DOI: 10.7860/JCDR/2017/30903.10889

Original Article

Paediatrics Section

Knowledge, Utilization and Benefits of a Child Health Care Scheme

SHEETAL SRIRAMAN[1], SHANTHARAM BALIGA[2], BHASKARAN UNNIKRISHNAN[3], NUTAN KAMATH[4]

ABSTRACT

Introduction: Child health plays an essential role in shaping the future of a community. For this reason, governments worldwide have made child health care a priority. Studying the trends of utilization and benefits of child health care schemes is therefore, imperative to assess its impact on the community.

Aim: This study was undertaken to assess the knowledge, utilization and benefits of a child health care scheme Bal Sanjeevani Program (BSP) in a Government District Hospital.

Materials and Methods: Hundred children belonging to Below Poverty Line (BPL) families, between 0 to 6 years of age admitted for tertiary care were divided equally into cases and controls. The children who availed the BSP were enlisted as the case, whereas those who did not avail the benefits of the BSP were enrolled as the control. The study was conducted in March and April 2016. A semi-structured questionnaire was used for data collection, after approval of the Institutional Ethics Committee. Data analysis was done using SPSS 16.0. Descriptive statistics as well as the Chi-square test were used for analysis.

Results: Of the respondents, 61(61%) had heard of the BSP, of which 11(22%) chose not to register for the scheme. Of those not availing the scheme, 39(78%) stated lack of awareness as the main reason for non-utilization. The mean expenditure of those not utilizing the scheme was 12.87 times more than that of the mean expenditure of those utilizing the scheme.

Conclusion: This program significantly alleviates the financial burden on families with children admitted in tertiary care centers. Increasing the awareness regarding the BSP and identifying eligible children at the Primary Health Care (PHC) level would enhance optimum utilization of this scheme.

Keywords: Bal sanjeevani program, Child care, Neonatal care, Tertiary care

INTRODUCTION

Children are vital to the nation's present and future. However, communities vary considerably in the resources that they make available to meet health care needs of children. This is reflected in the ways in which communities address their collective commitment to child health [1].

India is home to one-fifth of the maternal deaths and one-quarter of the child deaths reported in the world [2].

Health outcomes have shown considerable improvement over time. However, they are still patterned along dimensions such as gender, caste, wealth, education, and geography. The economic development of the state contributes considerably in determining the trends of under-five mortality [3-5].

The primary goal of public policies is to redress any inequities in health, enabling health systems to achieve equity, alongside efficiency, in the distribution of health in a population [6-8].

Article 45 of the Indian constitution states that: "The state shall endeavour to provide early childhood care and education for all children, until they complete the age of 6 years" [9].

In keeping with this, the government launched The Integrated Child Development Services (ICDS) scheme, which is the largest program for promotion of maternal and child health and nutrition in India. A major component of this scheme is The Bal Sanjeevani Program (BSP) [10].

The BSP was conceived and implemented by the Government of Karnataka under the child development program since the year 2011. Under this scheme, children aged between 0 and 6 years belonging to BPL families and suffering from illness and malnutrition requiring Tertiary Care treatment are entitled for free treatment in selected hospitals (33 hospitals) in the state, up to a maximum of Rs.35,000 ($516) and Rs.50,000 ($738) for the treatment of the neonate. Children admitted for the following illnesses can avail treatment: severe pneumonia, encephalitis-meningitis, complicated malaria, anaemia, diabetes, renal problems- urinary bladder/kidney problems, tertiary care treatment of neonatal baby, liver problems, neurological disorders, secondary malnutrition, complicated diarrhoea, surgery of neonatal baby, treatment of snake bite and poisoning. Identification of the children eligible to avail this scheme is the responsibility of the health worker (anganwadi worker), Child Development Project Officer (CDPO) or the medical officer in the PHC center [11].

Understanding the trend of utilization and non-utilization of this scheme as well as ascertaining the advantages this scheme has to offer to the beneficiaries, would help promote the utilization of this scheme, thereby increasing the quality of paediatric child care and alleviating the financial burden on families with children admitted in tertiary care hospitals.

This study was done to assess the knowledge of the BSP amongst the parents of children admitted to a Government District Hospital, to determine the factors affecting the utilization of this program, as well as to assess the advantages of this program on the beneficiaries.

MATERIALS AND METHODS

This was a frequency matched case control study conducted in Regional Advanced Paediatric Care Centre (RAPCC), Mangaluru, Karnataka, India. The hospital is a government nodal referral centre for neonatal and paediatric care covering a population of nearly 1.23 crores (12 million). The study was conducted for two months between March 2016 and April 2016. The study population consisted of BPL parents, whose children had been admitted for treatment of illnesses that were covered under the BSP. The sample size was calculated to be 100 children taking 95% confidence level. Ratio of case and control was taken as 1:1, i.e., 50 cases and

50 controls. After obtaining clearance from the Institutional Ethics Committee, the study participants were divided into two groups- cases and controls. Convenience sampling was used to select the participants for the study. The study was done by dividing the study population into two groups, the case and control groups. The children between zero to six years of age who were eligible to avail the benefits of the BSP and who had availed the BSP was enlisted as the case; whereas, the equal number of children of same age group and socioeconomic status as that of the case, who were eligible to utilize the scheme, but had not availed the benefits of the BSP were enrolled as the controls. Children above six years of age, those belonging to non BPL families, those who were admitted for illnesses not covered by the BSP and those who did not consent to participate in the study were excluded from the study. Matching was done with regard to the socioeconomic status and age. A semi-structured questionnaire was used for data collection. The questionnaire was divided into three sections. The first section dealt with the demographic details of the participant, the second part had questions to assess the knowledge and utilization of the scheme and the third part had questions to gauge the advantages or benefits of the scheme. The questionnaire was filled by the investigator, based on the information given by the parents, after interviewing them regarding the scheme. The willing participants were required to consent to participate in the study. The information provided by all the participants was kept confidential and was only used for research purposes.

STATISTICAL ANALYSIS

The data obtained was analysed by SPSS software version 16.0 using descriptive statistics. Statistical significance was assessed by Chi-square test wherein $p<0.05$ was considered to be statistically significant.

RESULTS

Out of the total number of cases, 34 (68%) of them were infants and the rest 16 (32%) were between one to six years of age. The association between the age of the participants and their utilization of the BSP was found to be statistically significant. Males constituted 24 (48%) of the cases and 29 (58%) of the controls. Females constituted 26 (52%) of the cases and 21 (42%) of the controls. Majority of the cases 44 (88%) as well as controls 45 (90%) were Hindus. Most of the cases 32 (64%) resided in rural areas whereas 27 (54%) of the controls resided in urban areas. Most of the cases 35 (70%) as well as controls 34(68%) belonged to nuclear families. Majority of the cases 37 (74%) as well as controls 44 (88%) belonged to low socioeconomic status according to BG Prasad Scale [12].

Mean per capita income of the cases and control groups were Rs.2429 ($36.32) and Rs.1929 ($28.84) respectively. Majority of the cases i.e., 26 (52%) lived 50 to 100 km away from the tertiary care center [Table/Fig-1].

Cases predominantly showed a trend of suffering from neonatal problems 17 (34%), surgical problems 8 (16%), neurological problems 8 (16%), and pneumonia 7 (14%). Controls however showed a trend of suffering from miscellaneous diseases 18 (36%), surgical problems 7 (14%), and anaemia 7 (14%). Cases were mostly referred from Taluk Hospitals 19 (38%) or had not been referred 15 (30%) whereas most of the controls were referred from Taluk Hospitals 29 (58%) or Private Hospitals 11 (22%). The association between the place of reference of the participants and their utilization of the BSP was found to be statistically significant with a p-value <0.05, which was 0.003. The cure rate of the cases was found to be 30 (60%), while 12 (24%) have ongoing treatment, 5 (10%) were referred elsewhere and 3 (6%) had passed away. The association between the outcome of treatment of the participants and their utilization of the BSP was found to be statistically significant with a p-value <0.05, which was

Determinants	Controls% (No.) n=50	Cases% (No.) n=50	Total% (No.) n=100	p-value
Age				
< 1 year	68% (34)	26% (13)	47% (47)	<0.001
1 to 3 years	16% (8)	8% (4)	12% (12)	
>3 years	16% (8)	66% (33)	41% (26)	
Sex				
Male	48% (24)	58% (29)	53% (53)	0.321
Female	52% (26)	42% (21)	47% (47)	
Religion				
Hindu	88% (44)	90% (45)	89% (89)	0.801
Muslim	12% (6)	6% (3)	9% (9)	
Christian	0% (0)	4% (2)	2% (2)	
Area of residence				
Urban	36% (18)	54% (27)	45% (45)	0.567
Rural	64% (32)	46% (23)	55% (55)	
Type of family				
Nuclear	70% (35)	68% (34)	69% (69)	0.829
Joint	30% (15)	32% (16)	31% (31)	
Socioeconomic Status (BG Prasad Scale)				
High	0% (0)	2% (1)	1% (1)	0.057
Middle	6% (3)	2% (1)	4% (4)	
Low	94% (47)	96% (48)	95% (95)	
Percapita income				
</=$15 (Rs1000)	16% (8)	24% (17)	25 %(25)	
$15 to $45 (Rs.1000 to Rs. 3000)	62% (31)	60% (30)	61% (61)	
$45 to $75 Rs. 3000 to Rs. 5000	18% (9)	2% (1)	10% (10)	
>$75 (Rs. 5000)	4% (2)	4% (2)	4% (4)	
Mean income	$36.32 (Rs. 2429)	$28.84 (Rs. 1929)	$32.58 (Rs. 2179)	
Distance of home from the hospital				
<10 km	0% (0)	8% (4)	4% (4)	0.062
10 to 20 km	8% (4)	10% (5)	9% (9)	
20 to 50 km	6% (3)	18% (9)	12% (12)	
50 to 100 km	52% (26)	26% (13)	39% (39)	
>100 km	34% (17)	38% (19)	36% (36)	

[Table/Fig-1]: Sociodemographic profile of the study participants.

0.021. Out of the total sample size of 100, 61 (61%) had heard of the BSP, including 50 (100%) of the cases and 11 (22%) of the controls. The main source of information regarding the scheme for those who were aware of the scheme (total 61 patients, comprising 50 patients belonged to the cases group and 11 belonged to the controls) were hospital doctors for both cases 47 (94%) and control 8 (72.72%). Other sources included PHC or Anganwadi workers {3 (6%) cases and 2 (18.18%) of controls} and friends or family {1 (9%) controls}. Most of the cases i.e., 44 (88%) and all the controls i.e., 11 (100%), who were aware about the scheme, were unaware about the age groups of children that could have availed benefits of the scheme, the monetary benefits received and the number of children who availed the scheme [Table/Fig-2].

As seen in [Table/Fig-3], out of the 50 controls, 39 (78%) did not avail the scheme due to lack of knowledge, 10 (20%) found the process of availing the scheme too difficult and 1 (2%) claimed that they did not receive cooperation from the authorities. Monetary benefits received from the scheme was the main reason that most of the cases i.e., 49 (98%) chose to avail the scheme and 1 (2%) chose to avail the scheme due to encouragement by PHC workers. Out of the 50 members in the case group, 42 (84%) received all of the benefits of the BSP, i.e. free treatment, monetary benefit and

Determinants	Controls % (No.) N= 50	Cases % (No.) N= 50	p-value
Diseases			
Pneumonia	14% (7)	8% (4)	
Meningitis and Encephalitis	4% (2)	0% (0)	
Complicated Malaria	0% (0)	0% (0)	
Anaemia	2% (1)	14% (7)	
Diabetes	0% (0)	0% (0)	
Renal Problems	0% (0)	4% (2)	
Neonatal Problems	34% (17)	6% (3)	
Liver Disorder	0% (0)	2% (1)	
Neurological Disorder	16% (8)	6% (3)	
Malnutrition	0% (0)	0% (0)	
Diarrhea	0% (0)	6% (3)	
Surgery	16% (8)	14% (7)	
Snakebite	0% (0)	0% (0)	
Poisoning	0% (0)	0% (0)	
Others	12% (6)	36% (18)	
Referred from			
PHC*	6% (3)	12% (6)	
CHC**	12% (6)	0% (0)	
Taluk Hospital	38% (19)	58% (29)	0.003
Private Hospital	14% (7)	22% (11)	
Not Referred	30% (15)	8% (4)	
Outcome of treatment			
Ongoing	24% (12)	46% (23)	
Cured	60% (30)	54% (27)	0.021
Referred	10% (5)	0% (0)	
Death	6% (3)	0% (0)	
Heard of BSP			
Yes	100% (50)	22% (11)	
No	0% (0)	78% (39)	
Source of information			
PHC/Anganwadi worker	6% (3)	18.18% (2)	
Friends/Family	0%(0)	9.09% (1)	
TV/Radio/Newspaper	0% (0)	0% (0)	
ASHA worker	0% (0)	0%(0)	
Hospital Doctor	94% (47)	72.72%(8)	
Private Doctor	0% (0)	0%(0)	
Age groups that can avail the scheme			
Aware	12% (6)	0% (0)	
Unaware	88% (44)	100% (11)	
Monetary benefirs received			
Aware	12% (6)	0% (0)	
Unaware	88% (44)	100% (11)	
Number of children that can avail the scheme			
Aware	12% (6)	0% (0)	
Unaware	88% (44)	100% (11)	

[Table/Fig-2]: Knowledge regarding the BSP.
*Primary Health Center (PHC)
**Community Health Center (CHC)

reimbursement of transportation and 8 (16%) received only free treatment because they claimed to not require compensation for loss of wages or transportation.

The mean amount of money received from the BSP was Rs.13302 ($198.88). The mean expenditure of the cases was Rs.4264 ($63.75), which was 175% (or 1.75 times) of the mean per capita income [Table/Fig-4]. The mean expenditure of the controls was Rs.54880 ($820), which was 2844.9% (or 28.44 times) of the mean per capita

Determinants	Controls % (No.) n=50	Cases % (No.) n=50
Reason for non utilization		
Unaware regarding the scheme	Not Applicable	78% (39)
Process of availing was too difficult	Not Applicable	20% (10)
No cooperation from the authorities	Not Applicable	2% (1)
Did not require monetary assistance	Not Applicable	0% (0)
Using another Scheme	Not Applicable	0% (0)
Reason for utilization		
Monetary benefit	98% (49)	Not Applicable
Encouragement by PHC workers	2% (1)	Not Applicable
Encouragement by ASHA workers	0% (0)	Not Applicable
Encouragement by Doctors	0% (0)	Not Applicable
Benefits received		
Free treatment	100% (50)	Not Applicable
Free drugs and other facilities	84% (42)	Not Applicable
Monetary benefit	84% (42)	Not Applicable
Reimbursement of transportation	84% (42)	Not Applicable

[Table/Fig-3]: Utilization of the BSP.

Determinants	Controls % (N)	Cases % (N)	Total % (N)
Money from BSP			
≤ $15 (Rs1000)	8% (4)	Not Applicable	
$15 to $150 (Rs1000-Rs10000)	38% (19)	Not Applicable	
$150 to $300 (Rs10000-Rs20000)	38% (19)	Not Applicable	
$300 to $450 (Rs20000-Rs30000)	12% (6)	Not Applicable	
$450 to $600 (Rs30000-Rs40000)	2% (1)	Not Applicable	
$600 to $750 (Rs40000-Rs50000)	2% (1)	Not Applicable	
Mean	$198.88	Not Applicable	
Expenditure from self			
≤ $15 (Rs. 1000)	82% (41)	2% (1)	42% (42)
$15to $75 (Rs1000-Rs5000)	8% (4)	30% (15)	19% (19)
$75 to $150 (Rs5000-Rs10000)	2% (1)	14% (7)	8% (8)
$150 to $750 (Rs10000-Rs50000)	4% (2)	30% (15)	17% (17)
$750 to $1500 (Rs50000-Rs1 lakh)	4% (2)	10% (5)	7% (7)
> $1500 (>Rs1lakh)	0% (0)	14% (7)	7% (7)
Maximum	$0	$15 (Rs.1000)	$0
Minimum	$897 (Rs60000)	$5232 (Rs350000)	$5232 (Rs350000)
Mean	$63.75 (Rs4264)	$819.32 (Rs54880)	$442.14 (Rs29572)
Direct costs			
Minimum Expenditure	$0	$15 (Rs1000)	$0
Maximum Expenditure	$822 (Rs55000)	$4784 (Rs320000)	$4784 (Rs320000)
Mean	$47.3 (Rs3164)	$740 (Rs49494)	$393.65 (Rs26329)
Indirect costs			
Mimimum Expenditure	$0	$0	$0
Maximum Expenditure	$224.2 (Rs15000)	$598 (Rs40000)	$598 (Rs40000)
Mean	$16.45 (Rs1100)	$76.19 (Rs5096)	$46.32 (Rs3096)
Source of expenditure			
No expenditure	48% (24)	0% (0)	24% (24)
From income or savings	48% (24)	76% (38)	62% (62)
From insurance	0% (0)	0% (0)	0% (0)
From liquidation of property	4% (2)	16% (8)	10% (10)
Borrowing from others	0% (0)	8% (4)	4% (4)
Ability to avail treatment without BSP			
Possible	78% (39)	Not Applicable	
Not possible	22% (11)	Not Applicable	

[Table/Fig-4]: Health care expenses among the study population.
*All conversions from Rupees to Dollars were done according to the rates as on 15 February 2017

income. The mean of direct costs of the cases was Rs.3164 ($47.31), which was 130% (or 1.30 times) of the mean per capita income. The mean direct costs of the controls was Rs.49494 ($740), which was 2565.78% (or 25.65 times) of the mean per capita income. The mean of indirect costs of the cases was Rs.1100 ($16.45), which was 45.28% (or 45 times) of the mean per capita income. The mean indirect costs of the controls was Rs. 5096 ($76.19), which was 264.17% (or 2.64 times) of the mean per capita income. Majority of the patients in the case group either did not incur any expense i.e., 24 (48%) or used their income or savings i.e., 24 (48%) as funds for treatment. The rest of the cases, 2 (4%) had to liquidate their property to pay for the treatment. Controls also predominantly used their income or savings to fund their treatment i.e., 38 (76%). The rest of the controls had to either resort to liquidation of their property i.e., 8 (16%) or had to borrow money from others i.e., 4 (8%). Out of the 50 cases, 11 (22%) claimed that they could not have had availed treatment for their child if not for the BSP.

Out of the 50 cases, 25 (50%) of the cases were highly satisfied by the encouragement by the PHC worker/doctors to avail this scheme, 37 (74%) were highly satisfied by the attentiveness and treatment provided by the doctor, 22 (44%) were satisfied by the process of availing the scheme, 23 (46%) were satisfied by the waiting time involved before availing the scheme, 20 (40%) were neutral towards the monetary compensation provided for their child's treatment, 20 (40%) were satisfied by the benefit of availing the scheme for their family and child, 36 (72%) were highly satisfied by the general comfort in the hospital, and 37 (74%) were highly satisfied by their overall stay in hospital [Table/Fig-5].

S. No	Criteria	Highly Satisfied	Satisfied	Neutral	Dis-satisfied	Highly Dis-satisfied
1.	Encouragement by the PHC worker/ doctors to avail this scheme	50%(25)	46%(23)	4%(2)	0%(0)	0%(0)
2.	Attentiveness and treatment provided by the doctor	74%(37)	26%(13)	0%(0)	0%(0)	0%(0)
3.	Process of availing the scheme (easy and hassle free)	42%(21)	44%(22)	14%(7)	0%(0)	0%(0)
4.	Waiting time involved before availing the scheme	32%(16)	46%(23)	22%(11)	0%(0)	0%(0)
5.	Sufficient monetary compensation provided for treatment	24%(12)	36%(18)	40%(20)	0%(0)	0%(0)
6.	Benefit of availing the scheme	36%(18)	40%(20)	24%(12)	%(0)	%(0)
8	General comfort	72%(36)	28%(14)	0%(0)	0%(0)	0%(0)
9.	Over all stay in hospital	74%(37)	24%(12)	2%(1)	0%(0)	0%(0)

[Table/Fig-5]: Patient satisfaction about BSP.

DISCUSSION

The BSP is a state funded child health care program that aims to alleviate the financial burden on families with children admitted to tertiary care centers for treatment.

Under this scheme, the government funds the treatment of the child, including the cost of drugs and investigations required during the course of the treatment. Also, parents are given monetary compensation for loss of wages and the transportation costs are reimbursed.

It is evident from [Table/Fig-1] that there was significant association (p=0.001) between the age of the child and the utilization of the scheme, with 68% of the beneficiaries less than one year of age. This trend may be because of greater susceptibility in infancy to diseases leading to the requirement of more intensive therapy for the infant's treatment [13].

No association was found between the utilization of the scheme and the socioeconomic status of the family or the family income. This can be attributed to the fact that the cases and controls both belong to BPL families that fall under similar socioeconomic and financial strata.

Most of the cases were admitted for neonatal problems (34%), surgical problems (16%), neurological problems (16%), and pneumonia (14%). This was similar to the trend noticed in a study done by Singhi S et al., in which gastrointestinal and respiratory diseases (23% each), neurological illnesses (16%), and neonatal problems (15.6%) formed the majority of the cases [14].

Most of the cases have either been referred from a Taluk hospital (38%) or have not been referred (30%). Also, 60% of the cases were completely cured, 12 (24%) have ongoing treatment, 5 (10%) were referred elsewhere and 3 (6%) had passed away.

It was observed that, 61% of the total sample size had heard of the BSP, including 100% (50) of the cases and 22% (11) of the controls. The main source of information regarding the scheme for both cases (94%) and control (72.72%) were the hospital doctors. According to the guidelines of this scheme, the identification of children who were eligible to avail this scheme should be done at the PHC level. The child is then required to be referred to the nearest Tertiary Care Centre [11,12]. As it was evident from the results above, the main source of information regarding the scheme are the doctors working in the tertiary care centre and not the PHC worker. This may be because of the lack of knowledge among the PHC workers regarding the eligibility criteria of the BSP.

It was found that 78% (39) of the controls did not avail the scheme due to lack of knowledge. This may be due to the failure in identification of eligible children and counselling of the parents regarding the scheme, which should have been done at the PHC level.

The mean amount of money received from the BSP was Rs. 13302. The mean expenditure of the cases was Rs.4264, which was 175% (or 1.75 times) of the mean per capita income. The mean expenditure of the controls is Rs.54880, which is 2844.9% (or 28.44 times) of the mean per capita income. Evidently the financial burden on the beneficiaries has been significantly alleviated because of the BSP.

Majority of the cases either did not incur any expense (48%) or used their income or savings (48%) as funds for treatment. This can be attributed to the fact that the beneficiaries of the scheme incurred little or no expenses and hence, could pay for their child's treatment from their savings.

In present study, 16% of the controls had to resort to liquidation of their property for their child's treatment and 8% of the controls had to borrow money for treatment. This could be because of the lack of financial assistance received by the parents for their child's treatment.

LIMITATION

This study was done in a Tertiary care center in Mangaluru, with a population of 100 children admitted for treatment. Conducting the same study under different settings may not result in the same findings due to differences in the socioeconomic status of the study population as well as the cost of the health care service provided.

CONCLUSION

The BSP aims to promote a high standard of paediatric and neonatal child care, yet there are a significant number of children who do not utilize this scheme.

Many of the participants (39%) had not heard of the BSP. The main reason for non-utilization was lack of awareness followed by

difficulty in availing the scheme. This calls for a need to propagate more information about the benefits of the BSP.

Most of the parents who were utilizing the scheme were unaware regarding the eligibility criteria and the monetary benefits they are to receive under this scheme.

Hence, it is obvious that the BSP significantly alleviates the financial burden on families with children admitted in tertiary care centers. The scheme could be more useful if more awareness was created and eligible children were identified at the PHC level itself instead of at the tertiary care hospital. Awareness regarding government schemes could be propagated through mass media and health care professionals so as to increase the utilization of the scheme by the target population.

ACKNOWLEDGEMENTS

The authors would like to thank all the children who participated in the study as well as their parents for their cooperation.

We would like to thank the Department of Paediatrics and the Department of Community Medicine for their help and support.

QUESTIONAIRE (APPENDIX 1)

Part 1: Demographic Details

1. Age _____
2. Sex _____
3. Address and/or Mobile Number _____
4. Religion
   a. Hindu
   b. Muslim
   c. Christian
   d. Others
5. Caste
   a. SC
   b. ST
   c. OBC
   d. General
6. You live in a
   a. Rural area
   b. Urban area
7. What type of a family do you live in?
   a. Joint
   b. Nuclear
   c. Three generation family
8. Do you possess any of the following?
   a. BPL card
   b. Anthyodhaya
   c. APL card
   d. None
9. Do you regularly visit a PHC/Anganwadi present in your locality?
   Yes
   No
10. Total no of people in household:

	Education	Occupation	Monthly Income
Father			
Mother			
Others 1. 2. 3. 4.			

TOTAL MONTHLY INCOME: _____

MODIFIED KUPPUSWAMY SCALE:

- Total score:
- Socio-economic class:

11. HISTORY OF ADDICTIONS IN FAMILY (ALCOHOLISM): _____

Part 2: Knowledge and Utilization of the Bal Sanjeevani Program

1. What disease is your child currently admitted for? _____
2. Were you referred from somewhere else?
   (a) Yes (b) No
3. If yes, from where were you referred? (PHC, CHC, Taluka hospital, Private hospital) _____
4. What is the outcome of your treatment at RAPCC?
   a. Recovered
   b. Not cured
   c. Referred elsewhere
   d. Death
5. Have you heard of the Bal Sanjeevani Programme?
   a. Yes
   b. No
6. If yes, who provided you with the information regarding the program?
   a. PHC/Anganwadi worker.
   b. Friends/Family
   c. TV/ Radio/ Newspaper
   d. ASHA worker/ANM
   e. Government Doctor
   f. Private Doctor
   g. Others, please specify: _____
7. What age group of children can avail the benefits of Bal Sanjeevani Program?
   a. 0 to 2 years of age
   b. 0 to 6 years of age
   c. 0 to 12 years of age
   d. 2 to 8 years of age
8. How much money are you entitled to under the Bal Sanjeevani Program?
   a. Rs. 1,000 to Rs. 10,000
   b. Rs. 10,000 to Rs 20,000
   c. Rs. 35,000 to Rs, 50,000
   d. Rs. 1 lakh
9. How many children can avail the benefit under this program?
   a. 1
   b. 2
   c. 3
   d. Any number of children
10. Have you made use of the Bal Sanjeevani Programm for your child's treatment?
    a. Yes
    b. No
11. If no, why
    a. I was unaware regarding the scheme
    b. The process of availing the benefits was too complicated.
    c. No cooperation from the concerned authorities
    d. Don't require the financial assistance
    e. Utilizing another scheme, please specify: _____
12. If yes, Did you get
    a. Free treatment
    b. Free drugs and other facilities
    c. Monetary benefit
    d. Reimbursement for transportation costs
    e. All of the above
13. Reasons for utilizing the scheme:
    a. Monetary benefit
    b. Encouragement by ASHA worker
    c. Encouragement by PHC worker
    d. Encouragement by the Doctors
14. Have you utilized this scheme for any other child?
    a. Yes
    b. No
15. Distance of the hospital from your home _____kilometers.
16. Are you aware of any other government schemes?
    Yes, please specify: _____
    No

PART 3: Benefits of the Bal Sanjeevani Program

- EXPENDITURE

From Bal Sanjeevani:

a. Free treatment - _____
b. Free drugs and other facilities - _____
c. Monetary benefit - _____
d. Reimbursement for transportation costs - _____

By self:

DIRECT COSTS	INDIRECT COSTS
Drugs: Investigations: Consumables: Ambulance charges:	Consumables: Food: Transport charges: Loss of wages:

- SOURCE OF EXPENDITURE: (Mention amount)

a. From Income:
b. From Insurance:
c. By Liquidation of property:
d. Borrowing amount and source, repayment mode interest on loan to be paid:
e. Others (specify):

- PRIOR DEBTS (if any): _____
- PATIENT SATISFACTION QUESTIONAIRE

S. No.	Criteria	Highly Satisfied	Satisfied	Neutral	Dis-satisfied	Highly Dis-satisfied
1.	Encouragement by the PHC worker/doctors to avail this scheme					

2.	Attentiveness and treatment provided by the doctor					
3.	Process of availing the Scheme (easy and hassle free)					
4.	Waiting time involved before availing the scheme					
5.	Monetary compensation provided for my child's treatment					
6.	Benefit of availing the scheme on your family and my child					
8	General comfort					
9.	Over all stay in hospital					

- Would you have taken the treatment given if Bal Sanjeevani was not available?

a. Yes
b. No

- Would you recommend this Scheme to your family and friends?

a. Yes
b. No

REFERENCES

[1] National Research Council (US), Institute of Medicine (US). Children's Health, The Nation's Wealth: Assessing and Improving Child Health. Washington (DC; National Academies Press (US). 2004 [Internet]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK92206/[Accessed on 20/2/2017].

[2] UNICEF. The State of the World's Children 2009: Maternal and Newborn Health. UNICEF, New York 2009 [Internet]. Available from: https://www.unicef.org/sowc09/report/report.php[Accessed on 20/2/2017].

[3] Joe W, Mishra US, Navaneetham K. Socio-economic inequalities in child health: Recent evidence from India. Glob Public Health. 2010;5(5):493-508.

[4] Balarajan Y, Villamor E. Nationally representative surveys show recent increases in the prevalence of overweight and obesity among women of reproductive age in Bangladesh, Nepal, and India. Journal of Nutrition. 2009;139(11):2139-44.

[5] Sen G, Ostlin P, George A, (2002). Engendering international health: the challenge of equity. Cambridge. MIT press.281-300.

[6] Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M. Challenging inequities in health: from ethics to action. New England Journal of Medicine Oxford University Press. 2001;45(25):1857-58.

[7] Karlberg I. Getting health reform right: a guide to improving performance and equity. International Journal of Integrated Care. 2004;4(4):332.

[8] The World Helath organization (WHO). The world health report 2000: Health Systems: Improving Performance. WHO Geneva. 2000;30-40 [Internet]. Available at: http://www.who.int/whr/2000/media_centre/press_release/en/ [Accessed on 20/2/2017].

[9] Integrated Child Development Services (ICDS) website [Internet]. Available at: http://www.icds-wcd.nic.in/cwnew.htm [Accessed on 20/2/2017].

[10] Kapil U. Integrated Child Development Services (ICDS) scheme: a program for holistic development of children in India. Indian journal of Paediatrics. 2001;69(7):597-601.

[11] Government of Karnataka. Integrated Child Development Scheme Website [Internet]. Available at: http://dwcdkar.gov.in/index.php?option=com_content&view=article&id=62&Itemid=114&lang=en [cited 20 /2/2017].

[12] Mangal A, Kumar V, Panesar S, Talwar R, Raut D, Singh S. Updated BG Prasad socioeconomic classification, 2014: A commentary. Indian J Public Health. 2015;59(1):2-4.

[13] McKhann CF, Kapnick I. Immunity and susceptibility to disease in early infancy. The Journal of Paediatrics. 1938;13(6):907-18.

[14] Singhi S, Jain V, Gupta G. Paediatric emergencies at a tertiary care hospital in India. Journal of Tropical Paediatrics. 2003;49(4):207-11.

PARTICULARS OF CONTRIBUTORS:

1. MBBS Student, Kasturba Medical College, Manipal University, Mangaluru, Karnataka, India.
2. Professor, Department of Paediatrics, Kasturba Medical College, Manipal University, Mangaluru, Karnataka, India.
3. Professor, Department of Community Medicine, Kasturba Medical College, Manipal University, Mangaluru, Karnataka, India.
4. Professor, Department of Paediatrics, Kasturba Medical College, Manipal University, Mangaluru, Karnataka, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Nutan Kamath,
Professor, Department of Paediatrics, Kasturba Medical College, Light House Hill Road,
Hampankatta, Mangaluru-575001, Karnataka, India.
E-mail: nutan.kamath12@gmail.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Jun 14, 2017**
Date of Peer Review: **Aug 10, 2017**
Date of Acceptance: **Oct 07, 2017**
Date of Publishing: **Nov 01, 2017**