life, of socio economic and cultural development, health, peace, and be safeguarded from the risks of pollution, poverty, ignorance, disease and war (Sanciaux, 1984).

Rosa (1975) points out that the food is the basic need of the infant. The diet of the infant should include all the nutrients infants need for his complete growth and development. According to Tate and Glisson (1980) the need to dress a small child is one of the primary duties of their parents, and it helps to promote their personality, so that they feel secure in their life.

Abraham (1978) says that the immunisation of an infant is a must against many of the common infectious diseases. It should be given to them at regular periods. Mukharjee (1969) emphasizes that the sleep facilities are essential needs of an infant by which the infant's body regulates itself, maintains equilibrium, in its chemical constitution and thus preserve the energy for later activity.

#### B. Child rearing practices

Davis (1964) defines child rearing practices as child training, nourishing, caretaking, educating and bringing up of the child. Desari (1964) points out that child rearing is a process of bringing up of children through happy, constructive childhood experiences to play a worthy role as men and women.

Child rearing practices are a product of ideas, beliefs, and attitudes prevalent in a community on how to bring up children (Whiting, 1977). Sears et al (1957) explain child rearing as child training, nourishing, caretaking, educating and bringing up children.

According to Gupta (1966) bearing children is a natural phenomenon but rearing them in a manner so as to make them useful, healthy and mentally sound citizens is something which

communities, the results highlights that the poorer a family the higher the percentage of its income spent on necessities food, water, fuel and health care UNICEF(1985).

Samule's (1964) study in Delhi, Bombay, Calcutta, and Madras concluded brought forth the fact that the cost of a child to a middle class family in India was four times the annual income of the family.

According to Seavy (1973) the expenditure for children in low and middle income families are respectively for food rupees 27/- and 32/- clothing Rs.9/- and 10/- medical care Rs.4/- and 5/- transport and recreation Rs.15/- and 17/- and miscellaneous Rs.4/- and 3.5/- per month.

Narain (1985) conducted a survey in Japan to find out the cost of child rearing. According to his estimate, the basic cost of bringing up one child is rupees 6,12,000. The expenditure for food amounted to three lakhs while it was Rs.78,500/- for clothing, Rs.49,000/- for medical treatment and the rest for cosmetics.

The Indian Institute of Public opinion (1964) revealed that, on an average the direct expenditure incurred by parents on children was Rs.4,838/- in rural areas and Rs.6,521/- in

urban areas at 1960-61 prices. Of this expenditure, nearly 70 per cent was on food. The study also indicated that the cost of bringing up a child in highest expenditure group was more than ten times the cost in the lowest expenditure group.

In a study reported by Sumati (1979) the total annual cost of bringing up an average Indian Child up to the age of 21 in 1960-61 was rupees 7,545 in rural areas and rupees 9,985 in urban areas. The total expenditure thus obtained reveal that in 1973-74 the cost of bringing up a child up to the age of 15 was on an average about Rs.6,566/- in rural areas and Rs.8,163/- in urban areas at 1972-74 prices (Sumati, 1979).

A study conducted by the World Vision of India in New Delhi to find out the amount of savings done by parents for children reveals that 85% of them do not have any form of savings and 4% had savings in the banks, 5% in the chit-fund companies and 0% had kept their savings at home. Most parents appeared to have little notion of what it actually costs to raise a child, and many were reluctant to discuss the expenditure on children (Patnák, 1979).

Another aspect of the study done by the World Vision of India in New Delhi dealt primarily about debts for children. The prime causes of debts seemed to be medical aid and house construction for the child. Only 40 per cent of the families did not have any debts for rearing an infant.

Dandekar (1979) observes that in rural India, the utility of children to poor is much more than their cost to them. On the other hand, to the rich the cost of children is probably much higher than their utility. Espenshade (1972) in his critical review of the literature on the cost of children, has observed that many estimates of this cost are now out of date.

To sum up it could be said that there is a great need to develop empirical evidence in this area through more systematic studies.

### III. METHODOLOGY

The methodology of the study on "cost of rearing infants from birth to six months" is presented under the following headings.

- A. Selection of the area
- B. Sample characteristics
- C. Collection of the data
- and D. Analysis of the data

#### A. Selection of the area

Within the limits of Coimbatore City Mathamariamman Koll Street, Kamarajapura, Sivamatha Colony, Saibaba Colony, Town hall, Gandhipark, Annamalai Chettiar Road, R.S.Pura and Ramnagar were the areas selected for the study due to the easy accessibility to the investigator.

#### B. Sample characteristics

The halwadias, nursery schools and the elementary schools in the areas cited above were visited. Through the teachers and children informations on the presence of infants in the family were sought. The investigator had to go with the children to locate the family and identify infants for the study. Hundred and twelve infants who had completed three months of age by

December 1984 were chosen. Among the 112, there were fifty from low income families; fifty from middle income families and 12 from high income families. As far the infants of high income families, only 12 could be had out of 40 who were identified since their mothers were not cooperative. The investigator had to choose three months old infants in order to have data on the cost of rearing an infant atleast upto 6 months.

C. Collection of the data

Each family having an infant of the characteristics explained above was given a record note book to make entry of all the expenses on the child. Recall method was adopted to collect the data regarding the various expenses for the infant during the first three months of his life with the assumption that the parents would be able to recapitulate.

A sample of the record given to the parents is in Appendix A. The record consisted of details such as family background, column for financial cost incurred on food, clothing, cosmetics, medicare, furniture, ornaments, servants, play equipment, ceremonies and savings for the infant. The other information elicited were sleepless nights, debts, and loss of wages/income due to infant rearing.

The mothers of infants of three months age were approached and the purpose of the study was explained to them in detail and were requested to co-operate in maintaining the necessary record for the investigator. In the beginning of the study the investigator entered the information required in the record as the family recalled the expenses incurred during the first three months. It was heartening to note that the mothers were able to remember the amount spent on various items of the child during the first three months of the child without any difficulty.

The investigator requested the parents to maintain the record in a detailed manner for the next three months entering the expenses as and when they incurred. The investigator visited each family atleast once a month to check and facilitate the entry of the expenses. Those mothers and families who were not willing to maintain the record in the middle and who did not want to participate in the study were not included.

#### D. Analysis of the data

The data collected was consolidated and treated statistically to find out the cost of rearing an infant 't' test was administered to find the cost in terms of income, ordinal position, sex of the infant, educational and occupational status of the head of the family.

#### IV. RESULTS AND DISCUSSION

The informations pertaining to the study "Cost of rearing infants from birth to six months" have been discussed under three aspects.

- A. Family background of the selected infants
- B. Expenses incurred on various items for infants at three income levels.
- C. Total cost of rearing infants

##### A. Family background of the selected infants

The family background include details regarding the type, size of the family, educational and occupational status of the parents of the infants selected and are given in Table I.

TABLE I

## FAMILY BACKGROUND OF THE SELECTED INFANTS

S.No.	Details	Percentage
1.	<u>Type of family</u>	15
	a) Joint	85
	b) Nuclear	
2.	<u>Size of the family</u>	85
	a) Small (1-5 members)	15
	b) Large (5 and above)	
3.	<u>Educational status of Mother</u>	27
	a) Illiterates	5
	b) Upto elementary level	5
	c) Up to middle school level	27
	d) High school level	36
	e) College level	
4.	<u>Educational status of the Father</u>	4
	a) Illiterates	4
	b) Elementary school education	9
	c) Middle school education	20
	d) High school level	63
	e) College level	
5.	<u>Occupation of the Mother</u>	6
	a) Professional	19
	b) Clerical	7
	c) workers in Industries	1
	d) Business	15
	e) Cooli	52
	f) Non workers	
6.	<u>Occupation of the Father</u>	19
	a) Professional	17
	b) Clerical	13
	c) workers in industries	30
	d) Business	21
	e) Cooli	

Majority of the families were nuclear and small families having five and less than five members.

While a maximum number of fathers had received college education with a minimum of them having had elementary level of education and being illiterate, the educational status mother were less favourable. About one-fourth of the mothers were illiterate. Only a small number had high school and college education highlighting the fact that women are still backward in their educational status.

Fathers had been well placed in their occupational status than the mothers. Fifty two per cent of the mothers were homemakers while fifteen to nineteen per cent were involved in clerical jobs as well as in coolie workers.

B. Expenses incurred on various items for infants at three income levels.

The expenses incurred on food, clothing, cosmetics, medicare, furniture, ornaments, servants, play materials, ceremonies and savings were elicited through records maintained by the parents and are presented in the following tables.

1. Food expenses incurred.

Table II shows the food expenditure incurred for infants, since birth to six months according to income levels of the families.

TABLE II

## FOOD EXPENSES INCURRED

Amount spent in rupees	number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0 - 75	94	58	33
75 - 150	6	24	8
150-225	--	10	26
225-300	--	6	17
300-375	--	2	8
375 -340	--	--	--
450-525	--	--	--
525-600	--	--	8
Mean	42	90	187.5
S.D	17.8	75.4	150
Particulars	MD	SSD	t
LIG Vs MIG	48	11.06	4.34**
LIG VS HIG	145.5	21.8	6.67**
MIG Vs HIG	97.5	30.39	3.21**
LIG	- Low income		
MIG	- Middle Income		
HIG	- High Income		
**	- Significant at 1 per cent level		

The Table II indicates that majority of the low and 50% of the middle income families spent rupees 75 and below 75 for food. The higher the income the more the amount spent on food. The high income group has spent more amount than the low and middle income groups. While the mean expenditure for the food per infant in the low income over a period of six months for infants is rupees 42 it is double in the middle income group and four and a half times more in the high income group. However, the mean amount spent for an infant on food over a period of six months appears to be quite less in all categories with range of rupees 42 to 187.5. This may be because, as Dhillon et al (1979) says proprietary foods are very rarely used before six months and majority of the Indian mothers breast fed their babies atleast for eight months. The difference between the three income levels with regard to food expenses appears vast and is statistically significant.

## 2. Clothing expenses incurred for infants

Expenses on frocks/shirts, scarf, underwears, napkins and other linen along with the charges for stitching were considered as clothing expenses. Expenditure on clothing for infants aged six months in three income groups and 't' values obtained for these groups are presented in Table III.

TABLE III

## CLOTHING EXPENSES INCURRED FOR INFANTS

Amount spent in rupees	Number in percentage		
	LIG n=50	MIG N=50	HIG N=12
0 - 150	100	26	8
150 - 300	-	56	59
300 - 450	-	8	17
450 - 600	-	8	8
600 - 750	-	-	-
750 - 900	-	2	-
900 - 1050	-	-	8
Mean	75	234	325
SD	0	149.2	223.6
	MD	SD	t
LIG Vs MIG	159	21.17	7.51**
LIG Vs HIG	250	32.14	7.77**
MIG Vs HIG	91	53.2	1.71 NS

NS Not significant

Clothing expenses was found negligible in the low income group and maximum in the high income group. The 't' test analysis has proved significant difference between low and middle income groups and no significant difference between middle and high income groups. The infants of high income group appear to have been privileged to <sup>be</sup> backed with more expenses under this head expenses which mean more clothing facilities.

It is seen from the mean expenses in Table II and III families spend considerably more amount on clothing than on food. This may be perhaps because the infants are breast fed by them during the first six months without much of supplementary feeding.

### 3. Expenses incurred on cosmetics for infants

The cosmetics refer to oil, soap, and talcum powder and other herbal powder for infants. The expenses on the same along with statistical appraisals are indicated in Table IV.

TABLE IV

## EXPENSES INCURRED FOR INFANT'S COSMETICS

Amount spent in rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0 - 30	70	10	-
30 - 60	30	32	-
60 - 90	--	38	8
90 -120	--	20	59
120 -150	--	--	25
150 -180	--	--	--
180 -210	--	--	8
Mean	46	65.4	117.5
SD	13.74	27.1	28.6
Particulars	MD	S&D	t
LIG Vs MIG	41.4	4.34	9.54**
LIG Vs HIG	93.5	5.75	16.23**
MIG Vs HIG	52.1	8.8	5.92**

\*\* Significant at 1 per cent level

The mean expenditure of the majority (70 per cent) of the low income families ranged between 0-30 while the range for the rest of the 30 per cent was between 30 and 60. The middle income families have spent on infants' cosmetics half the mean expenditure of the high income families. The high income group had optimal expenses and the difference between the various income group is significant statistically.

#### 4. Medicare expenses incurred

Cost of medicine, consultation fees given to doctors, cost of immunization, transportation charges to see the doctor were the aspects taken into consideration to arrive at medicare expenses. Table V enlists the medicare expenses for infants along with statistical values.

TABLE V

## MEDICARE EXPENSES INCURRED

Amount spent in rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0-- 75	90	36	42
75 -150	10	52	33
150 -225	--	8	17
225 -300	--	4	--
300 -375	--	-	--
375 -450	--	-	--
450 -525	--	-	--
525 -600	--	-	8
Mean	45	92.5	200
SD	22.5	56.1	121.8
Particulars	MD	SEB	t
LIG Vs MIG	52.5	8.6	6.1**
LIG Vs HIG	155	18.4	8.42**
MIG Vs HIG	102.5	23.64	4.34**

\*\* Significant at 1 per cent level.

The high income families spent four times higher than the low income families while the middle income group spent twice than the latter. It may be due to the reason that the high and middle income group seek medical consultations for the infants from the doctors in the private nursing homes while the low income group avail the facilities in the government hospitals and primary health centres.

**5. Expenses incurred on special furniture**

The furniture expenses consist of expenses for cradle, cot, mosquito frame and toilet commode as reflected in Table VI.

TABLE VI

EXPENSES INCURRED ON SPECIAL FURNITURE			
Amount spent in rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0 - 75	100	50	33
75 - 150	-	48	33
150 - 225	-	2	8
225 - 300	-	-	8
300 - 375	-	-	-
375 - 450	-	-	-
450 - 525	-	-	-
525 - 600	-	-	18
Mean	37.5	76.5	181.25
SD	0	40.4	182
Particulars	MD	SD	t
LIG Vs MIG	39	5.77	6.75**
LIG Vs HIG	143.75	25.7	5.59**
MIG Vs HIG	104.75	28.25	3.7**

\*\* Significant at 1 per cent level

As for the expenses on furniture items, the statistical analysis revealed that vast difference exist among the income groups. All the low income families spent within seventy five rupees while it was double and five times more in the middle and high income families respectively. The amount spent differed significantly between low and middle income, middle and high income, low and high income families.

The pattern of mean expenditure in the three income levels apparently shows that the low income families, due to their inability to spend more money for special furniture, spend less than the other two groups.

6. Ornamental expenses incurred for infants Ornaments

Table VII reports the expenses for ornaments at three income levels with the statistical appraisals.

TABLE VII

ORNAMENTAL EXPENSES INCURRED FOR INFANTS ORNAMENTS			
Amount spent in Rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0 - 150	100	54	42
150 - 300	-	12	--
300 - 450	-	4	--
450 - 600	-	16	8
600 - 750	-	6	-
750 - 900	-	8	17
900 -1050	-	-	33
Mean	75	273	537.5
SD	0	257	408
Particulars	MD	SD	t
LIG Vs MIG	198	36.7	5.39**
LIG Vs HIG	462.5	59.65	7.88**
MIG Vs HIG	264.5	95.53	2.76**

High and middle income families have spent considerably more money for ornaments for infants than the low income families. Perhaps it is natural since the priority of the latter group differs from those of the other two groups. For the middle and high income families spending money on ornaments might also be to maintain status symbol in the community to which they belong to.

7. Expenses on servants maids.

The expenditure on servant maids as reported by the selected families are depicted in Table VIII.

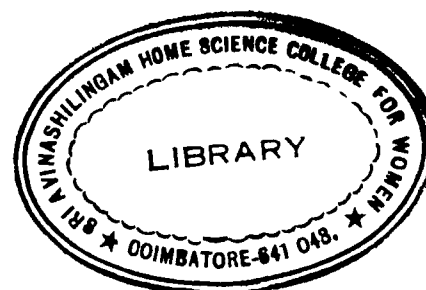


TABLE VIII

## EXPENDITURE ON SERVANTS MAIDS

Amount spent in Rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0	100	—	—
0 - 50	—	78	25
50 -100	—	4	—
100-150	—	8	8
150-200	—	8	25
200-250	—	2	17
250-300	—	—	25
Mean	0	51	166.7
SD	0	53.1	93.2
	MD	SAX	t
LIG Vs MIG	26	7.58	3.42**
LIG Vs HIG	141.7	13.39	10.57**
MIG Vs HIG	115.7	20.5	5.63**

\*\* Significant at 1 per cent level.

Maximum number of the high income families spent more amount for servants. This may be perhaps because they are financially well placed and are capable of maintaining servant maids. The middle income families spent quite less for servants than families of high income. It is seen that in low income families, there is no expense at all on account of servant maid.

8. Expenses incurred on play equipment

Table IX shows the expenses for play materials.

TABLE IX

## EXPENSES INCURRED ON PLAY MATERIALS

Amount spent in rupees	Number in percentage		
	LIG N=50	MIG N=50	MIG N=12
0 - 50	100	72	-
50 - 100	-	24	58
100 - 150	-	4	18
150 - 200	-	-	8
200 - 250	-	-	-
250 - 300	-	-	-
300 - 350	-	-	8
350 - 400	-	-	8
Mean	25	41	137.5
SD	0	27.3	100
Particulars	MD	SEP	t
LIG VS MIG	16	3.9	4.1**
LIG VS MIG	112.5	14.37	7.82**
MIG VS MIG	96.5	16.45	5.86**

\*\* Significant at 1 per cent level.

All the low income families and majority of the middle income families spent below fifty rupees for play materials. One fourth of the middle income families and half of the high income families spent within the range of rupees 50 to 100. Maximum amount ranging from rupees 300 to 400 has been pumped in by high income families reflecting their vital interest in enabling the young children enjoy handling and using play materials and benefitting by them.

9. Expenditure on ceremonies

The expenditure for ceremonies are shown in Table X.

TABLE X

## EXPENSES ON CEREMONIES

Amount spent in rupees	Number in percentage		
	LIG N=50	MIG N=50	HIG N=12
0	100	-	-
0 - 300	-	56	25
300 - 600	-	8	8
600 - 900	-	6	-
900 -1200	-	26	-
1200-1500	-	4	42
1500-1800	-	-	-
1800-2100	-	-	25
Mean	0	492	1125
SD	0	424	683
Particulars	M.D	S.V.E	t
LIG Vs MIG	342	60.57	5.64**
LIG Vs HIG	975	98.18	9.92**
MIG Vs HIG	633	158.9	3.99**

\*\* Significant at 1 per cent level.

In Indian Culture, conducting ceremonies for infants are usual occasions. Expenses for ceremonies differed widely among the income groups. It is but natural that the high and middle income groups have spent more than the low income group. Among the three groups high income group exhibit unrelieved supremacy spending more on ceremonies for infants. Perhaps they follow the rituals on a grand scale in order to maintain social prestige.

#### 10. Savings for infants

Table XI puts forward the details regarding savings for infants.

TABLE XI

## SAVINGS FOR INFANTS

Amount spent in rupees	Number in per centage		
	LIG N=50	MIG N=50	HIG N=12
0 - 200	100	96	58
200 - 400	-	4	17
400 - 600	-	-	--
600 - 800	-	-	--
800 -1000	-	-	--
1000 -1200	-	-	25
Mean	100	108	383.3
SD	0	39.2	420
Particulars	MD	SEMD	t
LIG Vs MIG	8	5.6	1.42 N.S
LIG Vs HIG	283.3	60.37	4.69**
MIG Vs HIG	275.3	61.46	4.47**
NS	Not significant		
**	Significant at 1 per cent level.		

Although all the families had savings for infants in the range of zero to two hundred, in low income and middle income groups, the amount was much lesser than high income families. There was no difference between the low and middle income groups with regard to their savings against a significant difference between middle and high income group. While the study conducted by World Vision of India (1980) indicates that 84 per cent of Indians do not have any form of savings for their children, the findings of this study show that even the low income families save for their children.

**C. Total cost of rearing infants**

The total cost of rearing infants was analysed in terms of sex, ordinal position, educational and occupational status of the fathers and income of the families.

**ii. Total expenses incurred sex wise**

The total expenditure for boys and girls is depicted in Table XII.

TABLE XII

TOTAL EXPENSES INCURRED SEX WISE			
Amount in rupees per infant			
Particulars	Female N=57	Male N=55	
Food	42	73	
Clothing	168	191	
Cosmetics	65	65	
Medicare	80	72	
Furniture	90	56	
Ornaments	232	22	
Servants	24	43	
Play materials	37	41	
Ceremonies	507	90	
Savings	91	88	
<b>Total</b>	<b>1336</b>	<b>741</b>	
<b>Mean</b>	<b>133.6</b>	<b>74.1</b>	
<b>SD</b>	<b>138.3</b>	<b>43.9</b>	
Particulars	MD	SE	t
Female Vs Male	59.5	48.37	1.23 NS

NS - Not significant

The food expense appears to be little higher for boys than for girls. The pattern of expenditure is more or less similar for boys and girls with regard to items such as cosmetics, medicare, play materials and savings.

As far the high expense items ceremonies tops the list followed by ornaments and clothing in the case of girls while clothing expenses are prominent for boys followed by ceremonies. The expenses incurred were two times higher for female infants than what was spent for the male infants. The total cost for a male infant was Rs.74/- over a period of six months against Rs.133/- for a female infant.

12. Cost of rearing infants, ordinal position wise

Table XIII features the total cost of rearing an infant <sup>in terms</sup> of ordinal position.

TABLE XIII

COST OF REARING INFANTS ORDINAL POSITION WISE			
Particulars	Amount in Rupees per child		
	First Born	Second Born	Third Born
Food	63	61	42
Clothing	212	164	161
Cosmetics	59	68	64
Medicare	86	76	81
Furniture	79	50	40
Ornaments	191	179	110
Servants	42	33	21
Play materials	51	34	33
Ceremonies	445	325	162
Savings	140	87	51
<b>Total</b>	<b>1368</b>	<b>1076</b>	<b>765</b>
<b>Mean</b>	<b>186.8</b>	<b>107.6</b>	<b>76.5</b>
<b>SD</b>	<b>117.2</b>	<b>86.35</b>	<b>48.9</b>
	<b>MD</b>	<b>SE</b>	<b>t</b>
First born Vs Second born	29.2	48.52	.60 NS
First born Vs Third born	60.3	42.33	1.42 NS
Second born Vs Third born	31.1	33.07	.94 NS

NS - Not significant

# COST OF REARING INFANTS ORDINAL POSITION WISE

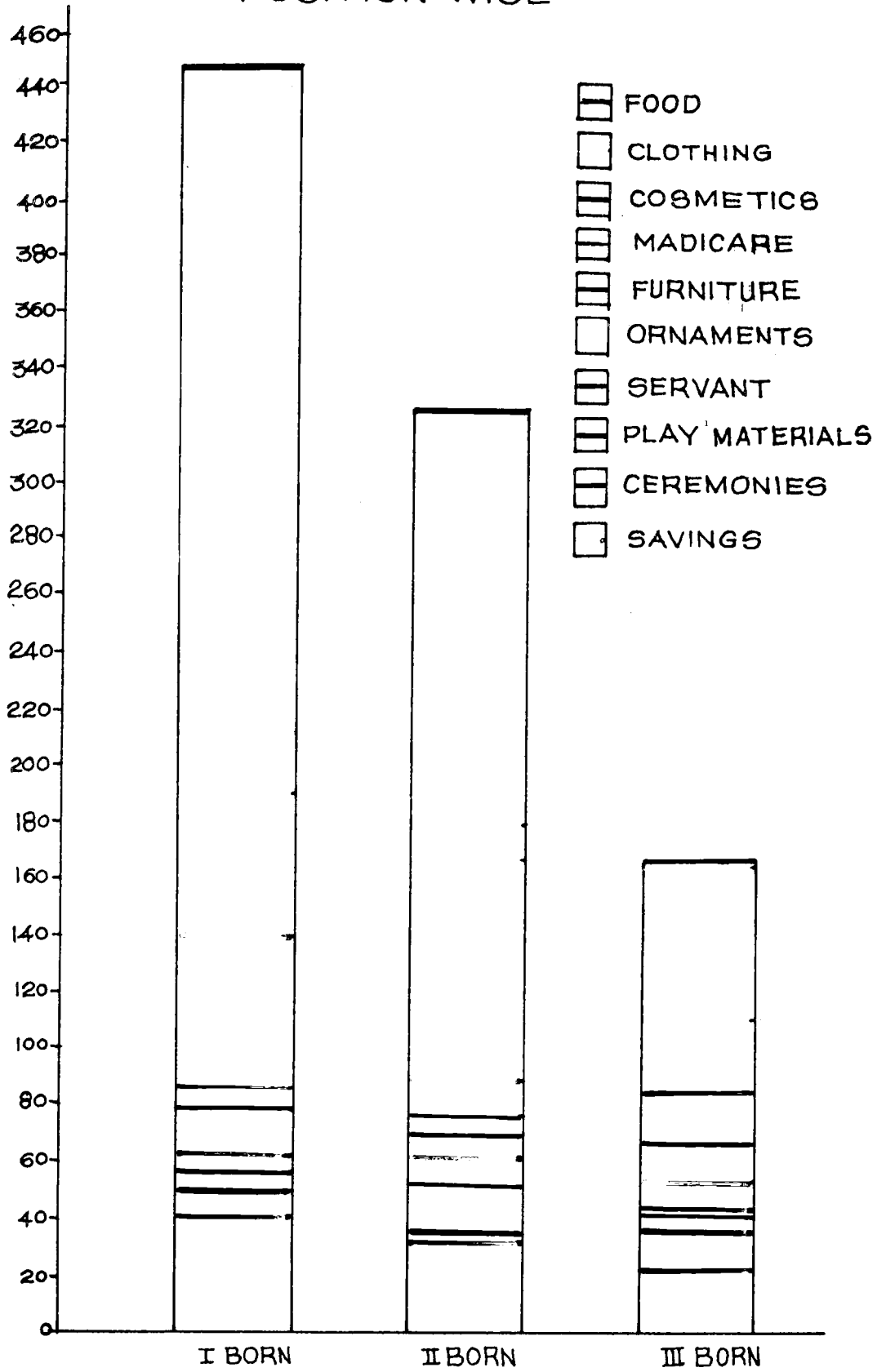


Figure. 1

No significant difference was observed in the total cost of rearing an infant in relation to ordinal position. Irrespective of the order of birth the infants seem to have received equal importance (Figure 1). This finding is contradictory to that of Santappen and Kuppen (1970) who had found that much importance is given to first born children in spending pattern than for the middle and last borns.

13. Total expenses in relation to educational status of the fathers

Table XIV reveals the details regarding the total cost for bringing up an infant in relation to the educational status of the fathers.

TABLE XIV

TOTAL EXPENSES INCURRED IN RELATION TO EDUCATIONAL  
STATUS OF THE FATHERS

Particulars	Amount in Rupees per child		
	Illiteracy	High school level	College level
Food	-	28	87
Clothing	67	116	239
Cosmetics	34	46	84
Medicare	50	51	108
Furniture	3	16	94
Ornaments	-	13	311
Servants	-	2	62
Play materials	7	16	61
Ceremonies	-	16	602
Savings	5	16	165
<b>Total</b>	<b>166</b>	<b>320</b>	<b>1813</b>
<b>Mean</b>	<b>16.6</b>	<b>32</b>	<b>181.3</b>
<b>SD</b>	<b>23.4</b>	<b>31.5</b>	<b>160.5</b>
	<b>MD</b>	<b>SE</b>	<b>t</b>
Illiteracy Vs high school level	15.4	13.08	1.77 NS
Illiteracy Vs college level	164.4	54.06	3.041**
High school level Vs College level	149	54.52	2.73*

When the total expenses per child was analysed in relation to the three levels of education, it is seen that the fathers who were illiterate spent very low, the amount being rupees 166/- for an infant. The amount was double with those fathers who had completed high school education. Those who had acquired college education had spent six times and eleven times more than those of others with high school and <sup>no</sup> education respectively. The difference between the first and the last group and the second and the last group was statistically significant.

14. Total expenses in relation to occupational status of the fathers

The variations in the total expenses incurred due to occupational status of the fathers are presented in Table XV.

TABLE XV

TOTAL EXPENSES IN RELATION TO OCCUPATIONAL STATUS  
OF THE FATHERS

Particulars	Amount in Rupees per child				
	Professional	Clerical	Industrial workers	Business	Cooli
Food	184	61	43	66	5
Clothing	444	129	126	280	62
Cosmetics	178	65	51	93	8
Medicare	261	66	55	69	30
Furniture	296	9	7	93	--
Ornaments	660	125	49	266	--
Servants	72	20	20	78	---
Play materials	125	12	10	88	6
Ceremonies	1193	182	162	546	-
Savings	268	45	55	199	-
<b>Total</b>	<b>3671</b>	<b>714</b>	<b>578</b>	<b>1798</b>	<b>111</b>
<b>Mean</b>	<b>367.1</b>	<b>71.4</b>	<b>57.8</b>	<b>179.8</b>	<b>11.1</b>
<b>SD</b>	<b>316</b>	<b>56.2</b>	<b>47.1</b>	<b>143.8</b>	<b>10</b>

The statistical appraisals (Appendix<sup>B</sup>) of the influence of occupational status of the head of the family pinpoint significant difference in the total expenses of professionalists with clerks,

Industrial workers and Coolli workers. The business people showed supremacy in their total expenses when compared with clerks, industrial workers, and Coolli workers. No difference existed among professionalists and business people. Significant difference was observed between clerks and coolli workers and between industry workers and coolli workers. No difference was found between clerks and industry workers.

The trend observed in the total expenses of groups of various occupational positions reflects that the higher the occupational status the more the expenditure. Naturally the groups of higher occupations have been facilitated to spend more for satisfying the needs of the infants.

15. Total expenses incurred in relation to income

Table XVI shows the total cost for an infant at various income levels.

TABLE XVI

## TOTAL EXPENSES INCURRED IN RELATION TO INCOME

Particulars	Amount in Rupees per child		
	LIG	MIG	HIG
Food	9	75	178
Clothing	69	231	392
Cosmetics	36	78	133
Medicare	30	97	199
Furniture	4	72	198
Ornaments	1	246	517
Servants	4	32	170
Play materials	24	50	128
Ceremonies	2	420	1167
Savings	8	91	440
<b>Total</b>	<b>187</b>	<b>1392</b>	<b>3529</b>
Mean	18.7	139.2	352.9
SD	21.1	116.0	300.9
	MD	SE	t
LIG VS MIG	122.9	39.3	3.12**
LIG Vs HIG	336.6	100.5	3.35**
MIG Vs HIG	213.7	107.5	1.988 NS

# TOTAL EXPENSES INCURRED IN RELATION TO INCOME

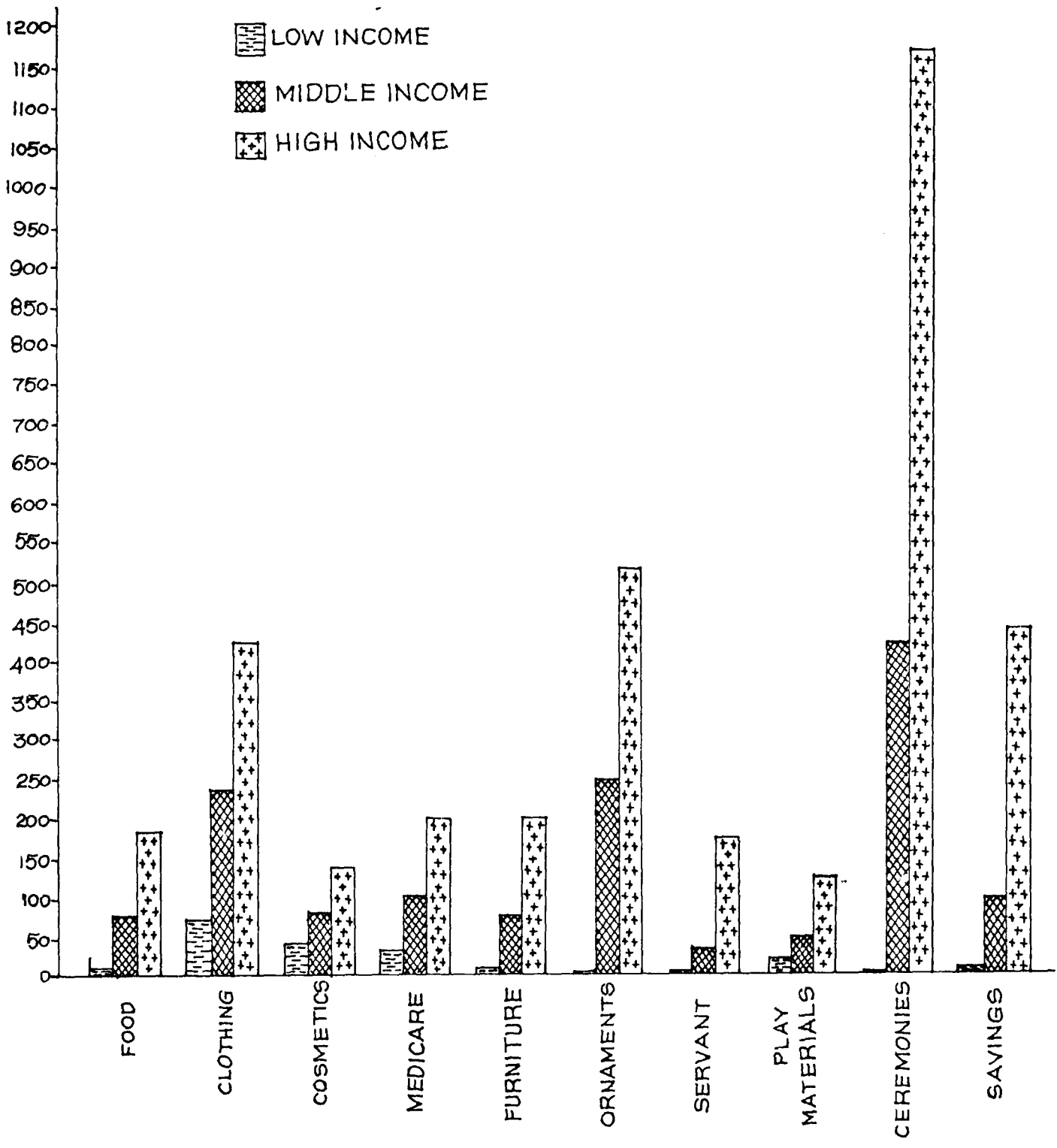


Figure. 2

On an average a low income child receives rupees nine for food while middle and high income receives rupees seventy five and one hundred and seventy eight respectively (Figure 2).

Of all the items, the low income families have spent more for clothing followed by cosmetics, medicare and play materials. The expenses on the above items per child are Rs.69/=-, Rs.36/=-, Rs.30/=- and Rs.24/=- respectively.

Negligible amount has been spared for a low income child for ornaments, servants, play materials, ceremonies, and savings. This may be because the low income families have their priorities and care little for items of secondary importance such as ornaments, servants and ceremonies.

The middle and high income families appear to attach importance remarkably to ceremonies, ornaments, and clothing. This may be perhaps because they like to behave in accordance with the social milieu in which they live.

The total cost for bringing up an infant in the low, middle and high income groups in Rupees 187/=-, Rs.1392/=-, Rs.3529/=- respectively.

16. Sleepless nights spent by the mothers due to the infants

Table XVII enlists the sleepless nights spent by the mothers due to the infants.

TABLE XVII

SLEEPLESS NIGHTS SPENT BY THE MOTHERS DUE TO THE INFANTS	
Income group	Number of sleepless nights
Low income	22
Middle income	18
High income	5

It is seen from the table that the mothers of low income had recorded 22 sleepless nights against 18 and 5 reported by the mothers of middle and high income families.

## V. SUMMARY AND CONCLUSION

A child imposes various kinds of costs on their parents. This study was undertaken with the objective of exploring the financial cost of rearing an infant below six months. The findings of the study are summarised as below:

1. Eighty five per cent of the infants were from small and nuclear families. Their fathers were well placed in their educational and occupational status than the mothers.
2. Significant difference existed between the families of three income levels in the expenditure pattern of items such as food, clothing, cosmetics, medicare, furniture, ornaments, servants, play materials and ceremonies.
3. There was no difference between low income group and middle income group with regard to savings.
4. The total cost of rearing a female infant amounted to be Rs.1336/- while it was Rs.741/- for a male infant though the difference was statistically significant.
5. For the first born infant the total amount spent on food, clothing, cosmetics, medicare, furniture, ornaments, servants, play materials ceremonies and

over a period of six months was Rs.1368/- while the second and third born infants created expenses of Rs.1076/- and Rs.765/- respectively. The statistical analysis proved that there was no significant difference in the total expenses in relation to ordinal position.

6. Illiterate parents incurred Rs.166/- for their infants while parents having studied up to high school had spent Rs.320/-. The amount spent was Rs.1813/- in the case of parents who had finished college level of education. The difference between the total expenses of parents of the second and third category and between the first and third category was significant statistically.
7. It was found that professional fathers spent the highest for their infants (Rs.3671/-) followed by parents having business (Rs.1798/-). The clerical and industrial workers did not differ significantly, since they had spent Rs.714/- and Rs.572/- respectively. The Coolie workers had spent Rs.111/- for their infants.

8. A child in the low income families meant Rs.187/- over a period of six months. The total cost per child in the middle and high income families were Rs.1392/- and Rs.3529/- respectively. Significant difference at one per cent level was observed in the total cost of rearing an infant between low and middle income families and between low and high income families.
9. The number of sleepless nights experienced by the mothers of low income was more than the other two groups.

#### Recommendations

The recommendations emerging from this study are:

1. Monetary expenditure incurred by the parents for bringing up a child needs to be studied longitudinally.
2. The public cost, that is, the cost of hospital, park, play ground can also be studied.
3. Studies could also be undertaken to find out the cost of toil and trouble which are non monetary and non quantifiable data.
4. Large scale studies in this area with more precise tools might help in bringing forth more conclusive results.

**BIBLIOGRAPHY**

1. Aggarwal, D.  
1975  
"Women can train the minds of children", Social Welfare, XXII, 4. P.11.
2. Asuri, P.  
1976  
"Child Care"  
New Delhi: UNICAF, Pp.1-8.
3. Bai, M.  
1969  
"The role of home and the school", Social Welfare, XIII, 10, p.27.
4. Barnabas, C.  
1980  
"Profile of the Child in India",  
New Delhi: Ministry of Social Welfare, Pp.54, 189, 295, 359.
5. Bhogle, S.  
1978  
"Child rearing practices among three culture", Social Change, VIII, Pp.5-13.
6. Bhoote, M.  
1980  
"Child rearing old and new",  
Child care, XI, 6. Pp.5-7.
7. Campbell, D.  
1968  
"Child rearing",  
San Francisco: Jossey Bass Inc.,  
Pp.151-157.
8. Dhillon, M. and  
Dhanoo, J.  
1979  
"Perspectives and issue", New Delhi:  
Voluntary health association of  
India, Pp.5-25.
9. Elliot, M.  
1967  
"Infant Care"  
Washington: Children's Bureau,  
Pp.10-26.
10. Gardner, D.  
1964  
"Development in early childhood",  
London: Harper and Row, Pp.296-307.
11. Ghosh, S.  
1976  
"The feeding and care of infants  
and young children", Delhi:  
Voluntary health association of  
India, Pp.13-18.
12. Gupta, S.P.  
1983  
"Statistical methods", New Delhi:  
Sultan Chand and Sons, Pp.6-4 - 6-14.

13. Harwood, A.  
1969 "Research relating to children",  
Washington: Children's Bureau,  
Pp.70, 75-78.
14. Indira Gandhi  
1981 "India and her children",  
UNICEF NEWS, X. P.3.
15. Joseph, T.C.  
1984 "Child rearing practices",  
Indian EXPRESS, December 9th P.4.
16. Khanna, A.  
1984 "Spare sometime for your child",  
Social Welfare, XII 8, Pp.13,14.
17. Kher, O.  
1962 "An introduction to child development"  
Delhi: Asia publishing house,  
Pp.43 - 59.
18. Kappaswamy, B.  
1976 "Child behaviour and development",  
Delhi, Vikash publishing house,  
pp.44, 48.
19. Marshall  
1961 "The needs of young children in care",  
London: Majesty's stationery office,  
Pp.10-13.
20. Moncrieff, A.  
1960 "Motherhood and parent craft", London:  
Odhams press Ltd., Pp.10-129.
21. Pathayya, B.C.  
1972 "Child welfare", Hyderabad:  
National Ins. itute of Community  
development, Pp.72-73.
22. Narain, K.V.  
1985 "It costs them a fortune",  
The Hindu, April 7th P.24.
23. Parsons, S.  
1961 "Mother craft in India", Madras:  
Christian Literature Society for  
India, Pp.69-74.
24. Reimer, A.  
1964 "A handbook for new mothers?",  
New York: The Child Study  
Association, Pp.11-27.
25. Reynolds  
1971 "Children from seed to saplings"  
New York: McGraw hill book  
company, Pp.29-69.

26. Rohatgi, S.  
1983 "Services for Children", Social Welfare, XIII, 4. p.2.
27. Sachana, K.  
1983 "Children's needs", Social Welfare XIII, 4. P.24.
28. Shamsuddin  
1984 "Home the Primary School", Social Welfare, XIII, Pp.37-38.
29. Shewak  
1982 "Assignment children", Geneva: UNICEF, Pp.19, 35-36.
30. Smart, S., and  
Smart, R.C.  
1978 "Infants development and relationships", London: Collier macmillan publishers, Pp.144-145.
31. Souza  
1979 "Children in India", New Delhi: Indian Social Institute, Pp.81-136.
32. Srinivasan, K.,  
Saxena, P.C. and  
Kanitkar, T.  
1979 "Demographic and socio economic aspects of the children in India", Bombay: Anandaya publishing house, Pp.235-245.
33. Sunder Raj., D.  
1980 "Child Care in India", New Delhi: World Vision of India, Pp.50-61, 170-176.
34. Traver, V.J.  
1977 "The growing child", New York: John Wiley and Sons, p.343-346.
35. UNICEF report  
1985 "Shift in Welfare Strategy", The Hindu, March 31, P.17.
36. Uppal, J.S.  
1983 "India's economic problems an analytical approach", New Delhi: Tata McGraw hill publishing Co., Ltd., Pp.7-8.

**A P P E N D I C E S**

APPENDIX - A

முத்தக வளர்ப்பிற்காகும் செலவு  
(பித்தகத்திற்குள் ஒரு மாதத்தில் மட்டும்)

- 1. பதிவு அலுவலகத்தில் பெயர் :
- 2. சீட்டு முகவரி :
- 3. குடும்ப வகை :
- 4. காதி / மதம் :
- 5. குடும்ப விவரம் :

குடும்ப தயார் செய்தல்	குடும்ப அலுவலகத்தில் பெயர்	குடும்ப அலுவலகத்தில் உதவு	வகை	பாதி	கட்டிட தகவல்	தொழில் விவரம்
.....	.....	.....	.....	.....	.....	.....

- 6. இத்தக முத்தக உரிமையின் எந்தவக வகை முத்தக :
- 7. ஆம் / இல்லை :
- 8. பித்தகம் பெறும் இத்தக வகை :
- 9. முத்தக பித்தக அலுவலகத்தில் தாதிப்பாதி கொடுக்கிறீர்களா? :
- 10. ஆம் எனில் தாதிப்பாதி கொடுக்க வகை அளவு (மாதத்தில்) :



13.

-----  
 மாதம் குழந்தைகளுக்கான பாஷாட்டுவதற்கான தாய்மார்க்கு உட்கொடுத்தும் விசேஷ உணவிற்கான செலவு ரூ ரூப  
 -----

1வது மாதம்  
செப்டம்பர்

2வது மாதம்  
அக்டோபர்

3வது மாதம்  
நவம்பர்

4வது மாதம்  
டிசம்பர்

5வது மாதம்  
ஜனவரி

6வது மாதம்  
பிப்ரவரி

14.

-----  
 மாதம் உட்கொடுத்தும் செலவு ரூ ரூப  
 -----

1வது மாதம்  
செப்டம்பர்

2வது மாதம்  
அக்டோபர்

3வது மாதம்  
நவம்பர்

4வது மாதம்  
டிசம்பர்

5வது மாதம்  
ஜனவரி

6வது மாதம்  
பிப்ரவரி

15.

மாநகம்	முத்தையார் தேவயான சோப, பவுடர், எக்செஸ், குளிக்க வசிகள் பாத்திரம்	செ	வெ
	பொத்தயத்தினாளுல் செயல்		

1வது மாநகம் செட்டியார்

2வது மாநகம் அக்டோபர்

3வது மாநகம் நவம்பர்

4வது மாநகம் டிசம்பர்

5வது மாநகம் ஜனவரி

6வது மாநகம் பிப்ரவரி

16.

மாநகம்	மத்திய, மத்திய செவல், மத்தியவாடிக் அமழ்த்தல் செவல் சரிபலம் செயல்	செ	வெ
--------	--	----	----

1வது மாநகம் செட்டியார்

2வது மாநகம் அக்டோபர்

3வது மாநகம் நவம்பர்

4வது மாநகம் டிசம்பர்

5வது மாநகம் ஜனவரி

6வது மாநகம் பிப்ரவரி



19.

மாநகர் உயர்நீதிமன்ற பாதுகாப்புச் சேலடி  
(அதாவது சேலையார் பாதிநீதிமன்ற- 6 ஸப  
காஞ்சி சேலடி)

1வது மாநகர்  
செப்டம்பர்

2வது மாநகர்  
அக்டோபர்

3வது மாநகர்  
நவம்பர்

4வது மாநகர்  
டிசம்பர்

5வது மாநகர்  
ஜனவரி

6வது மாநகர்  
பிப்ரவரி

20.

மாநகர் விவசாயத்துறை சேலடி (அதாவது  
பொய்க்காணி, மீத விவசாயத்துறை  
சாமாநீதிமன்ற பாதிநீதிமன்றசேலடி) 6 ஸப

1வது மாநகர்  
செப்டம்பர்

2வது மாநகர்  
அக்டோபர்

3வது மாநகர்  
நவம்பர்

4வது மாநகர்  
டிசம்பர்

5வது மாநகர்  
ஜனவரி

6வது மாநகர்  
பிப்ரவரி

21.

மாநம்	முத்திரைப் பெயர் கெட்டும், கார கெட்டும் பொக்கிரவத்திற்காகும் செயல்	செயல்
-------	---	-------

22.

மாநம்	முத்திரைக்காக செலிக்கும் கார	செயல்
-------	------------------------------	-------

மாநம்	முத்திரைக் காரணமாக பாக்கியம் கெட்ட நாட்டினம் கெட்டும்	காரணங்கள்
-------	--	-----------

- 1வது மாநம்
- 2வது மாநம்
- 3வது மாநம்
- 4வது மாநம்
- 5வது மாநம்
- 6வது மாநம்

**RECORD GIVEN TO MAINTAIN THE COST OF REARING INFANTS**

1. Name of the interviewee :
2. Home address :
3. Type of family : Joint/nuclear
4. Caste/Religion :
5. Family background :

Sl. No.	Name of the family members	Relation-ship to the head of the family	Age	Sex	Educa-tional status	Occu-pation	Monthly income
-----							

6. Ordinal position of the child
7. Sex : Boy/Girl
8. Weight of the baby during births
9. Did you breast fed the baby from the time of birth

Yes/No

10. If yes how long did you breast fed the child (in months)

11.

Month	Expenditure	Rs. pr.
-------	-------------	---------

I month

September

II month

October

III month

November

IV month

December

V month

January

VI month

February

12.

Month	Expenditure on Feeding equipments (Feeding bottle, brush, soap etc.)	Rs. p.
-------	--	--------

I month

September

II month

October

III month

November

IV month

December

V month

January

VI month

February

13.

Month	Expenditure on special food consumed by the mother during lactation	Rs. ps.
-------	---	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
February

14.

Month	Clothing expenditure	Rs. ps.
-------	----------------------	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February



17.

Month	Expenditure on special furniture (cradle, cot, mosquito net and toilet accessories)	Rs. p.
-------	---	--------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

18.

Month	Ornamental expenses	Rs. ps.
-------	---------------------	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

19.

Month	Expenses for taking care of the infant (servant maids)	Rs. ps.
-------	--	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

20.

Month	Play materials expenses	Rs. ps.
-------	-------------------------	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

21.

Month	Expenditure on social functions (Waiving, harboring etc.)	Rs. ps.
-------	---	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

22.

Month	Savings	Rs. ps.
-------	---------	---------

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

23.

-----

Month	Number of days spent on sleepless nights due to the infant	Reasons
-------	--	---------

-----

I month  
September

II month  
October

III month  
November

IV month  
December

V month  
January

VI month  
February

-----

## APPENDIX B

STATISTICAL ANALYSIS

$$t' = \frac{\bar{x}_1 - \bar{x}_2}{SE} = \text{Mean Differences/SE}$$

$$\text{Mean Difference} = \bar{x}_1 - \bar{x}_2$$

where-  $\bar{x}_1$  = Mean of the first group

$\bar{x}_2$  = Mean of the second group

$$SE = \sqrt{\frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} \times \frac{1}{n_1} + \frac{1}{n_2}}$$

where  $n_1$  = Number of sample in the first group

$n_2$  = Number of sample in the second group

$s_1$  = Standard deviation of first group

$s_2$  = Standard deviation of second group

Example :

## STATISTICAL APPRAISAL FOR FOOD EXPENSES INCURRED

(1) LIG Vs MIG

$$t_{n_1 + n_2 - 2} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2 - 2} \times \frac{1}{n_1} + \frac{1}{n_2}}}$$

$$\bar{x}_1 = 42$$

$$\bar{x}_2 = 90$$

$$n_1 = 50$$

$$n_2 = 50$$

$$s_1 = 17.8$$

$$s_2 = 75.4$$

$$t = \frac{42 - 90}{\sqrt{\frac{(50(17.8)^2 + 50(75.4)^2)}{50 + 50}}} = \frac{-48}{\sqrt{\frac{1}{50} + \frac{1}{50}}}$$

$$= \frac{-48}{11.06}$$

Therefore 't' = 4.34

(11) LIG Vs HIG

$$\bar{x}_1 = 42$$

$$\bar{x}_2 = 187.5$$

$$n_1 = 50$$

$$n_2 = 22$$

$$s_1 = 17.8$$

$$s_2 = 150$$

$$t = \frac{42 - 187.5}{\frac{50(17.8)^2 + 12(150)^2}{50 + 10} \times \frac{1}{50} + \frac{1}{12}}$$

$$= \frac{145.5}{21.8}$$

$$= 6.67$$

(111) MIG Vs HIQ

$$\bar{x}_1 = 90$$

$$\bar{x}_2 = 187.5$$

$$n_1 = 50$$

$$n_2 = 12$$

$$s_1 = 75.4$$

$$s_2 = 150$$

$$t = \frac{90 - 187.5}{\frac{50(75.4)^2 + 12(150)^2}{50 + 10} \times \frac{1}{50} + \frac{1}{12}}$$

$$= \frac{97.5}{30.39}$$

$$t = 3.21$$

There is a significant difference between three income levels with regard to food expenses incurred for infants.

**TOTAL EXPENSES IN RELATION TO OCCUPATIONAL STATUS  
OF THE FATHERS**

Particulars	MD	SD	t
Professional Vs clerical	295.7	106.87	2.76*
Professional Vs workers in Industry	309.3	106.49	2.9**
Professional Vs Business	187.3	115.7	1.61 N.S.
Professional Vs Cooli	356	105.5	3.37**
Clerical Vs workers in Industry	13.6	23.93	0.568 N.S
Clerical Vs Business	108.4	51.22	2.116*
Clerical Vs Cooli	60.3	19.14	3.15**
Workers in Industry Vs Business	122	50.43	2.419*
Workers in Industry Vs Coolies	46.7	16.92	2.76*
Business Vs Coolies	168.7	48.34	3.48**