

## Assessment of knowledge and utilization of Below Poverty Line (BPL) Schemes among BPL families

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### Abstract:

**Background:** Below Poverty Line is an economic benchmark and poverty threshold used by the Government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid<sup>1</sup>. According to the poverty report by planning commission of Government of India headed by Shri S. D. Tendulkar constituted to estimate poverty, reported that nearly 38% of India's population (380 million) is poor<sup>2</sup>. The BPL cards are distributed after identifying the households based on population based surveys<sup>1</sup>. A recent study conducted by the National Council of Applied Economic Research (NCAER) in six states found that 40% of the BPL cards have been issued to people who are above the poverty line (APL). The state-level analysis suggests that the extent of misuse of BPL card is highest in Andhra Pradesh followed by Karnataka and Kerala<sup>3</sup>.

**Objective :** To assess the knowledge of BPL families regarding the BPL schemes by knowledge questionnaire, assess the utilization of BPL schemes by BPL families by utilization questionnaire and to find the association between knowledge and selected variables like education, type of family, type of card they holds.

**Design and methods:** Research approach was quantitative approach and design was descriptive survey approach. Data was collected by house to house survey.

**Setting:** Adopted villages of Manipal College of Nursing, Manipal

**Participants:** 200 BPL families selected by purposive sampling method.

**Results:** Majority (85.5%) of subjects had poor knowledge and (14.5%) average knowledge regarding the BPL schemes. The findings of utilization reveal that Basavavasathi scheme (64%), and BPL ration scheme (58%) SuvarnaGramodayaYojana(4%)Swarnajayanthi Gram SarojgarYojana(19.5%), Mahatma Gandhi National Rural Employment Guarantee Scheme (14%), Nirmal Bharat Abhyian(15.5%) JananiSurakshaYojana(77.8%)Bhaghyalakshmi scheme (54.2%)and old age pension (55.4%) respectively. Knowledge had a significant association between education ( $\chi^2 = 11.866$ ,  $p < 0.05$ ) and type of family ( $\chi^2 = 4.118$ ,  $p < 0.05$ ).

**Key words:** Knowledge, Utilization

### I. Introduction

Below Poverty Line is an economic benchmark and poverty threshold used by the Government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid<sup>1</sup>.

The BPL cards are distributed after identifying the households based on population based surveys. So far, three BPL surveys – 1992, 1997 and 2002 – have been conducted throughout the country using three different methodologies. In Karnataka the BPL family is selected on the basis of an annual income of not more than 11,800/-, those who do not have an own two wheeler, a phone connection, and a loan more than 1 lakh. The major BPL schemes running in Karnataka are JananiSurakshaYojana, Vajpayee Arogyasri, BhaghyalakshmiYojana, BasavaVasathiYojana, Old Age Pension Scheme, BPL Ration Scheme, Nirmal Bharat Abhiyan, Mahatma Gandhi National Rural Employment Guarantee Scheme, SuvarnaGramodhyaYojana, Swarnajayanthi Gram SarojgarYojana, and RasthriyaSwasthiyaBimaYojana<sup>1</sup>.

A recent study conducted by the National Council of Applied Economic Research (NCAER) in six states found that 40% of the BPL cards have been issued to people who are above the poverty line (APL). The state-level analysis suggests that the extent of misuse of BPL card is highest in Andhra Pradesh followed by Karnataka and Kerala<sup>2</sup>. Over 15 years of growth in India, 46% of the children in the country are still undernourished. (NFHS, 2005/06), about 50% of the adult females are illiterate, 67% of the population does not have access to improved sanitation, and 44% of the population has no access to electricity<sup>3</sup>. By reviewing all these literature the researcher intended to assess the knowledge and utilization of all BPL schemes in adopted villages of Manipal College of Nursing, Manipal.

**Objectives:**

1. To assess the knowledge of BPL families regarding the BPL schemes by knowledge questionnaire.
2. To assess the utilization of BPL schemes by BPL families by utilization questionnaire.
3. To find the association between knowledge and selected variables like education, type of family, type of card they holds.

**Hypothesis:**

H<sub>1</sub>: There will be a significant association between the knowledge and selected variables such as education, type of family and type of card they holds

**II. Materials and methods**

A descriptive survey design was used to assess the knowledge and utilization of BPL schemes by BPL families residing in adopted villages of Manipal College of Nursing, Manipal. All the BPL families in the adopted villages include the study population and 200 BPL families. The estimated sample size was 114 but the researcher was decided to select 200 samples. Administrative permission was obtained from the Dean, Manipal College of Nursing, Manipal, Institutional Ethical clearance was obtained from The Institutional Ethics Committee, Kasturba hospital, Manipal and Informed consents from the participants.

Data collection tools were developed after extensive review of literature and expert Opinion for the development of the tools. The instruments used were demographic proforma, questionnaire on knowledge BPL schemes and utilization of BPL schemes. The tools were given to seven experts for their suggestions. All the tools were translated into Kannada and retranslated into English.

Tool 1: Demographic Proforma: Structured demographic proforma was developed by the researcher. The tool consisted of 10 items seeking background information like age, gender, religion, education, occupation, socio economic status, type of family, BPL card number, colour of BPL card and card number. The items in this tool do not have scoring as it reflects factual information. The tool was validated by 7 experts. Translated into kannada and pretested among 5 BPL families. Tool 2: Knowledge Questionnaire on BPL schemes: A structured multiple choice questionnaire was developed with the intention of assessing the knowledge of BPL schemes among BPL families. It consisted of 40 multiple choice items in all BPL schemes available in Karnataka like Janani Suraksha Yojana, Vajpayee Arogyasri Yojana, Bhagyalakshmi Yojana, Basava Vastahi Yojana, Old Age Pension Scheme, BPL Ration Scheme, Nirmal Bharat Abhiyan, Mahatma Gandhi National Rural Employment Guarantee Scheme, Suvarna Gramodaya Yojana, Swarnajayanthi Gram Swarozgar Yojana, Rasthriya Swasthya Bima Yojana. Each right answer carried a score of 1 and each wrong answer was scored zero. The entire item had four alternative responses. The maximum total score was 40 and the minimum score was 0. To analyse and interpret the knowledge level, the total score was arbitrarily classified as follows good knowledge has a score of (28-40), average knowledge (14-27) score and poor knowledge (13-0) score. Pretesting was done among 5 BPL families and reliability was established by split half method ( $r=0.92$ ) among 20 BPL families. Tool 3: Utilization Questionnaire on BPL Schemes: Structured questionnaire on utilization of BPL schemes was developed to gather information regarding utilization of the available services. This tool comprised of 15 items covering all the schemes available in Karnataka. Each right answer scored 1 and wrong answer scored 0. The maximum score was 15 and minimum was 0. The tool was pretested by administering it to five participants residing in Alevoor Village. The reliability of the structured utilization questionnaire was determined by using Kuder Richardson formula ( $r=0.86$ ).

Data were collected from 14<sup>th</sup> January to 16<sup>th</sup> February 2013 in the adopted villages of Manipal College of Nursing, Manipal. The samples were selected by purposive sampling technique by house to house survey and questionnaire was administered.

The data were analysed using both Descriptive and inferential statistics using Statistical Package for Social Science Version 16 (SPSS 16). Descriptive statistics: Frequency and percentage distribution were used to describe the sample characteristics. Inferential statistics: Chi Square was used to test the association between knowledge and selected variables like education, type of family and type of card they holds.

**III. Results**

**Sample characteristics**

The sample for analysis consisted of 200 BPL families. Frequency and percentage were computed for describing the sample characteristics.

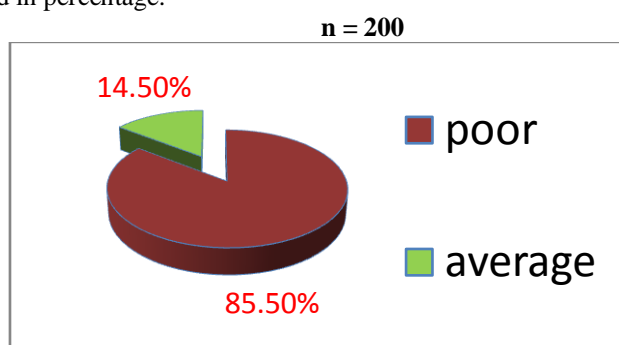
**Table 1: Frequency and percentage distribution of sample characteristics n=200**

Variables	f	%
<b>Age in yrs</b>		
20-29	34	17.0
30-39	56	28.0
40-49	51	25.5
50-59	44	22.0
above 60	15	7.5
<b>Gender</b>		
Male	106	53.0
Female	94	47.0
<b>Religion</b>		
Hindu	172	86.0
Christian	8	4.0
Muslim	20	10.0
<b>Education</b>		
Illiterate	12	6.0
Primary	57	28.5
Highschool	49	24.5
PUC	72	36.0
Diploma	10	5.0
Graduate	0	0
<b>Income (annual in Rs)</b>		
<11800	197	98.5
>11800	3	1.5
<b>Marital status</b>		
Married	200	100.0
Unmarried	0	0
<b>Type of family</b>		
Nuclear	172	86.0
Joint	28	14.0
<b>Colour of BPL card</b>		
Green	177	88.5
Pink	23	11.5

Data presented in Table 1 shows that majority (56%) of samples belongs to the age group of 30-39 years and are males (53%) and belongs to Hindu religion (86%). Most (36%) of the samples had an education upto PUC and were coolie workers(49%). The samples were married; 86% were from nuclear family and majority( 98.5%)had an annual income of less than Rs.11800. Only 11.5% had anthyodhya card (pink colour) which indicates that these anthyodhya card holders are from very poor family.

**Description of knowledge scores of BPL families**

The knowledge scores of BPL families on BPL schemes were classified as poor, average and good knowledge and is presented in percentage.



**Fig 1: Pie diagram showing the Knowledge scores on BPL Schemes**

The data presented in Figure 1 shows that majority (85.5%) samples had poor knowledge, 14.5% had average knowledge and no one had good knowledge on BPL schemes.

**Table 2: Utilization of BPL schemes.**

n=200		
Schemes	Utilized (%)	Not utilized (%)
Vajpayee Arogyasri	33	67
Basavavasathi scheme	64	36
BPL ration scheme	58	42
Nirmal Bharat Abhyian	15.5	84.5
Mahatma Gandhi National Rural Employment Gaurantee Scheme	14	86
SuvarnaGramodayaYojana	4	96
Swarnajayanthi Gram SarojgarYojana	19.5	80.5
RashtriyaSwasthyaBimaYojana	28	72

Data presented in Table 2 shows that among 200 samples Basava Vasathi scheme (64%) and BPL ration scheme (58%) were the mostly utilized schemes. Utilization of other schemes were as follows: Suvarna Gramodaya Yojana (4%), Swarnajayanthi Gram Sarojgar Yojana (19.5%), Mahatma Gandhi National Rural Employment Guarantee Scheme (14%) and Nirmal Bharat Abhyian (15.5%).

#### Utilization of Janani Suraksha Yojana

Among 200 families 54 families were eligible for Janani Suraksha Yojana. Data related to utilization were collected using utilization questionnaire on BPL schemes. Frequency and percentage was used to analyse the data.

**Table 3: Utilization of Janani Suraksha Yojana**

n=54		
Utilization scores	f	%
Not utilized	12	22.2
Utilized	42	77.8

Data presented in Table 3 shows that majority (77.8%) of the families were utilized Janani Suraksha Yojana.

#### Utilization of Bhagyalakshmi Yojana

Among 200 families 48 families were eligible for Bhagyalakshmi scheme. Data related to utilization were collected using utilization questionnaire on BPL schemes. Frequency and percentage was used to analyse the data.

**Table 4: Utilization of Bhagyalakshmi Yojana**

n=48		
Utilization scores	f	%
Not utilized	22	45.6
Utilized	26	54.2

Data presented in Table 4 showed that 54.2% of families are utilizing Bhagyalakshmi scheme

#### Utilization of old age pension

Among 200 families 112 families were with people above 65 years of age eligible for old age pension. Data related to utilization were collected using utilization questionnaire on BPL schemes. Frequency and percentage was used to analyse the data.

**Table 5: Utilization of old age pension**

n=112		
Utilization scores	f	%
Not utilized	50	44.6
Utilized	62	55.4

Data presents in Table 5 shows that only 55.4% of families were availing the old age pension scheme.

#### Association between knowledge and selected variable

$H_0$  – there will be no significant association between the knowledge and selected variables like education, type of family and type of card they hold at 0.05 level of significance.

**Table 6: Association between knowledge and selected variables**

Sample characteristics	Knowledge score category		X <sup>2</sup>	df	P value
	Poor	Average			
	<b>n=200</b>				
<b>Education</b>					
Illiterate	12	0	11.866	4	0.018*
Primary (1-7)	48	9			
High school	45	4			
PUC	56	16			
Diploma	10	0			
<b>Type of family</b>					
Nuclear	144	28	4.118	1	0.042*
Joint	27	1			
<b>Type of card</b>					
Green	152	25	0.168	1	0.682
Pink	19	4			

\*Level of significance at p<0.05

Data presented in Table 6 shows that the chi-square value computed between knowledge and selected variables like education, type of family and type of card they holds. It shows that there is a significant association between education ( $\chi^2 = 11.866$ ,  $p < 0.05$ ) and type of family ( $\chi^2 = 4.118$ ,  $p < 0.05$ ) and there is no association between the knowledge and type of card they holds ( $\chi^2 = 0.168$ ,  $p > 0.05$ ). Hence the null hypothesis was accepted with regard to the type of card they holds.

#### IV. Discussion

##### Knowledge and Utilization of BPL schemes

In the present study majority (85.5%) samples had poor knowledge, 14.5% had average knowledge and no one had good knowledge on BPL schemes. It was supported by a cross sectional study conducted by Rohit A, Patil PS, Dixit UR, Chowti J V in 2012 among rural BPL Families in Darward district in Karnataka. The study result showed that awareness regarding obstetric, medical services like JSY were high (70%) and other services like Vajpayee Arogyasri was low (4%).<sup>4</sup>

In the present study the utilization of JSY was 77.8%, Bhagyalakshmi Yojana 55.4%, Vajpayee Arogyasri is 33% and Ration scheme was 58%. It was supported by a cross sectional study conducted by Rohit A, Patil PS, Dixit UR, Chowti J V in 2012 regarding the utilization of Government Health Services and Schemes among rural BPL families in Darward district in Karnataka. The study result showed that Utilization of non-medical benefits like Bhagyalakshmi Yojana 90%, ration scheme 93% are high whereas Utilization of government health services like JSY, Vajpayee Arogyasri, are low (27.85%), Schemes with monetary were benefits utilized more, Awareness regarding obstetric, medical services -high like JSY is 70% and other services like Vajpayee Arogyasri (4%) is low<sup>4</sup>.

In the present study the coverage of Nirmal Bharat Abhiyan in adopted villages was only 15.5%. This contradicts the findings of another study conducted in Andhra Pradesh (AP) where a coverage status of 60% is reported. It points out that the analysis of field data reveals that AP has achieved a coverage status of 60% but the usage of toilet by the household is alarmingly low. The major funds include insufficient fund allocation as compared to water, lack of effective strategies for demand creation, no or low expenditure on IEC components etc. The study findings concluded that the government should concentrate on public private partnership which can accelerate solutions and enhance service provisions<sup>5</sup>.

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