"SOCIO-ECONOMIC DETERMINANTS IN UTILIZATION OF BALSANJEEVINI SCHEME IN CHILDREN OF 0 TO 6 YEARS OF AGE IN BELOW POVERTY LINE FAMILIES OF BELAGAVI TALUKA."

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Doctor of Philosophy

In the Faculty of

INTER-DISCIPLINARY RESEARCH

By

Mr.PRAMOD N SULIKERI

Registration No: KLEU/Ph.D./DOUN13023/2013-14

Under the Guidance of

Prof. Dr. A S Godhi

PROF. DEPARTMENT OF SURGERY, J N MEDICAL COLLEGE &

FORMER PRINCIPAL, J N MEDICAL COLLEGE, BELAGAVI.

2019

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Research Scholar
Mr.Pramod N Sulikeri
Registration No: KLEU/
Ph.D./DOUN13023/2013-14
KAHER, Belagavi

Place : Belagavi
Date :

Guide
Dr. Ashok S. Godhi (M.S, FRCS)
Professor,
Department of Surgery
J.N Medical College, Belagavi

Place : Belagavi
Date :

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Ph.D./DOUN13023/2013-14

Part Time Inter-Disciplinary Research

KAHER, Belagavi

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Signature

Dr. N.S Mahantshetti. MD

Principal

KLEU's J.N.Medical College,

Belagavi – 590010, Karnataka

Place : Belagavi

Date :

Signature

Dr. Jyoti Nagmoti

Research Dean

KAHER ,Belagavi.

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Place : Belagavi

Date :

Signature

Dr. Ashok S. Godhi

Professor

Department of Surgery

J.N. Medical College Belagavi

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Date: ***Mr.Pramod N Sulikeri***

Place: Belagavi.

ABBREVATIONS:

Sl.No	Abbreviation	Expanded Forms
1	AW	Anganwadi
2	AWCs	Anganwadi Centres
3	AWW	Anganwadi Worker
4	AWS	Anganwadi Supervisor
5	AARR	Annual Average Reduction Rate
6	BSS	Balsanjeevini Scheme
7	BPL	Below Poverty Line
8	CY	Cheeranjivi Yojana
9	CAM	Complimentary Alternative Medicine.
10	CDPO	Child Development Project Officer
11	CG	Compare Group
12	CHC	Community Health Centre
13	HNP	Health Nutrition & Population
14	ICDS	Integrated Child Development Schemes
15	ICMR	Indian Council of Medical Research
16	JSY	Janani Suraksha Yojana
17	LMICs	Low & Medium Income Countries.
18	LPG	Liquefied Petroleum Gas
19	MDGs	Millennium Development Goals

20	NFHS	National Family & Health Survey
21	NSI	Nutritional Security Innovation
22	NRHM	National Rural Health Mission
23	NWH	Net Work Hospital
24	OHTP	Oral Hygiene Training Program
25	OOPEs	Out of Pocket Expenses
26	PDS	Public Distribution System
27	PEM	Protein Energy Malnourishment
28	PMD	Patent Medicine Dealers
29	PHC	Primary Health Centre
30	PG	Project Group
31	RSBY	Rashtriya Swastha Bima Yojana
32	SC	Schedule Caste
33	SSA	Sub-Saharan Africa
34	SES	Socio Economic Status
35	ST	Schedule Tribe
36	THs	Traditional Healers
37	UHC	Urban Health Centre
38	W & CWD	Women & Child Welfare Department
39	WHO	World Health Organization

ABSTRACT

Background

The intricate relationship between poverty and health is a matter of concern among the researchers, academicians and health administrators. The studies have established that, poverty is root of ill health and ill health produces poverty. Utilization of health care among underprivileged is very low. Poor social location, overcrowding, poor environmental acquaintance, deficiency of health services and behavioural features are all strongly related with poverty.

High-quality primary childhood education, continuous access to health care, income supports for families most in need and support from parents to enable work and family life can contribute to reduce the effects of poverty on children**.**

Balsanjeevini Scheme is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and mortality among BPL children of 0 to 6 years of age. The scheme offered a treatment cover of Rs 50,000 to neonatal (up to one month after birth) and Rs 35,000 from 1 month to 72 months children. Parents accompanying the child also receive Rs 100/- as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment covering 18 broad spectrum of diseases. The scheme was launched in the year 2011 by Government of Karnataka; Women & Child development Department is the implementing agency of the BSS. Anganwadi Workers/ Supervisors, CDPOs play an important role in implementing the scheme.

The objective of present study was to evaluate utilization and barriers in utilization of BSS among BPL children of Belagavi Taluka from 0 to 6 years and socioeconomic factors associated with their health. The socioeconomic factors which are closely knit with health of children are parental education, income, type of house, food habits, quality of drinking water, belief, customs and availability of toilet in the home etc.

Objective:

1. To know Socio-Economic determinants in utilization of Balsanjeevini scheme in children of 0 to 6 years of age in Below Poverty Line families of Belagavi Taluka.

Methodology:

1. Health Check-up camp for needy BPL Children in the age group of 0 to 6 years was conducted at nearest PHC/UHC/SCs/AWCs.
2. Children who need further investigations/management referred to KLE Dr. Prabhakar Kore Charitable Hospital, Belagavi for further management.
3. Data was obtained from who sought care and who did not sought care under the scheme.

Results:

In this study, total 359 children were study subjects among them 179 (49.8%) were male and 180 (51.2%) were female children in the age group of 0 to 6 years. Majority of the participants belong to Hindu religion 326 (90.8%) and 33 (9.2%) were belonging to Muslims & other minority religions. About 315 (87.7%) of mothers were within the age group of 25 to 29 years with mean age of 26 years. About 287

(79.9%) mothers were educated up to high school level. 107 (29.8%) were vegetarians and 252 (70.1%) were non vegetarians. 234 (65.2%) children belong to joint families and 125 (34.8%) children hail from nuclear families. Regarding the average household income, the income level of 260 (72.4%) families is between Rs.3000 – 6000 per month.

Conclusions:

1. The health seeking behaviours of mothers for 0 to 6 years children of the BPL families was found to be very poor. 233 (65%) did not sought care (not utilized) the benefit of the BSS & 126 (35%) sought care (utilized) the benefit of the scheme.

2. District Hospital is the preferred destination than Private hospital amongst BSS beneficiaries.

3. Lack of awareness & gaps in Knowledge about BSS is 181 (77%) reported in the study.

4. The poor socio-economic background of the population is evident from the study, 75% beneficiary's income is < 7,000/- per month. 65% live in Kachha house, 51% of them cook their food on firewood, 48% of fathers' are victims of one or the other addictions. Half of the study population do not own any land shows that poor socio-economic background of the study participants.

Keywords: Balsanjeevini, Below Poverty Line, Socio-Economic determinants, Anganwadi, Poverty, Belagavi.

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1. INTRODUCTION

1.1 Background

India is a welfare state and the health is the state subject, each state governmenthaveinitiated health coverage, particularly to BPL families to prevent catastrophic financial burden to the low socio-economic segments of the society. Following are the few important schemes launched by various state Governments;

1. **RashtiryaBalSwasthyKaryakram(RBSK):**RashtriyaBalSwasthyaKaryakram (RBSK) is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's such as, Defects at birth, Deficiencies, Diseases, Development delays including disability.

All pre-school children below 6 years of age are screened under RBSK scheme for deficiencies, diseases, developmental delays including disability at the Anganwadicentre at least twice a year. Those children who need further assessment are referred to DEIC (District Early Intervention Center) for further management. RBSK cover children of 0 -6 years of age in rural areas and urban slums in addition to children enrolled in classes I to XII in Government and Government aided Schools.

According to March of Dimes (2006), out of every 100 babies born in this country annually, 6 to 7 have a birth defect. This would translate to around 1.7 million birth defects annually in the country and accounts for 9.6% of all the newborn deaths. The delays in children, if not intervened timely may lead to permanent disabilities

including cognitive, hearing or vision impairment. The scheme facilitates early diagnosis and proper interventions in the formative age of child.

2. **Arogya Karnataka- AyushmanBharathScheme: T**he objective of Ayushman Bharat Aarogya Karnataka Scheme is to expand 'Universal Health Coverage' to all residents in Karnataka . Under this scheme, specified primary, secondary and tertiary health care benefits are provided by the government. The existing ongoing health schemes like RashtriyaBalaSwasthayaKaryakram (RBSK), Vajpayee Arogyashree, Rajiv ArogyaBhagya Scheme, Yeshaswini Scheme, RashtriyaSwasthayaBimaYojana (RSBY) including RSBY for senior citizens, Indira SurakshaYojana, Cochlear Implant Scheme, MukhyamantriSantwana Harish Scheme etc. now fall under this Scheme. The beneficiaries under the scheme are those having a PDS card.It covers wide spectrum of diseases for BPL and APL families. It is a collaborative program with Central Government. Over 1,000 surgical procedures are covered which includes treatment to Neonates. Annual coverage of Rs. 5 lakh per family is offered under the scheme.
3. **Employees State Insurance Scheme (ESI):** also offers treatment to the ESI beneficiaries and theirfamily members who are working at various industries and institutions. Medical care is provided to an Insured person and his family members from the day he enters insurable employment. There is no ceiling on expenditure on the treatment of an Insured Person or his family member. Medical care is also provided to retired and permanently disabled insured persons and their spouses on payment of an annual premium of Rs.120/- .

4. **Mahatma JyotibaPhule Jan ArogyaYojana:**The scheme was renamed as Mahatma Phule Jan ArogyaYojana and launched by Maharastra Government in 2017 for BPL families. Mahatma JyotibaPhule Jan ArogyaYojana, is a Universal health care scheme run by the Government of Maharashtra for the poor people of the state of Maharashtra who holds one of the 4 cards issued by the government; Antyodaya card, Annapurna card, yellow ration card or orange ration card.
5. **Rajiv Arogyasri Community Health Insurance Scheme:** The Scheme is initiated by Andhra Pradesh Government to offer quality treatment to the BPL families it covers upto to 1,50,000/-. Rajiv Aarogyasri is a unique communityhealth insurance scheme that is being implemented in the state of Andhra Pradesh. It provides financial protection for individuals who are below the poverty line in the state. The objective of the scheme is to provide good quality medical treatments for specific diseases that require therapy, hospitalization, or surgery from the network hospitals of the healthcare service providers.
6. **MukhyamantriAmrutamYojana:** The Gujarat Government launched this scheme in 2012 to benefit poorer segments of the state. Beneficiaries of the schemes include lower middle class and BPL families. The scheme offers cover of Rs. 3 lakhs per year on a family floater basis. Treatment can be availed in recognized NWHs.
7. **Balsanjeevini Scheme:**It is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and mortality among BPL children of 0 to 6 years of age. The scheme offered

a treatment cover of Rs 50,000 to neonatal (upto one month after birth) andRs35,000 from 1 month to 60 months children. Parents accompanying the child also receives Rs 100 as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment covering 18 broad spectrum of diseases. The scheme was launched in the year 2011 by Government of Karnataka; Women & Child development Department is the implementing agency of the BSS.

UNICEF in its report stressed the importance of the first 1,000 days of life - the period between conceptionto second birthday of a child is a important phase of a child. The foundations are laid for optimum health, growth, and neurodevelopment across the lifespan are established. But, in developing countries, poverty, malnutrition, weaken this foundation, leading to earlier mortality and significant morbidities such as poor health and substantial loss of neurodevelopment potential. In the modern era, under nutrition remains the major challenge worldwide. Both under nutrition and over nutrition are termed as 'malnutrition'. The malnutrition is shown to potentially reduce brain development.

At least 200 million children living in developing countries fail to meet their developmental potential. Along with under nutrition, influences of infectious disease, environmental hazards, and household violence, contribute to this loss of potential. All other parameters are difficult to change but, nutrition can be well taken care by parents. Timely correction of nutritional deficits alone has been estimated to have the power to increase the world’s intelligence quotient by 10 points.

The science suggests that it is far better policy to build the brain right in the first place through nutritional deficit prevention programs than to depend on

replacement therapy once a deficit has occurred. Feeding the fetal, newborn, and young child brain is one of the best ways to achieve the goal.

Encouraging and assuring positive health is indispensable to human well-being for continuous economic and social advancement. The path breaking declaration by World Health Organization (WHO) at Alma-Ata, Kazakhstan in 1978 envisaged health for all to ensure better quality of life which can lead to universal harmony and safety. The health is the highest priority for the health policy makers, but regrettably, the priorities of the government are economic growth, unemployment, low wages and high cost of living[1, 2].

The World Bank is the largest funding agency for improving Health standards and Nutrition of the Population (HNP) of the developing countries. In spite of large funding and expert inputs from the World Bank, various health initiatives have not yielded expected result in India. The World Bank has invested over 2.6 billion US $ over past three decades. The Bank has also identified that slow growth is due to over population of the country, which is the major challenging factor in improving health of Indian population. The core reason for failing to achieve noticeable progress is poverty, low levels of education, child marriage, poor sanitation and lack of pure drinking water resources. Public health has not produced noticeable changes as health is not a priority issue in the low income population[3].World Health Organisation in the year 2012 set a fresh global goal of bringing down the number of stunted children under the age of 5 years by 40% by the year 2025[4]. In spite of more than twenty years of noteworthy economic progress, India has dubious distinction of having the world's highest child stunting rates. There is considerable improvement in health conditions of children under 5 years compared to the reports of NFHS-3. The

prevalenceof underweight (weight-for-age) was 37.6% in NFHS-3 and it has come down to 35.2% as per the findings of NFHS-4. Further, under 5 mortality was 54 per 1000 births as per NFHS-3 and it is reported to be 32 as per NFHS-4 report. There were 70.3% of children were anemic in the age group of 6 months to 59 months as per the reports of NFHS-3, however the findings of NFHS-4, 60.9% children are anemic. The NFHS 4 results demonstrate that the improvements over NFHS 3 are significant for many key indicators, but there are considerable rural, urban and inter State disparities in key indicators. There is also a significant influence on non-health determinants – such as education, income level, access to water, sanitation and nutrition, clean fuel, etc, that impact health status[5].

Child stunting is related to serious and mainly irrevocable consequences on survival, wellbeing, growth, and educational performance; it may also have implications on productivity when they grow up in later part of life[4, 5].

WHO highlighted that inequality in Low and Medium Income Countries (LMICs) should be an agenda in improving the health standards of its citizen and also for reducing the health gap between the affluent and the deprived in the LMICs. WHO emphasized that "In any country, economic inequality needs to be addressed to make progress towards health equity"[6].

United Nation's Task Team's work on the post-2015 growth agenda made this point very clear: "High levels of inequalities can jeopardize the well-being of large segments of the population and have subsequent effects on health, nutrition and child development"[7].

The intricate relationship between poverty and health is a matter of great concern among the researchers, academicians and health administrators. The

Economists, Sociologists, Public health professionals, Development practitioners, Policy makers, National and Local governments are all concerned with the association between poverty and ill health. Majority of the studies have established that a strong link exists between poverty and health; poverty is a prominent root of ill health and ill health produces poverty [8-10]. Scarcity is associated with increase in infant and child death rate, rise in maternal mortality, poor lifespan, under nutrition, higher prevalence of chronic diseases and excess burden of ailments on families in particular and on the nation at large[11-13]. The relationship between earnings and health is strong at lower incomes[14]. Utilization of health care among underprivileged is very low. Poor social location, overcrowding, poor environmental acquaintance, violence, crime in the community, deficiency of health services and behavioral features are all strongly related with poverty[15-17].

Children born in poverty ridden families can face lifelong consequences on innumerable dimensions of children's upbringing; not being fed adequately and exposed to harmful environment in the early years may have an adverse effect on child performance in later part of life. It may affect their performance in schools and future working abilities. Research studies have also revealed that initial and constant intervention, supporting through finances and investments in community can curtail these trends. High-quality primary childhood education, continuous access to health care, income support for families most in need and support from parents to enable work and family life can contribute to reduce the effects of poverty on children[18,19].

The connection between poor health and poverty was known in Europe in the 19th century[20]. WHO Commission on Social Determinants of Health described that under privileged are exposed to frequent illness and untimely mortality. It is noticed

across the countries that, at all stages of income, health and wellbeing follow a socioeconomic gradient; the vulnerable section of the society has poor health[21]. The United Nations Millennium Development Goals (MDGs) have concentrated the world's attention on reducing malnutrition and mortality in children less than five years of age[22].

Children born and grown up in poor economic status face a number of emotional, physical and environmental threats that curtails their development. Poverty enhances exposure to low levels of sanitation and hygiene, severe and long-lasting infections, under nourishment, food scarcity, and exploitation. Carelessness and tension are common amongst families of low income group[23, 24]. Across the globe, millions of children experience delay in physical and mental progress because of their exposures to poverty and related issues, such as nutrition, health care, education, and lack of encouraging environment.[23]

The gross socioeconomic inequalities in children of developing countries are a worldwide concern and are challenge to the academicians and health policy makers. The socioeconomic studies with children health are very few[25.] The objective of present study was to evaluate health of Below Poverty Line (BPL) children of BelagaviTaluka from 0 to 6 years and socioeconomic factors associated with their health. The socioeconomic factors which are closely knit with health of children are parental education, income, type of house, food habits, quality of drinking water, belief, customs and availability of toilet in the home etc. The study was conducted by taking into consideration wide range of socioeconomic parameters. Much of the research conducted is presented from developed countries and not from low

socioeconomic countries. This study has identified the socioeconomic factors are the root cause of the inequalities in the health.

The first six years are the most important phase in life of children; in this phase the strong basis are formed for mental, social and emotional development of the children. Further, children undergo physical growth, motor development and imbibe the process of continuous lifelong learning [26].

The Integrated Child Development Services (ICDS) program is one of the important programs of the Government of India. ICDS comprehensively addresses the nutrition, health and pre-school needs of children from 0 to 6 years of age.

BSS is the ambitious program of Women and Child Welfare Department (W & CWD) of Government of Karnataka. The scheme funds for free treatment/surgery in the recognized Hospitals which are known as Net Work Hospital (NWH). The recipients of the BSS are children of BPL families between the age group of 0-6 years. The sole purpose of the scheme is to offer best of the medical services to reduce mortality and morbidity of the children.

As per the estimations of the World Bank, India is one of the uppermost ranking countries in the world for the number of children experiencing malnourishment. The incidence of low-weight children in India is maximum in the world; it is nearly two times that of Sub-Saharan Africa (SSA) with its negative effect on productivity and economic growth because of increased morbidity and mortality.[27]

The scarcity of food, illiteracy, ignorance and lack of knowledge are the risk factors for under-nutrition among children.[28] The children of high socio-economic

families are comparatively better nourished. Children of minority households and of scheduled castes or tribes also face higher degrees of malnourishment. This phenomenon of malnutrition is more prevalent in the rural areas of India. It is an established fact that, children's appropriate weight and height are very much relate to the socio-economic status of the population.[29] Children of families with poor socio-economic status are deprived of proper growth. While children belonging to similar communities have shown to share same levels of nutrition. Child nourishment differs from family to family and it is largely dependent on the parental characteristics, family traditions, customs and locality in which they reside. It is a proven fact that, improvements in socio-economic status will also significantly improve child nutrition[30]. World Health Organization (WHO) has made it explicitly clear that, approximately fifty percent of infant and child mortality is associated with malnutrition [31].

The ICDS is functioning for over 4 decades in the country, but it has not addressed its objectives, due to which children health management needs further improvement. A methodical step by step exercise is to be planned to enhance the health and growth of both children and mothers in our country. The public health in India need to significantly improve; if it makes remarkable change obviously the child and mother health improves on its own [32.]

The major cause of concern for malnutrition and poor health of children is the pitiable environment such as poor quality drinking water, sanitation, housing, overcrowding, poor concern of family/community towards children and hygiene. Improvement in Socio-Economic status will create healthy environment and over 50% of children health problems can be resolved[33.]

1.2 JUSTIFICATION & OBJECTIVE OF THE STUDY

Balsanjeevini Scheme is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and mortality among BPL children of 0 to 6 years of age. The scheme offered a treatment cover of Rs 50,000 to neonatal (up to one month after birth) andRs 35,000 from 1 month to 72 months children. Parents accompanying the child also receives Rs 100 as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment covering 18 broad spectrum of diseases. The scheme was launched in the year 2011 by Government of Karnataka, Women & Child development Department is the implementing agency of the BSS.

The needy sick children are referred by Medical Officer of PHC/CHC/Taluka Hospital/District Hospital to recognized NWH for secondary and tertiary care. The referral letter is issued by concerned CDPO. The payment are made to NWH by Department of Women & Child Welfare, Government of Karnataka. Initially only Medical College Hospitals with tertiary care facilities were identified as NWH. Later private Hospitals also joined and recognized as NWH. Memorandum of Understanding was signed between NWH and Women & Child Welfare Department for smooth and effective implementation of the scheme in NWHs.

Severe acute malnutrition is considered as a major cause of child death, or it can also increase the case fatality rate in children suffering from widespread childhood illnesses as diarrhea and pneumonia. The Government of Karnataka has taken immediate measure to address the health problems associated with children up to the age of 6 years through BSS. Net Work Hospitals (NWH) are assigned with the responsibility to screen the children at nearby PHCs, Sub-Centres (SC) or AWs in the designated blocks. Children who require further interventions are referred to Net

Work Hospitals. But unfortunately, even after repeated follow-ups by Child Development Project Officers (CDPOs), Anganwadi Supervisors (AWSs) and NWHs, parents do not bring their wards for further admission/investigations citing socio-economic issues and family compulsions, which may lead to mortality and morbidity. The medical aid not given at the right time to the child may lead to dangerous outcome. Hence, the investigator through this study has identified under laying socio-economic cause of why parents don't bring their children to Hospitals for further treatment at the right time. The study has also unearthed the reasons for apathy of parents in delaying or refusing for the treatment/surgery/investigations for the needy children. The study further suggested corrective actions for effective implementation of the BSS. The delay or neglect on the part of parents may lead to mortality and morbidity in children.

The scheme was implemented to prevent financial burden to the BPL families who could not afford the secondary and tertiary care. Further, tertiary care is not available in majority of the Government hospitals to overcome this difficulty the Government of Karnataka has identified the tertiary care hospitals for the treatment of needy children. There were instances, the parents refused for further investigations and treatment for their sick children quoting various socioeconomic reasons. That prompted the investigator and conducted Functional Group Discussion before takingup this research project, with all the stake holders such as Medical Officers, CDPOs, AWSs, AWWs, ASHA workers and Parents. In the discussions, it was noted that various socio-economic reasons were projected by parents in refusing to accept the treatment. Hence, the investigation was carried out to know the socio-economic determinants in utilization of the BSS in children of 0 to 6 years in BPL families of Belagavitaluka.

1.3 Diseases covered under BSS:

Acute Infections	Encephalitis-Meningitis
Neurological treatment	Acute Malaria
Anemia, Malnutrition	Blood related disorders
Diabetes	Renal Problems (Urology/Nephrology)
New born level 3 treatment	Liver disease
Complex Gastroenteritis	Surgery of New born
Snake/Poisonous insect bite	O P Poison
Cardiac problems	Trauma/Accident

1.4 Objective:

- To know Socio-Economic determinants in utilization of Balsanjeevini scheme in children of 0 to 6 years of age in Below Poverty Line (BPL) families of Belgaum Taluka.

1.5 Study site:

Belagavitaluk is part of Belagavi district located at Northern part of Karnataka State (India). It is one among the 10 talukas of Belagavi District. There are 124 villages and 14 towns in Belagavitaluk.

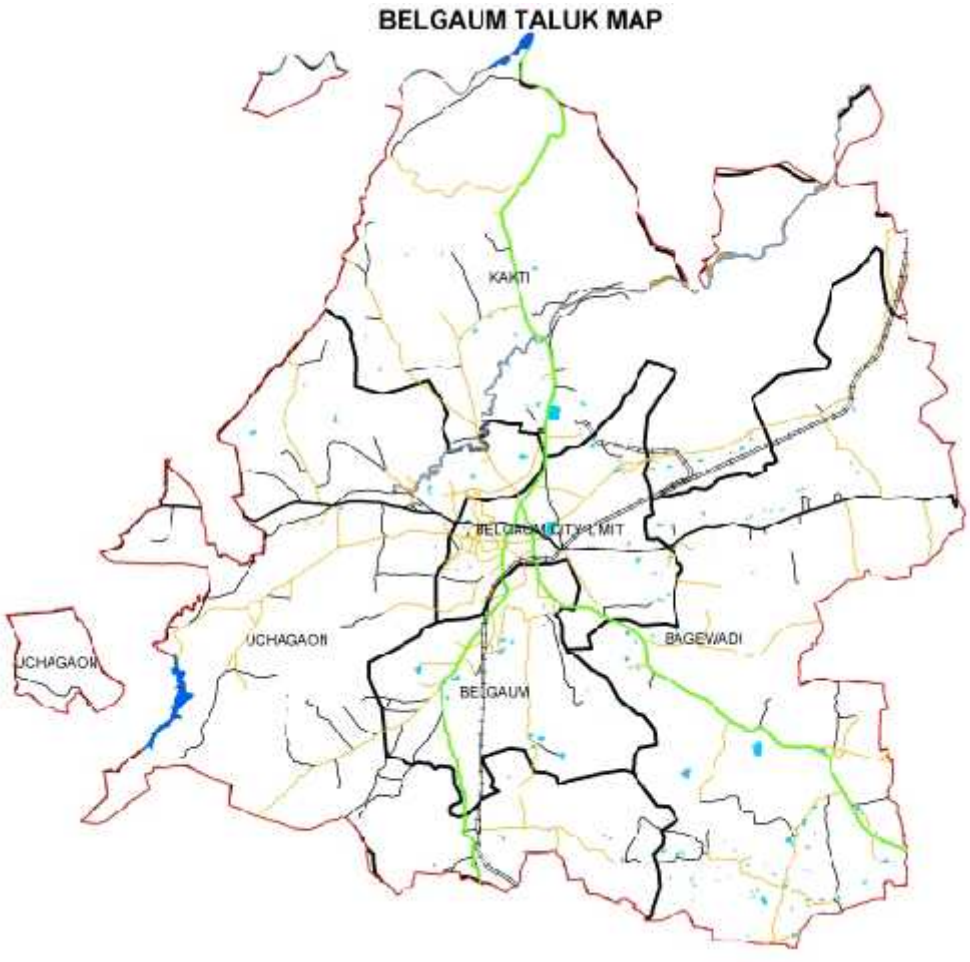
As per the2011 census, Belagavitaluk has 2,09,944 households, population of 9,57,373 of which 4,86,704 are males and 4,70,669 are females. The population of

children between the age group of 0-6 years is 1,08,494 which is 11.33% of total population.

The child sex ratio of Belagavitaluk is around 967 compared to 973 which is average child sex ratio of Karnataka State. The literacy rate of Belagavitaluk is 74.19% out of which 79.32% males are literate and 68.89% females are literate. The total area of Belagavi is 1,032 sq.km with population density of 928 per sq.km.

Out of total population, 32.75% of population lives in urban area and 67.25% lives in rural area. There are 7.58% SC and 6.69% ST of total population in Belagavitaluk. Belagavitaluk has 13 PHCs, 87 Sub Centres and one CHC.

1.6BelagaviTaluk Map



A community based Cross Sectional Study was conducted in Belagavitaluka, encompassing PHCs/SCs and UHCs of Belagavi. The Health camps were conducted at all PHCs and UHCs for ICDS children of 0 to 6 years. The Census population who were advised further treatment/investigations/surgery were study participants. The information was elicited by administering scientifically designed questionnaire. Wherever essential the trained enumerators' (Anganwadi Supervisors) assistance was utilized.

2. REVIEW OF LITERATURE

Malnutrition and SES:

The initial six years constitutes the important phase in the life of children, In this period the child begin to elevate learning ability, social adaptability, recognition of emotions, language, signs and continues to learn newer things [34]

The incidence of children with low weight is highest in India. The existence of underweight children in India is almost double that of SSA. The impact of low weight amongst children is a cause of concern as it has an impending effect on poor production, depressing economic growth which may also result in increased morbidity and mortality[35.]

The poverty, illiteracy, and ignorance are the risk factors for under-nutrition,[36] The socially progressive and economically better off are well nourished. Contrary to this whose Socio Economic Status (SES) is poor obviously children are undernourished. Children of Minorities, Scheduled Castes (SC) and Scheduled Tribes (ST) are reported to be victims of under nourishment. This occurrence of malnutrition is rampant in countryside compared to cities. SES of the family is decisive factor in identifying health of a child. Families with lower SES have higher malnourishment[37]. Children born in low SES were observed to be having poor growth compared to their age. Child nutrition is dependent on the parents' characteristic, household traditions, customs and place of residence. Improvement in SES levels will reduce malnutrition among the community[38.] As per WHO report malnutrition is the direct cause of infant and child mortality in close to 50% cases [39.]

A study was conducted on 25 children at Hospital in New Delhi. The children were admitted to Nutritional Rehabilitation Centre (NRC) they were in the age group of 6 to 60 months and all of them were suffering from Severe Acute Malnutrition (SAM). The average length of admission at NRC was 8.32+/-2.87 days. Further, follow up at the period of 15 days, 30 days and one and half month showed significant improvement in WAZ (weight for Z score) and WHZ (Height for Z score), suggesting that the NRC at Hospitals is a best place to the address the issues of SAM children.[40]

A study performed at National Institute of Nutrition, Hyderabad is a premier clinical & academic Centre in the country to comprehensively address, design and implement policies is respect of SAM children. The study conducted on 309 SAM children belonging to 2 to 60 months age group were admitted to NRC National Institute of Nutrition, Hyderabad found that average weight increase among children was reported to be 5g/kg/day. About 8% of the kids did not register weight gain, 44% of the kids had poor growth and 35% had minimal catch up growth. In the study it is reported that, only 12% of the kids had swift growth. Further, study advocates for The diet based on local energy dense foods was found to be suitable for the nutrition rehabilitation of severely malnourished children though the rate of weight gain was moderate[41.]

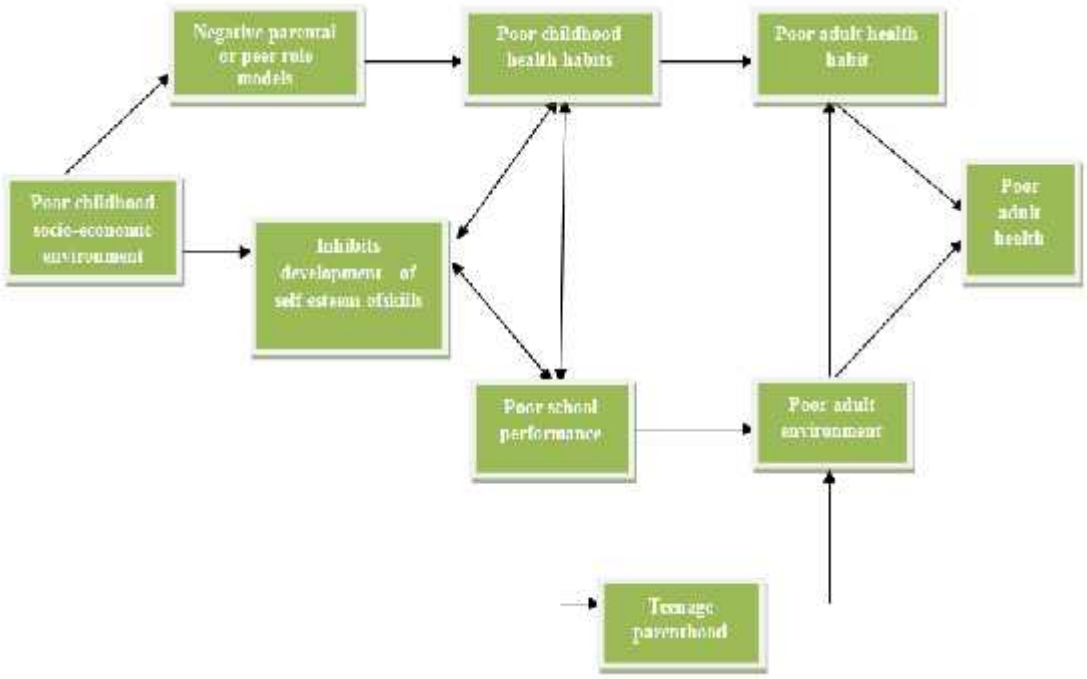
Study published in Lancet Volume 372 of Nov, 2008, found out that health of an individual to a great extent dependent on, where individuals are taken birth and in which Social environments they are brought up. The under privileged children are vulnerable to sickness and untimely death – but health deprivation is not restricted to

those who are economically weak. Wellbeing and sickness follow a social outline; the worst health is noticed in the population with lower the socio-economic condition.

Improvement in daily living conditions, investment from early childhood has some of the maximum benefit to reduce health inequality in the community. Reducing mortality and morbidity among children has been a focus and of worldwide interest. Early childhood developmental interventions will have positive impact on development of skills, increase in intelligence and better job opportunities. It also affects the risks of fatness, over nourishment, psychological problems and lifestyle diseases. The study highlights that, over 200 million kids worldwide are not achieving their full developmental potentials[42]

A study performed by Mittel Mark and published in Million Journal, Population with higher SES are well off and are privileged with better living conditions, they have easy access to services, facilities and materials goods which support for good health. The poorer section of the society lacks resources and is always deprived of basic minimum amenities which may affect their health. It is the core reason, poorer section of the society is exposed to illness than the rich. This clearly indicates that, the low income group communities have relatively poor health [43.]

Pathways between childhood and adult health Kuh. D. Et al 1997[44]



Jay Belskyl et al conducted a study on impact of socio-economic determinants on the health of pre-school children of 6 years of age. The health of the child was poor when families had meager income (r¼0.15), younger the mother (r¼0.16) and when mothers had poor educational background (r¼0.20). Higher income, maternal education, appropriate maternal age and adequate time living with a spouse and good parenting predicted better health among children.[45]

In the year 2004 to 2006 a study conducted with a sample size of 89 children. The data were computed by using Colaizzi's technique for phenomenological examination. The results of the study were, the children's experiences of dealing with various elements of hospital consisted of ten groups: pleasure, positive images, security, self-assurance, concern, sympathetic the meaning of the situation, taking part, seeking help, modification and defending oneself. The adjustment approach during admission to hospital described by the children was familiar to them and part

of their everyday lives. Presence of parents during hospitalization of child makes it very comfortable followed by Toys, Nurses can also help to keep the child to cope with hospitlization.[46.]

India faces major health problem in the form of under nutrition in children of less than 60 months of age. The study was carried out to assess trends in nutritional status, nutrient and food intake among children less than five year over two time periods. The study was conducted in tribal areas of India. Total of 14,587 children, 0 to 60 months under went anthropometric evaluation. A 24 hour nutrition survey was conducted in a sub-sample of households surveyed. The prevalence of underweight and stunting had reduced significantly over the periods (49% v/s 57%, 51% v/s 58%, respectively), whereas the incidence of wasting remained same (22% v/s 23%).

The study found out minimal reduction in food intake and nutrients and was observed to be below recommended standards. Stepwise regression indicated that the menace of malnourishment and stunting was significantly ($p<0.01$) higher in children whose mothers' were from lower income brackets and of poor education background. Children who suffered illnesses in the previous 15 days were found to had 1.3 times higher risk of underweight and wasting. The study concludes that, poor nutrition is a major health concern in tribal children and is associated with literacy of mothers, household income and morbidities. The study recommends to implement suitable nutritional guidelines and strengthen households food security through public distribution systems, food intakes, socioeconomic condition, improve the education of care takers and focus on cultivating better hygiene practices to improve the nutritional condition of tribal children. The findings of the study highlight thatunder nutrition is still an important public health problem among children under 5 years and

is associated with maternal literacy, socio-economic condition and morbidities. Initiatives are required to enhance socio-economic conditions by income augmenting activities such as; employment guarantees scheme, food for work program etc. Improved maternal education along with maternal health promotion, improved sanitation and provision of safe drinking water for prevention of diarrheal and other infections[59].

A study was conducted in tribal children of rural Karnataka in the age group of 6 to 24 months. To establish the relation between nutritional status of the children, mothers' and empowerment of women. The data was obtained from 820 mother-child pairs and statistically analyzed.

The extent of malnutrition reported in children (83.5%) and mothers (72.4%) in the study. In an order, Biological factors, health care seeking, women empowerment and socio-economic factors emerged as the major reasons for malnutrition. Women's empowerment variables (5.6%) were significantly associated with child nutrition. Maternal exposed to sexual abuse, domestic violence and ill treatment increased the risk of malnutrition in child and mothers.

To bring down the malnutrition in the tribal community the study recommends to improve the nutritional level of the mothers', encourage gender equality, women empowerment and treat women with respect [60].

Establishing better communication with patient, making him/her to realize how he/she views the disease, What could be the cause of origination of illness, what are the treatment have been taken by the patient and how best the modern medicine could be useful to them in resolving their health issues could build a strong

relationship between patients and Physicians. Even the trust deficit will reduce and outcome of the treatment modalities could be impressive.[57]

A cross sectional study was conducted in tribal belts of India on 14,587 children in the age group of 0- 60 months. The evaluation process included the study of underweight, wasting and stunting among the identified children. The survey on twenty-four hour food feeding practices was carried out on the families. The incidence underweight and stunting had noticeably reduced in a phased manner (49% v/s 57%, 51% v/s 58%, respectively), however, frequency of wasting recorded to be as it is (22% v/s 23%).

Food and nutrients feeding to children was reported to be less than recommended levels. The statistical results proved that the menace of underweight and stunting was considerably ($p<0.01$) more in children of low socio-economic families. The results further substantiated that the children of illiterate mothers had poor weight and stunting.

Tribal children are exposed to under nutrition and the factors responsible were; poor education level of mothers, low family income and morbidities. The study recommends for appropriate nutrition for children, improve public distribution systems, educate on quality food intakes, enhance in socioeconomic condition, empower of parents and focus on cleanliness may help in improving the nutritional status of tribal children [61]

The investigation was conducted on tribal children of India to find out the reasons for malnutrition. The investigator used data generated from NHFS-3. The statistical analysis of data proves that poor breastfeeding practices, low financial

status, improper antenatal care of mother and women's inability to make decision were the risk factors associated with malnutrition among tribal children. The study identified that, maternal malnutrition and overcrowding in families as the two major risk factors for child malnutrition. To control malnutrition among tribal children the known associated determine ants could be used for designing and targeting preventive programs.[62]

The effect of initiations on nutritional grade in Project Group (PG) and non-Nutritional Security Innovation (NSI) Comparison Group (CG) blocks was conducted in Chhattisgarh State. Mitanins, the female Community health workers in Chhattisgarh conducted household counsel lings and activated the community to utilize the child and maternal health services. One Mitanin for 250 to 500 populations was utilized and found to be effective. The coverage of exclusive breastfeeding, Immunization (DPT), timely initiations of complementary nourishments, and ANC services was reported to be over 70%. Over 90% of beneficiaries had access to PDS (Public Distribution System). In both the PG and the CG, $1/3^{rd}$ of children were undernourished and $1/4^{th}$ of children undernourished by 6 months of age. Over 40% of the infants recorded low birth-weight. More than 50% of women were undernourished. The estimated Annual Average Reduction Rate (AARR) for the entire state was estimated to be 4.22% for underweight and 5.64% for stunting.

The study highlights the need for frequent counseling to mothers and family members in the period of pregnancy and continued follow-up till the child attains the age of one year. This can significantly reduce the problems of underweight and stunting in children. The study reported that significant decrease in the annual rate of reduction of underweight and stunting in children. National Rural Health Mission

(NRHM) in India has trained and engaged the services of ASHAs, community health volunteers in addressing the issue of under nutrition in India [64].

Protein Energy Malnutrition (PEM) is a major public health problem in India. PEM affects the child at the important phase of his/her development undernourishment can cause long-term impairment in later part of life of the child.

PEM is calculated in terms of underweight (low weight for age), stunting (low height for age) and wasting (low weight for height). Among fewer than five children the prevalence of stunting is 48%, wasting is 19.8% and underweight is reported to be 42.5%, globally these figures are highest. The under nourished child easily falls prey to infection thus PEM is the chief culprit in child mortality. Lalonde model (1974) is used to look into the various determinants of PEM in under five children and its interrelation in causation of PEM. As per Lalonde Model (1974), the factors responsible for PEM are classified into four categories:

- Environmental factors which includes social and physical environment,
- Behavioral factors,
- Health-care service concerned
- Biological factors.

The societal and cultural practices have significant impact on care takers in feeding and care of the child. Unscientific feeding practices, poor nutritional status of the mother have an adverse effect on child health. However, it is observed that, family income has had no impact on the poor nutritional status of the child but, deficient health-care services adversely contributed to it. PEM is a serious public health

problem in India with various socio, economic and cultural factors playing a role in causing under nutrition. With almost half of below five years children being undernourished in India, the MDG of halving the prevalence of underweight by 2015 seems a distant dream [66]

Beliefs, Practices & Superstitions:

A research conducted in a Japanese Hospital, to establish the impact of false notion on the day of discharge of the patients from the hospital. The patients preferred to take discharge form hospital on Taian (a lucky day) and not to seek discharge from hospital on Butsumetsu (an unlucky day). Further, the investigation was performed to estimate the approximate costs of the effect of false notion on patients. This study was conducted in University hospital in Kyoto, Japan. The data was obtained between April 1992 to March 1995 from the patients who took discharge from Hospital.

The most number of discharges from the hospital were on Taian and least discharges on Butsumetsu. It was statistically significant. The difference in discharge from hospital cost was almost 7.4 million yen (£31,000).

The superstition was found to be the significant factor in taking discharge from hospital. The superstition is observed to be determining to higher health care expenses in Japan. Doctors must ensure patients should be admitted to the hospital for minimum duration only, however, patients belief and psychological effects to be respected by treating doctors by dismissing superstition [47]

The Socio-economic and cultural assault, originating partly from the erratic exploitation of human and material resources, have badly affected the healthy atmosphere. The study investigated the tribal population views in regards to origination of diseases and health seeking behavior in tribes. The data was collected in 148 households in Sundargarh district of Odisha state. The study found out that, the reasons for of sickness and improving are deeply associated with supernatural beliefs. The study also revealed that socio-economic, cultural beliefs & traditional factors are associated with health seeking among tribal. The study concludes that tribal's utilization of health facilities is dependent on their culture [48].

A study on beliefs in Rural Iraqi society – Since ancestral days the rural Iraqi society has averse to changes and it has stuck to its beliefs and practices. Rural Iraqi citizens have their own deep rooted ethics, viewpoint, traditions, communication and behaviours. These strong rooted beliefs sometimes beckon mystical agents such as malice, witchcraft and the results of misdeed, bad luck and suspicion. Ancient and present religious practices join with the effects of poverty and illiteracy. The sick people view modern health care with suspicion and from their beliefs and practices point of view. Un-scientific beliefs and practices make the treatment modalities even more challenging for treating Physicians. Iraqi rural population trust in diagnostics and therapy is limited this make physicians' work all the more difficult.

·An article published by SanjeetBagcchi in British Medical Journal with a title 'Villagers in India stage anti-superstition march after boy dies from untreated appendicitis'. An anti-superstition campaign was held in Arunachal Pradesh, after an incident of school going child succumbed to death due to appendicitis. Appendicitis was diagnosed to a child in health check-up camp organized at school. The school

headmaster advised the parents to seek treatment from a surgeon. But, the ignorant parents sought a supernatural cure. Unfortunately, child died of a ruptured appendix.

To prevent such incidents, the study recommends health awareness programs to be initiated. Also, to extend affordable healthcare facilities to people living in isolated places[67]

A study with an objective of obstacles in utilizing government health facilities by tribal migrants was conducted in 4 tribal slums of Bhubaneswar the capital of Orissa state.

The data collection instrument had a mixed-method of tool such as; quantitative data from mothers of children aged up to 14 years (n = 175) and qualitative data from inhabitants (n = 50) and informants (n = 26). The findings of the study were, 82 % of subjects did not utilize government health centres in the forgone year. Barriers in utilizing government health-care facilities were distance from home, lack of information about the place of government health facilities/services and trust deficit in the government services are the major concerns for low use. Socio-cultural beliefs like trust in traditional healers emerged as the reasons for low health-care utilization. The study highlights the cultural beliefs and practices of migrant community should be taken in to consideration while designing health system-related issues to improve the services to tribal migrant community[76].

Health seeking behavior:

A study performed at Nigeria and found that number of issues constitutes health-seeking behavior in Nigeria.

In the study Comparison was drawn between theoretical and genuine health-seeking behavior, where people required malaria treatment as alternative for health-seeking behavior and factors in use of health services.

The study was conducted in Nigeria. Multistage sampling method was used to pick a minimum sample size of 400 houses in rural and urban community. Data were gathered on where participants would favor to be treated for malaria if they had malaria and where they really seek treatment for malaria.

Theoretically, Most of the people desire to use public and private hospitals for treatment of malaria but most of participants in both villages and cities prefer to procure medicines from Patent Medicine Dealers (PMDs) for malaria.

It is observed in the study that, deviation between what participants would have preferred in treating malaria and what they really did when they encountered with malaria. Since PMDs were utilized by end users of malaria treatment over other providers chiefly owing to low cost, there is the need to train PMDs to improve the quality of their services[51]

In a study on Health seeking behaviors in Pakistan, 29 articles which fulfilled the health seeking behavior were reviewed in the study. The review found out that vast majority use of private hospitals, treatment by traditional healers, rampant self-medication and poor participation of women in health seeking decisions, superstitions and erroneous belief associated with health-seeking behavior were observed to be the issues that repeatedly emerged in the literature evaluation in health seeking behavior at Pakistan.

In Pakistan, health-seeking behavior is intricate. The study concludes to improve the level of health care and suggested to appoint female staff for better usage of medical services by women folk. Traditional healers required to be trained to refer cases to nearest hospitals. IEC activities need to be strengthened to enhance the knowledge and educational level of the community, in particular women in villages, to fight against superstition linked with health seeking behaviors[52]

This literature search was conducted in Pakistan to find out health-seeking behavior. The novel study also focused on methodology employed by researchers, to identify newer concepts and categorize emerging areas that needs to be researched.

Total 29 prominent scientific papers were scrutinized which employed diverse research techniques. Various research approaches were observed in the study respect to health-seeking behavior of people. However, wide spectrum of chronic diseases needs comprehensive health care. Large number of falsehoods, myths is associated with health seeking behavior particularly among rural women folk in Pakistan. Massive IEC activities need to be initiated by public health experts to eradicate myths associated with health seeking behavior. [56].

A study conducted at rural Western Kenya on the subject, Mother's Health seeking behavior during child illness. Child reported with high temperature (fever) was the major health concern among mothers. Over one third of (32 %) the mothers administered medication by procuring it from over the counters with no advice from doctor. The reason for not utilizing government facilities were far from homes, facilities are poor and the parents could not afford the private medical services due to escalating costs[71].

An organized review of literature on health seeking behavior for Childhood Illness in Developing Countries was conducted. The incidents of Pneumonia, Diarrhea or Malaria in Low and Middle Income countries (LMICs) are reported to be the main reasons of death in children. If right treatment is initiated early, these deaths are avoidable. The literature search was carried out to find out the knowledge of mothers who have child less than 5 years. Whether they were able to identify illness in the child and then take treatment from different types of healthcare providers.

The study team reviewed 91 papers which met the inclusion criteria. 18 studies reported data on caregiver identifying of disease and 71 studies on health seeking. The understanding in identifying of Diarrhea, Malaria and Pneumonia was poor (36.0%, 37.4%, 45.8 %,) respectively among mothers. The review also reported 73.0% of mothers took treatment outside the home. The study also highlighted that utilization of oral rehydration therapy (median: 34%) was low.

The study also recognized the fact that, very few studies were conducted on significant topic of child survival agenda. Care givers identifying of diseases such as Diarrhoea, Malaria and Pneumonia was found to be poor. Early recognition of the diseases is a vital determinant to improve utilization of health care.

In addition, considering that oral rehydration therapy has been widely recommended for over forty years, its use remains unacceptably low. The study also impresses utilization of nearest community health services is also found to be poor [72].

Scholars from Ubeera Memorial Research Society, AllamaIqbal Medical College, Lahore, Pakistan conducted a community based cross-sectional study in 2

districts of Pakistan's Punjab region. The purpose of the study was to find out socio-demographic associates of the health-seeking behaviors among rural population.

The utilization pattern of the public health facilities was reported to be more among rural poor population (74%). On the other hand use of private hospitals by 41% of the people who were better educated and higher income levels. The study reveals that, poorer segment of the society utilized public hospitals and least utilized private hospital [73].

Project Investigators examined the impact of social, geographical, financial and disease related factors in health seeking behavior for child illness amongst slum inhabitants of Nairobi, Kenya. Nairobi Urban Demographic Surveillance System conducted the study and gathered information on child morbidity, causes of illness, perceived illness severity and utilization of latest health services.

Investigators collected information from 15,174 homes; amongst them 3015 children less than 5 years lived. Of the 999 (33.1%) children who had complained of sickness, medical care of some sort was utilized in 604 (60.5%) cases. Poverty (49.6%) and a faith that the illness was not of serious nature (28.1%) were the chief explanation given for failure to seek health care outside the family. The study also reported that utilization of health care services was more common for children in the age group (0–11 months). Caretakers sought medical care often for diarrhea symptoms than for coughing. Family income was significantly associated with health care seeking up to certain threshold levels, above which its effects stabilized.

Educating mothers and enhancing their skills to identify risk signs of children illnesses may improve health-seeking behavior. Availability of free health care

services to urban poor by government can increase the utilization of health services and will reduce child mortality and morbidity[75]

A study on Health care seeking behavior and Out of Pocket Expenses (OOPE) for children less than five years of age living in slums, in Islamabad, Pakistan was executed. Islamabad city has large cluster of slums which lack basic civic facilities. Supply of safe drinking water, sanitation and garbage collection is poor. Inhabitants of slums have no access to both curative and preventive health care services. The poor living in slums is victims of communicable diseases and they become further poverty ridden to pay for health care services.

The study was executed by using pre-designed, pre-tested questionnaire on mothers of children of below 5 years of age. Out 34 slums 11 are recognized by the Capital Development Authority, of Islamabad in which 7 were included for the study.

The average family income was reported to be Rupee 10,000 (approx.US$100) per month. Diarrhea, fever, cough and cold were recurrent illnesses among children below 5 years of age. 43% of the mothers were illiterate and they chose to consult a private doctor. Majority of the parents remitted hospital bills by selling household or through making loans. Postponement of treatment for want of finance caused additional OOPEs to families.

The average cost of child's treatment is approximately Rs. 400/- for a visit to doctor. The study also highlighted various socio-economic issues in health seeking behavior of mothers for under 5 years children. The study recommends for multiple issues need to be addressed amongst them prominent are improvement in basic amenities, supply of safe drinking water, prevention of mosquito menace, community

cleaning drive, community based health education and provision of community health centers are essential recommendations to avoid catastrophic expenditure for slum dwelling families.[77]

JananiSurakshYojana (JSY)

An investigation was conducted on JananiSurakshaYojana (JSY), the provisional cash allocation scheme. JSY was introduced by Government of India to increase the delivery in hospitals in order to decrease the mother and child death. The JSY was launched in India in the year 2007. The study initiated to recognize the recipient level determinants in utilization of JSY scheme in the city slums and immigrant colonies of Yamuna area of Delhi.

A population centered investigation was conducted on mothers in the randomly identified areas of the two districts on a population proportionate basis. Socio-demographic factors, utilization of antenatal services and distance to nearest hospital were also recorded.

Data was obtained from 469 mother's, 333 (71%) had delivered at Hospitals, 128 (27.3%) had benefited from JSY scheme and 68 (14.5%) had received cash benefits of JSY.

Over 70% of expectant mothers did their antenatal checkups within the 3rdmonth of pregnancy. The hospital delivery rate was 71 per cent (333) and 52.5 per cent (246) beneficiaries delivered in government hospitals, 19% (87) gave birth to a baby in private hospitals and 29% (136) delivered at home. The institutional delivery rate varied from 89% in KhajuriKhas to 38 per cent in Rajiv Nagar area of Delhi.

The awareness level of JSY scheme was 62.3% (292), in that 72% (211) of the beneficiaries had no knowledge about the financial benefits of the scheme. Only 7.5% of the occupants of the slums had valid documents to show they belonged to SC, ST or BPL group. Majority of women (68%) came to know about JSY scheme in the process of Ante Natal Check (ANC) visit. Source of information: ANC Clinic (51.7%) and hospital (40.1%) came out as the major awareness points about JSY with Accredited Social Health Assistant (ASHA) acting as the 3rd major source (25.7%). Other informers were neighbors (20.5%), relatives/family members (6.5%), media (3.1%) and others (2.7%).

The study proves that poor of awareness and under utilization of JSY scheme in the occupants of urban slum. The study also recommended strengthening of Information, Education and Communication (IEC) activities to improve for proper utilization of the scheme. Also, minorities need special attention for improving utilization. Those who had more than six antenatal visits showed higher impact of utilization of the scheme[49].

Fear of Hospitalization:

Group of nursing staff conducted a study at Bengaluru hospitals to evaluate the communication of emotion between the children and the parent. The issues responsible for parent's susceptibility to emotional dilemma have received poor attention from researchers. The literatures recommend that, key factors of a child admission to hospital relates to how the parents describe the hospital stressors that they face them and how parents utilize the available resources to manage the stressful condition. The study was conducted to review the rate of pressure among the parents who got admitted their 5 year children for treatment in hospitals at Bengaluru. The

study assessed period of stress in the parents of below five children who were admitted in selected hospitals with pre-determined demographic variables.

60 women were assigned with responsibility of data collection through structured questionnaire. The overall knowledge score was found to be; majority of the parents (61%) had severe stress, 31% parents had moderate stress and only 7% of parents had mild stress. It reveals that majority of the parents had severe stress. Findings reveal that there is noteworthy alliance in the levels of stress and parents' age, occupation, educational level, housing type, residence and age as well as birth order of the children. The study clearly showed that there is severe stress with the parents of a hospitalized under five children[50].

Financial Incentive:

Financial incentive for low socio-economic population is widely used policy to lessen poverty, encourage development and to bring positive change in health. Financial incentives, minimal credit facilities, user fee elimination policies and coupon scheme that provide without any delay financial incentives to families have emerged over the years in Latin America, Sub-Saharan Africa, and are being followed in Southeast Asia. So far, no systematic study on the assessment of monetary incentives on coverage and uptake of health interventions aiming children less than 5 years of age was conducted.

The systematic search of literature on financial incentives on coverage of health interventions and behaviors focusing children of less than 5 years of age up to the year 2012 was evaluated in the study. The result of monetary encouragement for breastfeeding practices was observed to be low but hopeful results are reported on

receiving colostrum's, early commencement of breastfeeding, exclusive breast-feeding. The results on monetary encouragement on vaccination coverage are reported to be low. It is observed that, minimal quality proof of restrictive cash transfer leading to a minimal but non-significant raise in treatment of age-appropriate immunization. Monetary benefits to beneficiaries may have better prospect to encourage increased coverage of important child health interventions, but the available evidence is poor. The marked effects can be attained in the health schemes if, user charges are removed for easy access to health services. The impact was also noticed in the study that, transfer of financial incentives for taking part in health education and attending to health care facilities. This finding suggests that the measured effect may be less a consequence of the financial incentive and more due to conditionality's addressing important informational barriers[53].

Alternative Medicine:

The study was conducted to find out the incidence on usage of Complementary and Alternative Medicine (CAM) for children and to find out parents factors for choosing CAM for the children in Riyadh, Saudi Arabia.

The study that encompassed 462 households chosen by a multistage cluster-sampling method involving Riyadh region of Saudi Arabia. The samples were generated from 40 groups, chosen proportionally as per the size of the population in the study area of Primary Health Care Centers (PHCs). A structured data collection instrument that involved variables fulfilling the study objectives was designed to gather information by scholars.

In the study, approximately one-third of the study participants utilized the services of CAM for their kids. It is observed that, Quran (Muslims' holy book) is one of the most usually used CAM for kids. It is also observed that, Parents' themselves use CAM, obviously it is used for children also. Further research, to find out the use of CAM for particular ailments in children is required to be conducted [54]

People with epilepsy (PWE) in SSA have minimal preference in management of epilepsy. Usually, it is Traditional Healers (THs) take care of PWE. Ample of information is not accessible in respect of THs in handling epilepsy cases. In Zambia, a study was conducted to know the role of THs in management of epilepsy cases.

They are good in identifying the symptoms of epilepsy as is being done by Neurologists. The characteristics of convulsions are like; olfactory hallucination, Jacksonian march, automatisms. THs recognize an ancestral curse for seizures. They strongly believe witchcraft plays a dominant role in most of the seizures. The mode of treatment offered for seizures is usually plant and animal products. Patients not presented with further episodes of seizures are identified as cured. Patients who do not respond to the above therapy are referred to other healers. Epileptics presented with multiple complications along with seizures are referred to hospitals for further management. The study has proved the holistic relation between THs and modern medicine practioners in the management of Epilepsy.

THs record complete medical history of patient, they intensively treatment epileptics and refer patients who experience complicated seizures for treatment to experienced healers. They also consider the role of modern health care and guide patients to the hospital. THs have emerged as predominant treatment providers for PWE; further scientific study is essentially required to understand their approach to

treatment of PWE. The study highlights, combined associations between physicians and THs are essential to bridge the treatment gap in SSA[58.]

Knowledge, Attitude and Practices (K A P)

An investigation was carried out amongst high school students of selected 10 schools of Bareilly District of Uttar Pradesh. In the survey, data was recorded from participants on socio-demographic characteristics and evaluate the participants' knowledge, attitude and myth pertaining to epilepsy disease.

The data was obtained from 798 students consisting of 533 boys and 265 girls. 98.6% had some information of epilepsy. About 63.7% students were of the impression that, epilepsy is disease of brain while 37.3% believed it as a mental disorder. Other erroneous faith was that epilepsy is present right from birth (71.55%) and epilepsy is acquired by eating a no vegetarian food items (49%). About 77.2 % of study subjects informed that epileptics require lifelong medical management and 69% expressed the view that it is curable. In case of a convulsion, about 51.5% of the school children will take the person immediately to nearest hospital. Majority (72.31%) of the students have expressed that, epileptic children should continue their studies in special schools.

The study found out that, most of the students had excellent knowledge regarding epilepsy disease. However, considerable levels of falsehood and wrong beliefs about the epilepsy are present in students. Awareness programs amongst student community will prevent existing wrong notions [55]

Pre-school children of low SES suffer from early childhood caries is an another example of children of low SES are victims of early oral diseases.

The study subjects were 50 children aged between 24 months to 60 months drawn from five AW Centre's of Bengaluru city. Clinical evaluation was conducted and caries grade was documented as per the WHO guideline. Twenty-five children diagnosed with severe-Early Childhood Caries (s-ECC). Whole non-stimulated saliva was collected from all children and cultured for Mutans Streptococci (MS) and Lactobacilli (LB).

The study established that, 22 children were positive for LB and 25 children with s-ECC were positive for MS. A significant difference in the mean number of MS colonies (12.2 vs. 4.16) and LB colonies (8.4 vs. 3.8) among children with s-ECC and caries-free counterparts ($P < 0.01$) was observed. An important positive correlation was reported between caries experience and salivary MS and LB counts.

s-ECC is positively associated with salivary status of both MS and LB in preschool children of poor socioeconomic status. Good oral hygiene practice, regular check-up by dentists and awareness among caregivers need to be executed from early years of children[69]

Dental caries is the major public health problems in nursery children. Training Anganwadi workers (AWWs) in management of good oral health to the children by mothers is a cost effective initiative which can produce good oral health amongst kids. The study was executed to examine the immediate impact of Oral Hygiene Training Package (OHTP) to AWWs on increasing oral hygiene among preschool children in Chandigarh city.

534 children in the age group of 36-72 months going to 21 AWCs were examined before and after training intervention to AWWs. The knowledge and skill on OHTP consisting of tooth brush technique, gum massaging, plaque removal, flossing etc were passed on to AWWs. The trained AWWs then demonstrated the techniques to mothers in the AWCs. Post training session data was collected three months later. The results were found to be good progress in oral health condition (plaque, debris, gingival health), oral practice (brushing, rinsing) and decline in caries activity (Snyder test).

Incidence of dental caries was found to be 48.3%. Before intervention only 4.1% of the population reported to be brushing twice daily that significantly increased to 9.9% after the intervention. Significant decrease in debris (78.3% to 54.1%) and stage-1 plaque (75.5 to 66.5%) in the oral cavity. Caries activity by Snyder's test decreased from 48.2% to 31.2% post-intervention. The study is a simple yet very useful cost effective training intervention to AWWs which has significantly improved oral hygiene amongst children[70]

Education Level improves the utilization of Health services

The study was conducted in Tapi district of Gujarat state. 529 children in the age group of 1 to 6 years of ICDS program were identified as malnourished were included as study participants.

The offspring’s of educated mothers were found to have better weight compared to less educated mothers. An intensive intervention in the form counseling to less educated mothers on health, hygiene and nutrition also resulted in weight gain.

Thus the study concludes that education intervention is the cost effective activity which produces desired the results with least expenses [63]

A study was conducted to determine the reasons for home births of slum dwellers and find out the cause for home birth in slums of Delhi.

The findings of the study were 824 women who delivered a baby in the last year, 53% of women gave birth at home. The survey found out that, illiteracy and migrant category were the important reason for home births. The home birth is also associated with an element of fear of hospitals (36%), convenience of home (20.7%) and short of social support for child (12.2%) came out as the three main reason for women opting for home births.

The study also found out that, home births often lead to serious medical complications like septicemia which may turn out to be maternal mortality. The study also suggested sustains education, suitable incentives to be provided to promote institutional births[65].

Educated, empowered and knowledgeable mothers can control the sugar levels in the diabetic children. A study on mother's knowledge in controlling sugar levels among diabetic children was carried out in Prince Sultan Medical Military City, Riyadh, Saudi Arabia. Mothers who were study subjects and data was obtained from them. The evaluation was carried out by observing diabetes control by glycosylated hemoglobin (HbA1c).

The socio-demographic information of mothers was documented. The analysis of the study revealed that, noteworthy differences in the awareness of diabetes among mothers with differing ages. Family income and diabetes awareness

had no significant impact on the outcome of the study. The rich and affluent had better knowledge of diabetes, good management of the disease and proper control over HbA1c level. Mothers with higher level of education had better knowledge and good control of glycated hemoglobin levels in juvenile diabetics. The study concludes that, mother's with higher knowledge of diabetes and with enhanced education was managing a better blood sugar control of their children, irrespective of the socio-economic status. To prevent complications of Diabetes the mothers education and knowledge are helpful [68]

A descriptive study was performed among village level elderly population of 60 years and above staying in rural area of Prathipadu, District Guntur of Andhra Pradesh.

Majority of the study participants (65.5%) were in the age bracket of 60-69 years. 28.5% of the study subjects were illiterate. Most of them (79.5%) were not working. Around 68.5 % study participants were reported to be facing some kind of health problems.

39.42% were suffering from loss of balance while walking, followed by respiratory problems (30.66%), hypertension (27.7%) and visual impairment (25.55%). 75.91% elderly persons were taking treatment. Amongst them, 41.35% study participants were abiding with their treatment regime. The high cost of the treatment was the main reason for failure to comply with the treatment modality (39). The study advocates for setting up of geriatric therapy centers to take care of different physical, physiological, psychological and social needs of the elderly[74]

Summary of Literature Review:

The review of pertinent literature to the present study has found poor SES of the study participants. But, most of the studies limited their investigations to the poor level of Income; Education & Occupation of study participants is the main reason for underutilization of the public health schemes. Barriers exist in utilization of the publically funded health schemes but have not gone deep into the barriers. The studies have established that, the superstitions, age old beliefs and practices exists even in advanced country like Japan.

The present study has found out SES is the main reason for underutilization of the scheme. Further, investigator hasstudied, apart from poverty; intricate social factors are the reason for underutilization of the scheme. KAP analysis of the participants is also performed in the study to prove poor awareness about the scheme.

3. MATERIAL AND METHODS

3.1 Research design & Settings:

This community based cross sectional study was conducted in Belagavitaluk of Karnataka State. Belagavi is the one of the prominent city in the Northern part of Karnataka which is well connected by rail, road and Air. The health requirement of the Belagavi District is catered by District Hospital, Private Hospitals and Medical College teaching hospitals.

Belagavi city is situated at the heart of Belagavi District. There are two teaching Medical College Hospitals in Belagavi city. Both the teaching Hospitals are easily accessible and provide wide spectrum of quality medical services to the needy. KLES Dr. PrabhakarKore Hospital is a teaching hospital of J N Medical College and District Hospital is a teaching of Hospital of Belagavi Institute of Medical Sciences.

3.2 Over view of the Study hospital:

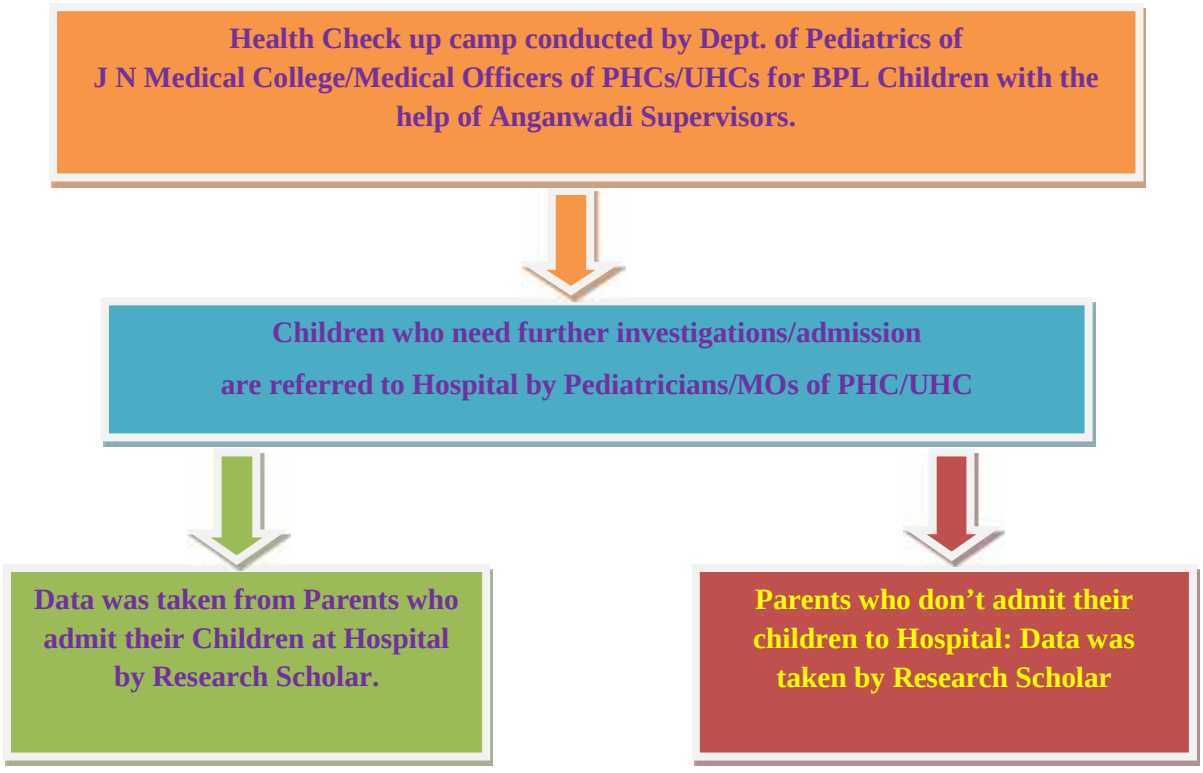
KLE Dr. PrabhakarKore Charitable Hospital is a multi-specialty, teaching hospital of KLE Academy of Higher Education and Research (KAHER), Deemed to be University and teaching hospital of J N Medical College, Belagavi. The hospital is located at Belagavi city at the headquarter of Belagavi district. It is one of the largest hospitals which cater to the health care needs of North Karnataka, Southern Maharashtra and Goa. It is largest hospital in this part of county with 2400 beds under one roof. The hospital has been developed as a centre for health care, academia and research.

3.3 Data Collection Process: Health Checkup camp conducted by Dept. of Pediatrics ofJ N Medical College/Medical Officers of PHCs/UHCs for BPL Children with the help of Anganwadi Supervisors.

Children who need further investigations/admissionare referred to Hospital by Pediatricians/MOs of PHC/UHC

Parents who don't admit their children to Hospital: Data was taken by Research Scholar. Data was taken from Parents who admit their Children at Hospital by Research Scholar.

3.4 Study population:



The BPL children of ICDS program from 0 to 6 years of age group of Belagavitaluka are the study participants. The selection criterion of children is as below;

- Health Check-up camp for needy BPL Children in the age group of 0 to 6 years was conducted at nearest PHC/UHC/SCs/AWCs by the Department of Pediatrics of J.N Medical College and KLE Centenary Charitable Hospital, Yellur Road, Belagavi.
- Children who need further investigations or management are referred to KLE Dr. PrabhakarKore Charitable Hospital, Belagavi for further management.
- It was observed in the study that, few of the parents were reluctant to utilize the benefit of the scheme by quoting various socio-economic reasons. Data from such parents was collected by Research scholar in the pre-designed and pre-tested questionnaire.
- Caregiver who utilized the benefit of the scheme and admitted at Hospital the data was collected at hospital by Research Scholar.

3.5 Study Period: The study was conducted from June, 2014 to Jan, 2016.

BelagaviTaluka has 13 PHCs, 1 CHC and 89 sub centers. 12 Sub centers were selected randomly and inverse sampling technique was used. At least 5 admissions from each SCwas required to be positive. Screening camps were held in all of these SCsbetween June, 2014 to Jan, 2016. At least two screening camps were held by Pediatricians. Over 3500 children were screened in the camps.

3.6 Administrative & Ethical considerations:

Human Ethical Committee of KLE University, Belagavi has granted permission to conduct the Study vide letter No. KLEU/Ethic/14-15/D-71 dated 26th May, 2014

Permission was obtained from CDPO of W&CWD, Government of Karnataka. Written consent was taken from the parents in vernacular language prior to the study.

3.7 Community Level:

Investigator had a group meeting and discussed the objectives of study with the Medical Officers, ANMs, AWSs, ASHAs & most importantly parents/guardians. The concerned health centres were able to facilitate for assessment of needy children. Investigator took permission from appropriate authorities before conducting health check-up for children.

3.8 Recruitment & Screening:

The essential goal was to recruit subjects (children) who have some sort of medical complications and high chances of availing free health facilities extended under the BSS. Study participants were selected through screening camps or through the information received from ANMs or AWSs who kept track of children who were sick at least two weeks and seeking medical care elsewhere. All such children records were procured through AWCs/SCs/PHCs of the respective community and were advised to attend health camps.

3.9 Tools and techniques for data collection:

- **Tools of data collection Structured and pretested questionnaire:** Record the name of child, age, sex, number of children, birth order, village PHC/UHC/SC name. Also recorded the education & occupation of mothers. Further, father's education, occupation, habits, type of house, drinking water source, family income, type of family (nuclear family/joint family) etc, religion, caste, availability of Television, vehicle, toilet in the home. Distance from Hospital was also recorded. All relevant family history was recorded. Also present health condition of the child as perceived by mother was gathered and recorded. The questionnaire has major four parts;

  Part I: Questions No. 1 to 5 are applicable for children who are more than 3 years of age who visit AWCs.

  Part II: It was designed to collect information regarding health conditions of the child, perception of mothers of child health and whether the child is taken for health camps as per the ICDS guidelines. What are the barriers in utilizing the health scheme is also obtained from the care takers.

  Part III: This part contains, if the child is sick health seeking behavior of the parents and knowledge, attitude and practices of care takers in utilizing and non-utilizing the benefit of the health scheme.

  Part IV: The quality of the treatment offered at Hospital for those who have utilized the benefit of the scheme, distance from home to hospital and the approximate amount family spends for per sick child annually.

Techniques of data collection: Data was collected by study personnel by face to face interview with the care takers in wards for those who were admitted in the hospital (who utilized the benefit of the scheme) and at home/AWCs/Temple from whom did not utilize the benefit of the scheme.

3.10 Inclusion & Exclusion Criteria:

- **Inclusion:** BPL Children of Belagavitaluka registered under ICDS Program from new born to 6 years were included as Subjects.
- **Exclusion:** Children not registered with ICDS program and Above Poverty Line (APL) category were excluded from study.

3.11 Data management and analysis: The obtained data was managed carefully by taking into considerations of the data safety and completeness. All the data were entered in to MS-Excel. Further necessary transformations were made in to SPSS-20 version. Data was summarized, presented and inferred by using appropriate statistical tests.

3.12 Pilot Study: A pilot study was conducted in the month of May and June 2014 in the Hudali PHC to observe the feasibility of the study.

3.13 Pre Testing of Study tool: Pre testing of the data collection tool was done amongst the care takers in May and June, 2014. After pre testing necessary modifications were made in consultations with Statistician and Community Medicine Staff. Hence, the utilization of pre-tested and standardized data collection instruments produced good quality of data.

3.14Quality Check: Supervision and monitoring of data collection was done by the investigator himself and the overall guidance was taken from the research supervisor.

3.15 Glossary of Terminology:

Age: Age of child was recorded in months the child has completed; it was obtained at the time of enrolment. However, the age of mother and father was recorded in years and it was also recorded on the date of interview.

Occupation: Mother or Father work for the economic gain for maintenance of livelihood is termed as occupation.

Nuclear Family: Husband, wife staying with their unmarried children is said to be Nuclear family.

Joint Family: Other than nuclear family all of other will be considered as Joint Family. Ex; Parents, grandparents, other family members stay together.

Religion: Categorized into Hindu, Muslims, Christians and Jain according to the belief of participants.

SC: The scheduled Caste is a group of traditionally underprivileged group of people and is accepted by the Constitution of India.

ST: Scheduled Tribes are group of traditionally underprivileged group of people and is accepted by the Constitution of India.

General: Other than SC and ST.

Type of Home: General description of home is given below;

Pukka: The walls, floors and roof the houses made by cement bricks/Stones by using good materials.

Kachha: The houses made up with cane, mud, thatch or other inferior materials

Shed: Is the one which has stone walls with no plasters and roof is of tin or asbestos sheet.

Hut: Few of the disadvantaged class of society and migratory labors stay in huts. Which are usually unauthorized places.

Electricity: The main source of light for home is electricity or any other form of energy is used.

Fuel used for cooking: The type of fuel is used for cooking. Usually Fire wood, Kerosene stove, Gobar gas & LPG are the sources of cooking media.

Education: The highest standard of schooling did she/he complete.

Graduate: Who completed graduation and above

PUC: Completion of two years course after 10^{th} Standard

Secondary: Who has completed 8^{th} to 10^{th}Standard?

Primary: Who has completed 1^{st} to 7^{th}schooling?

Adult Education: Who has attended adult education classes?

Illiterate: Who cannot read or write in any language.

Income: The monthly income of both parents. It is recorded in per month in rupees.

Other Information:

Information regarding habits like chewing of tobacco, smoking & Consumption of alcohol. Food habits like vegetarian or non-vegetarian. The information regarding family having Television, Vehicle, Mobile phone and toilet facility, etc are being collected from participants. Also distance from Hospital is recorded in the data sheet.

3.16 Socioeconomic issues in BPL families:

Following are the few of the important socio-economic issues in BPL families.

- **Below Poverty Line:**

BPL is an economic yardstick and poverty threshold. BPL identification is done by considering various parameters which is decided by using a various yardsticks by State Governments. Worldwide, an income of less than $1.25 per day per head of purchasing power parity is defined as extreme poverty. By the above formula it is estimated that, about 32.7% of Indians are extremely poor. A family is considered BPL if, bare minimum income to provide for food requirements; it does not includes other requirements like education and health care.

As per the survey conducted by Chairman of the Prime Minister's economic advisory council in 2011-12, approximately 363 million people, or 29.5% of India's 1.2 billion population lived in poverty.

- **Illiteracy:**

As per the UN guidelines, Illiteracy is defined as "The inability to read and write a simple message in any language." Illiterate person is deprived of certain

important information about various schemes/programs as he/she will not be able to understand and utilize the Government sponsored programs completely.

- **Sanitation:**

The word 'sanitation' refers to the maintenance of hygienic conditions, through services such as supply of clean and safe drinking water, garbage collection and wastewater disposal. Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. Usually BPL families have over crowded homes, poor ventilations, worst sewage systems and unhygienic conditions due to low literacy.

- **Alcoholism:**

Alcoholism or alcohol addiction is regular and without any control consumption of alcoholic drinks. Alcohol consumption deteriorates drinker's health, personal relationships, on his family and social standing. It is medically considered a disease, specifically an addictive illness. One who consumes alcohol is called an alcoholic.

- **Crime:**

Crime is an illegal act the one who indulges in criminal activity is punishable by law. Criminal activity is offence, which is a harmful act to individual, the community or to the state. Such acts are forbidden and punishable by law.

- **Ignorance:**

The word ignorant in simple terms is 'lack of knowledge' describes a person is not aware of the happenings around him/her which includes beneficial schemes and is often observed that they are unaware of benefits of the scheme or government programs. It is defined in simple term as lack of knowledge, information, or education; the state of being ignorant about various beneficial schemes.

Superstition:

It is the strong faith in supernatural forces that one incident causes another without any normal process. It connects two events—such as astrology, religion, omens, witchcraft, prophecies, miracles, magic, revelation etc., it contradicts natural Science. Superstition in India is considered a widespread social problem. The superstitions are believed to be more in country side and in far flung inaccessible areas. Low socioeconomic families are being misled by black magicians, tantric and mantriks.

- **Caste system:**

Caste System is based on social strata which identifies communities into various groups popularly called as 'Jatis' (in Hindi) and as Caste in English. Over 250 million persons across the world are the victims of case discrimination as per the UNICEF and Human Rights Watch.

3.17Balsanjeevini Scheme

Balsanjeevini Scheme is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and

mortality among BPL children of 0 to 6 years of age. The scheme offered a treatment cover of Rs 50,000 to neonatal (up to one month after birth) children and Rs 35,000 for the rest. Parents accompanying the child had also received Rs 100 as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment etc. The scheme was launched in the year 2011.

The needy sick children are referred by Medical Officer of PHC/CHC/Taluka Hospital/District Hospital to recognized NWH for secondary and tertiary care. The referral letter is issued by concerned CDPO. The payment are made to NWH by Department of Women & Child Welfare, Government of Karnataka. Initially only Medical College Hospitals with tertiary care facilities were identified as NWH. Later private Hospitals also joined and recognized as NWH. Memorandum of Understanding was signed between NWH and Women & Child Welfare Department for smooth and effective implementation of the scheme in NWHs.

3.18 Diseases covered under BSS:

Acute Infections	Encephalitis-Meningitis
Neurological treatment	Acute Malaria
Anemia, Malnutrition	Blood related disorders
Diabetes	Renal Problems (Urology/Nephrology)
New born level 3 treatment	Liver disease
Complex Gastroenteritis	Surgery of New born
Snake/Poisonous insect bite	O P Poison
Cardiac problems	Trauma/Accident

3.18.1 Report Submitted to Women & Child Welfare Department, Government of Karnataka:

- A detail report with suggestions submitted to Director, W&CWD Government of Karnataka - Submitted 29 page report on observations in functioning of ICDS and improvement in existing system, to the Registrar, KLE University, Belagavi for onward submission to Director, Women & Child Welfare Department, Government of Karnataka, Bangalore on 21st June, 2016.

3.19Sample Size:

Inverse Sample technique to study the rare events has been used. Sampling distribution for rare events is a Poisson distribution which becomes moderately normal for 5 positive subjects and normal for more than 10 positive subjects. So it was planned that, more than 12 clusters are selected with average positive events between 5 to 10. Making total positive events 120 (Admissions). Another group of participants who does not seek treatment were as many as possible.

3.19.1 Study Centres:

Sl.No	Name of Sub Centre	No. of Positive events/Care sought (Admitted)	No. of Negative events /Care not sought (Not admitted)	Total	Study conducted in number of villages
1	Handignur	12	30	42	6
2	UHC (South)	13	24	47	6
3	Yellur	18	10	28	7
4	Bendigeri	09	25	32	7
5	Kadoli	12	10	22	5
6	Uchagaon	09	07	16	4
7	Sulebhavi	09	20	29	7
8	Belgundi	13	15	28	5
9	Kakti	07	35	41	6
10	Peeranwadi	07	12	19	5
11	Kineye	07	08	13	3
12	UHC (North)	10	37	47	7
	Total	126	233	359	68

(*Source: Text book of Sampling Techniques, Third edition by William G Cochran pg 76-77).

4. RESULTS

4.1 Socio Demographic Factors

Table 4.1.1 Gender of the children

Gender of children	Total	Percent
Male	179	49.86
Female	180	50.13
Total	359	100

In this study, total 359 children were study subjects among them 179 (49.8%) were male and 180 (50.13%) were female children in the age group of 0 to 6 years.

4.1.2 Age profile of the children

Age of Child in months	Total	Percent
<12	65	18.10
12-36	153	42.61
36-60	89	24.79
60 -72	52	14.48
Total	359	100

The age profile of the children in the study were; Children <12 months were 65 (18.10%), children between 12-36 months were 153 (42.61%), in the age group of 36-60 months were 89 (24.79%) and from 60-72 months were 52 (14.48%).

4.1.3 Age Profile of Mothers' & Fathers'

Age in years	Mother	Percent	Father	Percent
<25	207	57.93	27	7.52
25-29	107	29.80	111	32.59
30-34	36	10.02	132	38.71
35+	08	2.22	76	21.16
Total	358	100	356	100

* mother-1& * fathers'-3 expired.

The age of profile of the Parents were as below; 207 (57.93%) mothers were <25 of age, between 25-29 years there were 107 (29.80%), between the age group of 30-34 years 36 (10.02%) and above 35 years only 8 (2.22%) mothers were study subjects. Majority of the mothers (57.93%) were of <25 years of age.

27 (7.52%) Fathers' age was <25 years, there were 111 (32.59%) fathers age was between 25-29 years, In the age group of 30-34 there were 132 (38.71) fathers' and above 35 years 76 (21.16%) were study subjects.

4.1.4 Education of Mother & Father

Education	Mother	Percent	Father	Percent
Illiterate	30	8.3	23	6.40
Adult education	07	1.94	11	3.06
Primary	100	27.85	102	28.41
High School	187	52.08	158	44.01
PUC	31	8.63	55	15.32
Degree	03	0.83	07	1.94
Total	358	100	356	100

*mother-1 & *fathers'-3 expired.

About 287 (79.9%) mothers were educated between primary and high school level, 34 (9.5%) mother were educated between PUC to degree level and 7 (2%) mothers' underwent adult education. There were 30 (8.3%) mothers who were unable to read or write (illiterates).

260 (72.45%) of fathers' educated between primary and high school. 62(17.2%) fathers' were educated between PUC to degree level. 11 (3.6%) of them had adult education and 23 (6.4%) of them were illiterates.

4.1.5 Occupation of Mother and Father

Occupation	Mother	Percent	Father	Percent
Skilful	8	2.22	150	41.78
Moderate Skill	--	--	27	7.52
Agriculture Labourer	195	54.3	165	45.96
House Wife/ Men at Home	147	40.94	14	3.89
Total	358	100	356	100

*mother-1 & *fathers'-3 expired.

8 (2.22%) of the mothers were performing skilful activities like tailoring, music & tuition classes. Majority of them i.e. 195 (54.3%) of them were working agriculture sectors as laborers on daily wages and 147 (40.94%) of them were house makers.

150 (41.78%) of fathers' were performing the task of skillful activities like working on machines in Udaymbag, 27 (7.52%) of them were doing moderate skill jobs. 165 (45.96%) of them were involved in agricultural works. 14 (3.89%) of them were not doing anything due to sickness or other health problems.

4.1.6 Religion of Parents.

Religion	Total	Percent
Hindu	326	90.80
Muslim	27	7.52
Others	06	1.67
Total	359	100

Majority of the study participants belong to Hindu religion 326 (90.8%) and 33 (9.2%) were belonging to Muslims & other minority religions

4.1.7 Caste of Parents.

Caste	Total	Percent
Scheduled Caste	34	9.47
Scheduled Tribe	41	11.42
Others (General)	284	79.10
Total	359	100

34 (9.47%) study participants represent from SC community, 41 (11.42%) of them belong to ST & remaining 284 (79.10%) were others.

4.1.8 Habits (Addiction) of Father

Type of Habit	Total	Percent
No Habit	194	54.03
Tobacco	79	22.00
Smoking	25	6.96
Alcohol	32	8.91
Combination	26	7.24
Total	356	100

*fathers'-3 expired

194 (54.03%) of the fathers' had no habits, 79 (22%) of them were chewing tobacco, 25 (6.96%) of them were smoking, 32 (8.91%) of them were alcoholics and 26 (7.24%) of them had combination of habits like smoking, alcohol & Tobacco chewing.

4.1.9 Type of Family

Type of Family	Total	Percent
Joint Family	234	65.18
Nuclear Family	125	34.81
Total	359	100

234 (65.2%) children belong to joint families and 125 (34.8%) children hail from nuclear families

4.1.10 Type of Food

Type of Food	Total	Percent
Vegetarian	107	29.80
Non Vegetarian	252	70.19
Total	359	100

The food habits of the families are 107 (29.8%) are vegetarians and 252 (70.1%) are non-vegetarians.

4.2 Socio-Economic Factors

4.2.1 Agricultural Land

Agricultural Land	Total	Percent
No Land	181	50.41
Yes	178	49.58
Total	359	100

181 (50.4%) of the households did not own any agricultural land however 178 (49.6%) of the households had agriculture land

4.2.2 Distribution of families on basis of socio-economic class according to B G Prasad Scale 2014

Socio-economic status	Per capita monthly income	No of familes	Percent
Class I (Upper class)	>=5357	0	0.00
Class II (Upper middle class)	2652-5356	0	0.00
Class III (Middle class)	1570-2651	2	0.56
Class IV (Lower middle class)	812-1569	95	26.46
Class V (Lower class)	<=811	262	72.98
	Total	359	100

As per the B G Prasad scale (2014) majority of the study subjects, 262 (73%) belongs to Class V Socio-economic status. 95(26.46%) represent Class IV and only 2 (0.56%) fall into Class III socio-economic class.

4.2.3 Type of House

Type of House	Total	Percent
Pukka	102	28.41
Kacha	241	67.13
Shed	13	3.62
Hut	03	0.83
Total	359	100

102 (28.4%) of the households stayed in Pukka (Concrete) House remaining 257 (71.5%) families live in Kachha (Mud & Stones) house, sheds or huts

4.2.4 Source of Electricity to Homes of the beneficiary

Source of Electricity	Total	Percent
Yes	351	97.77
No	08	2.22
Total	359	100

351 (97.77%) of the hoes has electrical connection and 8 (2.22%) did not have connections.

4.2.5 Presence of Television in the Home

Television	Total	Percent
Yes	262	72.98
No	97	27.00
Total	359	100

262 (72.98%) of the households had TV and 97 (27%) of them did not have TV in the homes.

4.2.6 Presence of Two Wheeler in the family

Two Wheeler	Total	Percent
Yes	160	44.56
No	199	55.43
Total	359	100

160 (44.5%) families have two wheelers in their homes and 199 (55.5%) do not possess any vehicles

4.2.7 Presence of Mobile in the family

Mobile	Total	Percent
Yes	320	89.13
No	39	10.86
Total	359	100

320 (89.13%) had at least one mobile phone in the family and 39 (10.86%) of them did not possess mobile phones.

4.3 Health Factors

4.3.1 Source of Drinking Water

Source of Drinking water	Total	Percent
Tap	165	45.96
Public Water Tank	135	37.60
Well	44	12.25
Hand Pump	12	3.34
Others	03	0.83
Total	359	100

165 (45.96%) families use tap water, 135 (37.60%) of them fetch water from Public water tank, 44 (12.25%) of them are dependent on well, 12 (3.34%) of them utilize hand pump for their drinking water source and 3 (0.83%) of them get water from other sources like ponds, rivers, etc.

4.3.2 Fuel is used for Cooking of food

Source of Cooking Medium	Total	Percent
LPG	158	44.00
Fire Wood	149	41.50
Gobar Gas	33	9.19
Kerosene stove	19	5.29
Total	359	100

158 (44%) of the households cook food on LPG, for 149 (41.50%) source of cooking is fire wood, 33 (9.19%) of them use Gobar gas, 19 (5.29%) of them cook on kerosene stove.

4.3.3 Facility of Toilet in the family

Toilet	Total	Percent
Yes	256	71.30
No	103	28.69
Total	359	100

It was found in the study that, 256 (71.4%) of the households had toilet facilities and 103 (28.6%) did not have toilet facilities in the households.

4.4 Assessment of Anganwadi Services:

4.4.1 Regularity in attending AWs among study subjects

Regularity in attending AWs	Total	Percent
Yes	120	85.10
No	21	14.89
TOTAL	141	100

*218 children <36 months are not admitted to AWs

120 (85.10%) of the children in the age group of > 36 months attend AWs regularly. 21 (14.89%) do not attend AWs regularly. <36 months of children are not admitted to AWs

4.4.2 Parents perception about facilities at AWs

Facilities at AWs	Total	Percent
Very Good	12	8.5
Good	75	53.19
Moderate	53	37.58
Poor	01	0.70
Total	141	100

*218 children <36 months are not admitted to AWs

12 (8.5%) of the parents have rated the AW facilities as very good, 75 (53.19%) of parents have rated it as Good, 53 (37.58%) of them as moderate and only 1 (0.70%) as poor.

4.4.3 Parents perception about quality of food served at AWs

Quality of Food served at AWs	Total	Percent
Good	115	81.56
Very Good	15	10.63
Moderate	10	7.09
Poor	01	0.70
Total	141	100

*218 children <36 months are not admitted to AWs

Regarding the quality of food served at AWs; 15 (10.63%) of them have rated it as very good, 115 (81.56%) of them as good, 10 (7.09%) as moderate and 1 (0.70%) as poor.

4.4.4 Improvement in learning ability after joining AWs as perceived by mothers.

Improvement after joining AW's	Total	Percent
Good	115	81.56
Poor	26	18.43
Total	141	100

*218 children <36 months are not admitted to AW's

Mothers perception of learning ability of the child has improved after joining AWs is 115 (81.56%) of them believe it as good and 26(18.43%) feel it as poor.

4.4.5 Mothers perception about the child activity

Activity of the child	Total	Percent
Good	272	75.76
Poor	87	24.23
Total	359	100

272 (75.76%) perceive as the child is active and 87 (24.33%) of the mothers feel that their child is poor in its activity.

4.4.6 Perception of mothers about child sickness

Child Sickness	Total	Percent
Frequently	89	24.8
Seldom	200	55.7
Never	70	19.4
Total	359	100

89 (24.8%) of mothers feel that their child falls frequently sick, 200 (55.7%) fall sick seldom and 70 (19.4%) of mothers are of the perception that child has never fallen sick.

5. ASSESSMENT OF THE INFLUENCE OF SOCIO-ECONOMIC CHARACTERSTICS & STATUS OF UTILIZATION OF THE SCHEME.

Table: 5.1 Association between Age of the child & status of utilization of the Scheme

Age of child in months	Not utilized	%	Utilized	%	Total
<12	28	56.00	22	44.00	50 (100%)
12-36	118	70.24	50	29.76	168 (100%)
>37	87	61.70	54	38.30	141 (100%)
Total	233	65	126	35	359 (100%)

X^2: 4.4730, df: 2, p-value: 0.170

Figure: 5.1.1

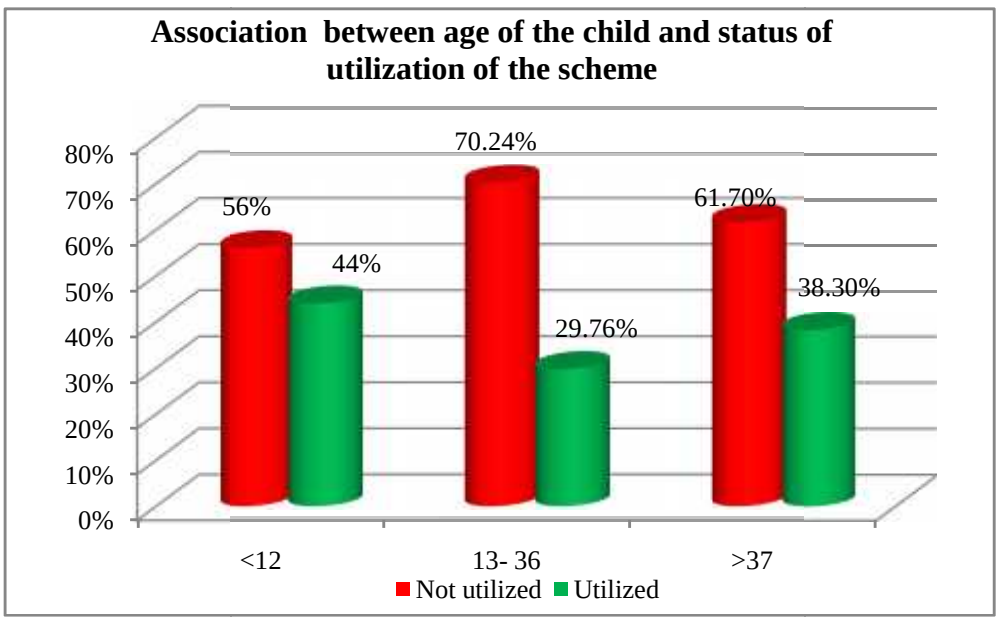
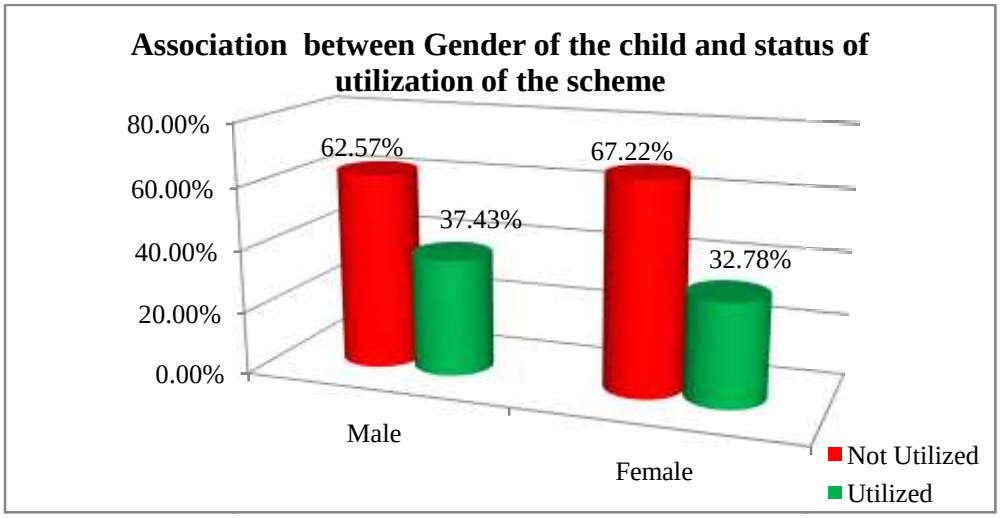


Table: 5.2 Association between Gender of the child & status of utilization of the Scheme

Gender of child	Not utilized	%	Utilized	%	Total
Male	112	62.57	67	37.43	179 (100%)
Female	121	67.22	59	32.78	180 (100%)
Total	233	65	126	35	359 (100%)

X^2: 0.8530, df: 1, p-value: 0.3560

Figure: 5.2.1



Total 359 children were study subjects, among them 233 (65%) children did not utilize the facilities of the scheme and 126 (35%) were admitted and utilized the benefit of the scheme. Amongst not utilized the division of children is as follows; <12 months 28 (56%), between 12-36 months 118 (70.2%) and above >37 months 87 (61.70%). Those utilized <12 months 22 (44%), 12-36 months; 50 (29.76%) and 54 (38.30%). There is no significant association between the age of child and status of utilization of the scheme.

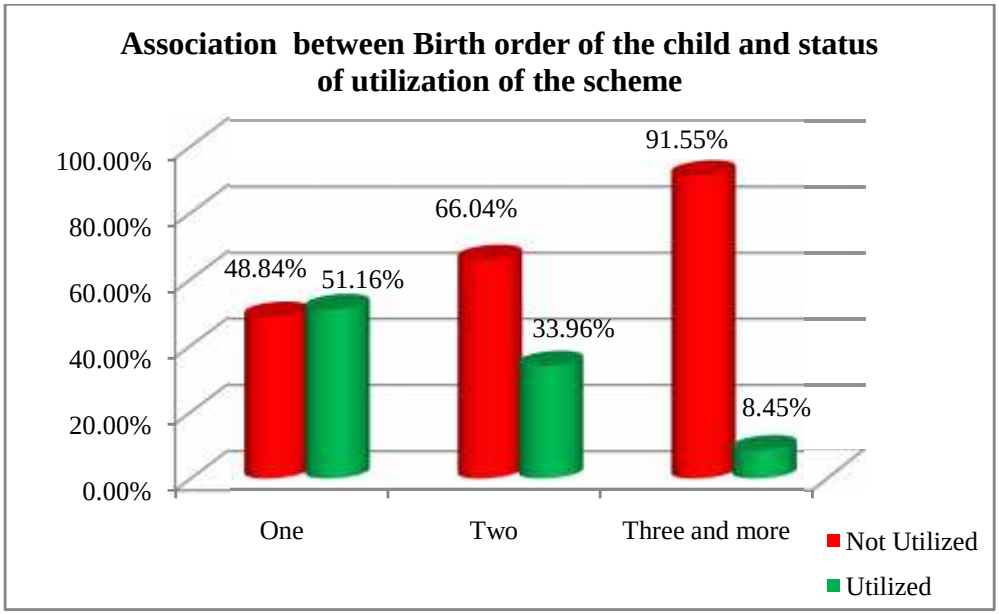
Also no significant association was noticed between gender of the child and status of utilization of the scheme.

Table: 5.3 Association between Birth Order and status of utilization of the Scheme.

Birth Order of child	Not utilized	%	Utilized	%	Total
One	63	48.84	66	51.16	129 (100%)
Two	105	66.04	54	33.96	159 (100%)
Three and more	65	91.55	6	8.45	71 (100%)
Total	233	65	126	35	359 (100%)

X^2: 36.8370, df: 1, p-value: 0.0001*

Figure: 5.3.1



Amongst not utilized group of 233, 63 (48.84%) belonged to birth order of one, 105 (66.04%) of birth order two and 65 (91.55%) birth order of three or more. In the utilized group 66 (51.5%) hail from birth order one, 54 (33.96%) from birth order two and 6 (8.45%) are from birth order three or more. There is significant association between birth order and utilization of the scheme (p=0.0001*).

Table: 5.4 Association between Age of the mother and utilization of the scheme is as below;

Age of the mother in Years	Not utilized	%	Utilized	%	Total
<25	87	41.83	121	58.17	208 (100%)
>=26	146	96.69	5	3.31	151(100%)
Total	233	65	126	35	359 (!00%)

X^2: 115.5980 ,df: 1, p-value: 0.0001*

Table: 5.5 Association between Occupation of the mother and utilization of the scheme

Occupation of mother	Not utilized	%	Utilized	%	Total
Skilled	13	76.4	4	23.5	17 (100%)
Agriculture	125	64.1	70	35.8	195 (100%)
House Wife	95	64.6	52	35.4	147 (100%)
Total	233	65	126	35	359 (100%)

X^2: ,df: 2, p-value: 0.0440*

Table: 5.6 Association between Education of the mother and utilization of the scheme

Education of mother	Not utilized	%	Utilized	%	Total
Illiterate	17	54.84	14	45.16	31 (100%)
Primary	70	70.00	30	30.00	100 (100%)
High School	124	66.31	63	33.69	187 (100%)
PUC+	22	53.66	19	46.34	41(100%)
Total	233	65	126	35	359 (100%)

X^2: 4.9570 ,df: 2, p-value: 0.0430*

(*Mother-1 expired)

Figure: 5.4.1

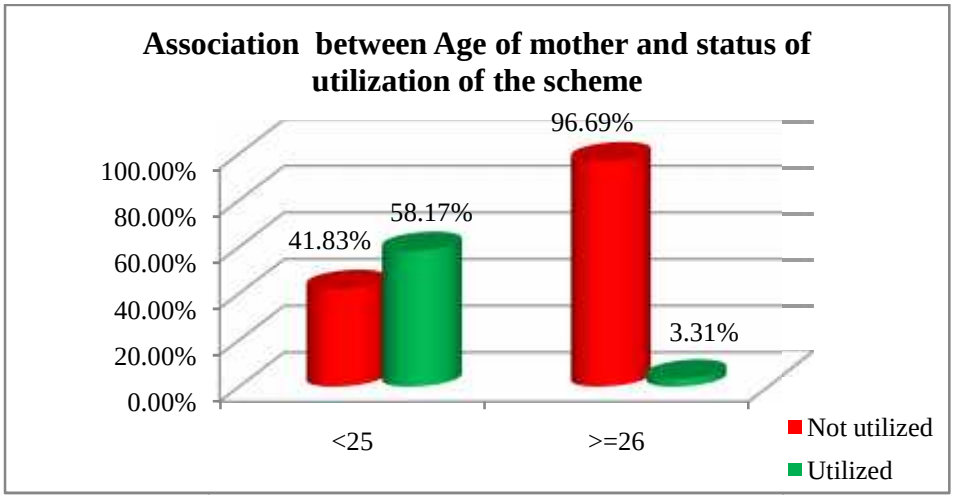


Figure: 5.5.1

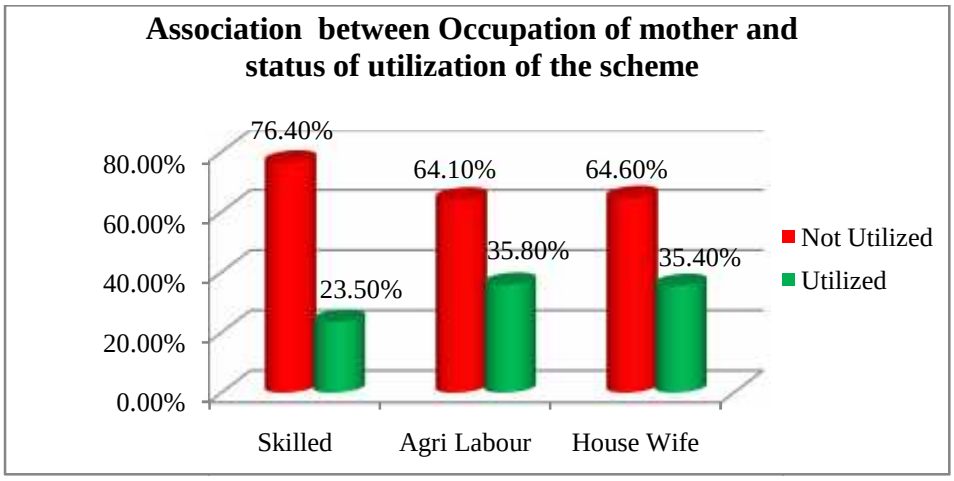
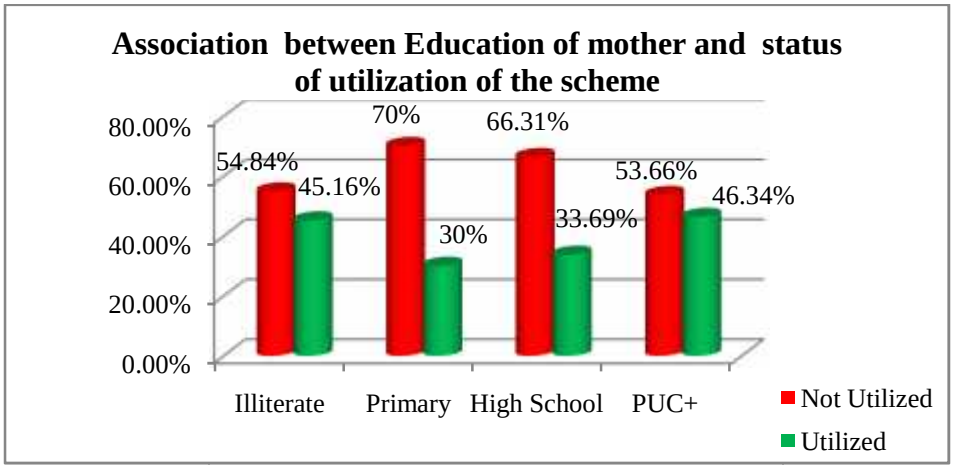


Figure: 5.6.1



Age of mother (Table- 5.4): Mothers of < 25 years in the not utilized group were, 87 (41.83%) and in the age group above >=26 is 146 (96.69%), from utilized group <25 years are 121 (58.17%) and 5(3.31%) are from the age group of >=26 age. There is significant association between age of mother and utilization of the scheme (p=0.0001*).

Occupation of mother (Table 5.5): Among 359 study subjects, 233 did not utilize the scheme. Among 17 skilled working mothers, 13 (76.4%) of them did not utilize and 4 (23.5%) utilized the scheme. 195 mothers were working in agricultural lands among them 125 (64.1%) did not utilized the scheme and 70 (35.8%) utilized the scheme. There were total 147 mothers who were house wife among them 95 (64.6%) did not utilized the scheme and 52 (35.4%) utilized the scheme. There is a significant association between occupation of mother and utilization of the scheme (p=0.0440*).

Education of mother (Table 5.6): 17 (54.84%) of mothers were illiterate, 70 (70%) of them were educated up to primary, 124 (66.31%) of the mothers were high school educated and 22 (53.66%) of them were PUC+ educated in the not utilized group. In the utilized group 14 (45.16%) were illiterate, 30 (30%) were educated up to primary level, 63 (33.69%) up to high school and PUC+ were 19 (46.34%) in the utilized group. Significant association between education of mother's and status of utilization of the scheme.(p value = 0.0430*)

Table: 5.7 Association between Age of the father and status of utilization of the scheme

Age of father	Not utilized	%	Utilized	%	Total
<=26	0	0.00	45	100.00	45 (100%)
>=27	233	74.20	81	25.80	314 (100%)
Total	233	65	126	35	359 (100%)

X^2: 95.1400, df: 1, p-value: 0.0001*

Table: 5.8 Association between Occupation of the father and status of utilization of the scheme

Occupation of father	Not utilized	%	Utilized	%	Total
High Skill	105	58.33	75	41.67	180 (100%)
Agricultural Labour	119	72.12	46	27.88	165 (100%)
Men at Home	9	64.29	5	35.71	14 (100%)
Total	233	65	126	35%	359 (100%)

X^2:7.1870 ,df: 2, p-value: 0.0500*

Table: 5.9 Association between Education of the father and status of utilization of the scheme

Education of father	Not utilized	%	Utilized	%	Total
Illiterate	26	70.27	11	29.73	37 (100%)
Primary	57	55.88	45	44.12	102 (100%)
High School	104	65.82	54	34.18	158 (100%)
PUC	40	72.73	15	27.27	55 (100%)
Degree	6	85.71	1	14.29	7 (100%)
Total	233	65	126	35	359 (100%)

X^2: 95.1400, df: 1, p-value: 0.0030*

(Fathers'-3 expired)

Figure: 5.7.1

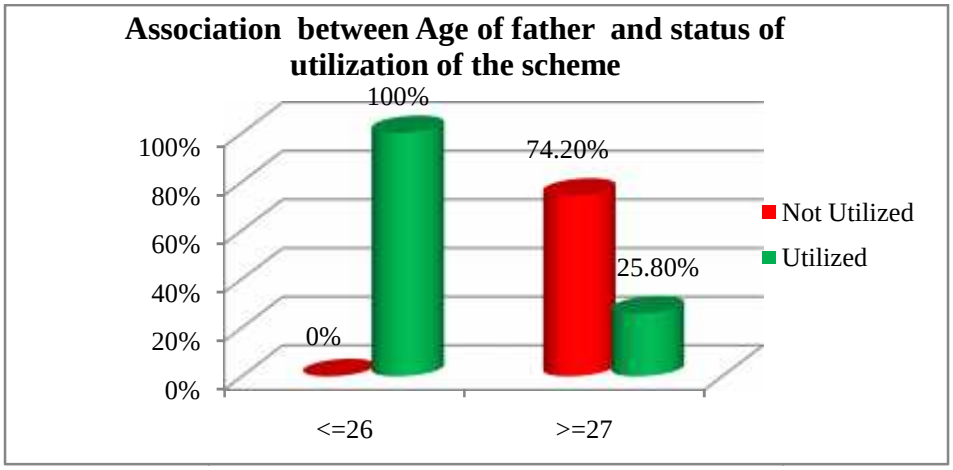


Figure: 5.8.1

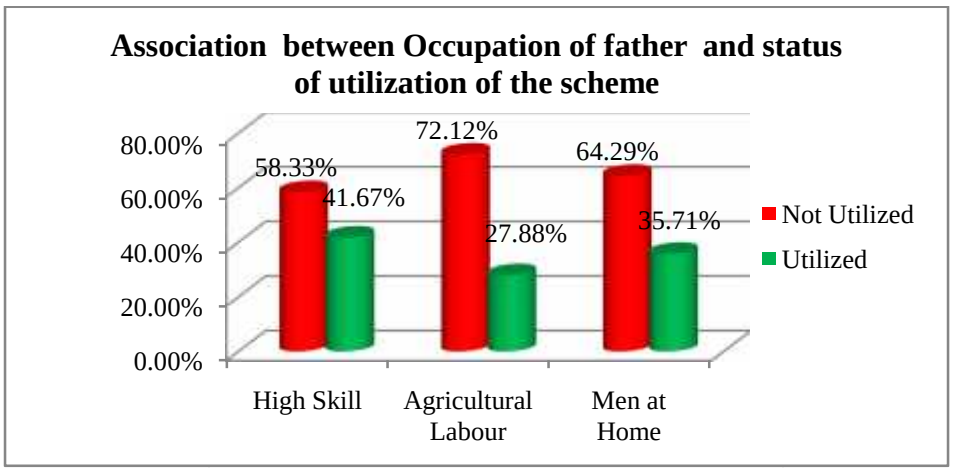
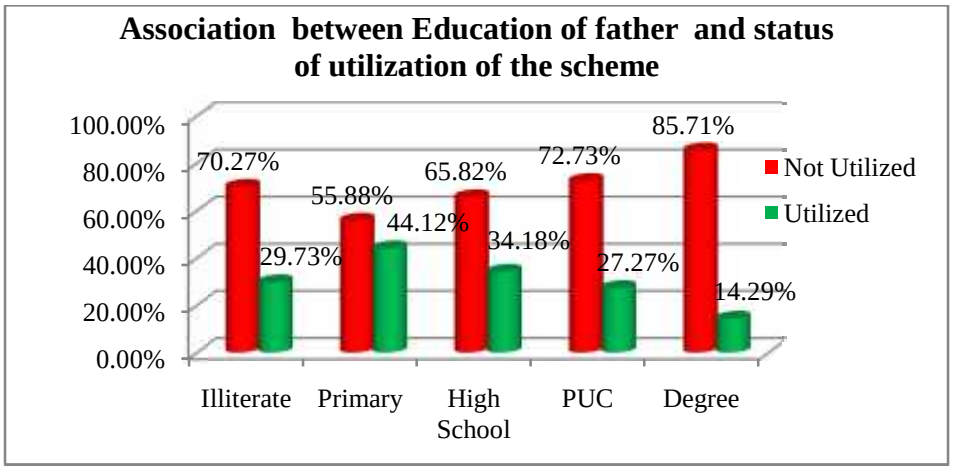


Figure: 5.9.1



Age of father (Table 5.7): None of the Fathers of <= 26 years have not utilized the scheme. Fathers whose age is >=27, 233 (74.20%) also have not utilized the scheme. From utilized group father's <=26 years 45 (100%) have utilized the scheme and father's whose age is <=27, 81 (41.67%) have utilized the scheme. There is a significant association between age of father and status of utilization of the scheme (p = 0.0001*)..

Occupation of father (Table 5.8): In the not utilized group the father's performing Skill job were 105 (58.33%), father's working in Agriculture filed were 119 (72.12%) and men at home due to sickness were 9 (64.29%). In the utilized group; father involved in skill works were 75 (41.67%), Agriculture labourers were 46 (27.88%) and 5 (35.71%) were not doing any work at home due to sickness. There is significant association between Occupation of father and status of utilization of BSS (0.0500*).

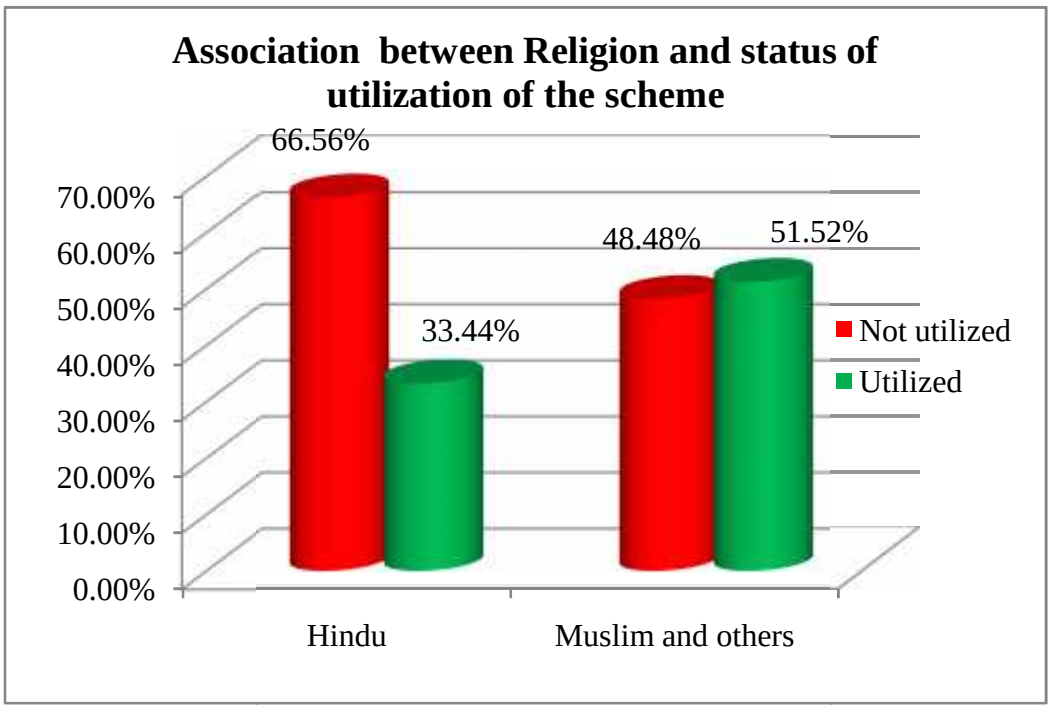
Education of father (Table 5.9): 26 (70.27%) of fathers were illiterate, 57 (55.88%) of them were educated up to primary, 104 (65.82%) of the fathers were high school educated, 40 (72.73%) of them were PUC educated and 6 (85.71%) of them were degree holders in the not utilized group. In the utilized group 11 (29.73%) were illiterate, 45 (44.12%) were educated up to primary level, 54 (34.18%) up to high school, PUC were 15 (27.27%) and 1 (14.29%) father had degree in the utilized group. Significant association between father education and status of utilization of the scheme (p=0.0030*)

Table: 5.10 Association between Religion and utilization of the scheme

Religion of beneficiaries	Not utilized	%	Utilized	%	Total
Hindu	217	66.56	109	33.44	326 (100%)
Muslim & Others	16	48.48	17	51.52	33 (100%)
Total	233	65	126	35	359 (100%)

X^2: 4.300, df: 1, p-value: 0.0380*

Figure: 5.10.1



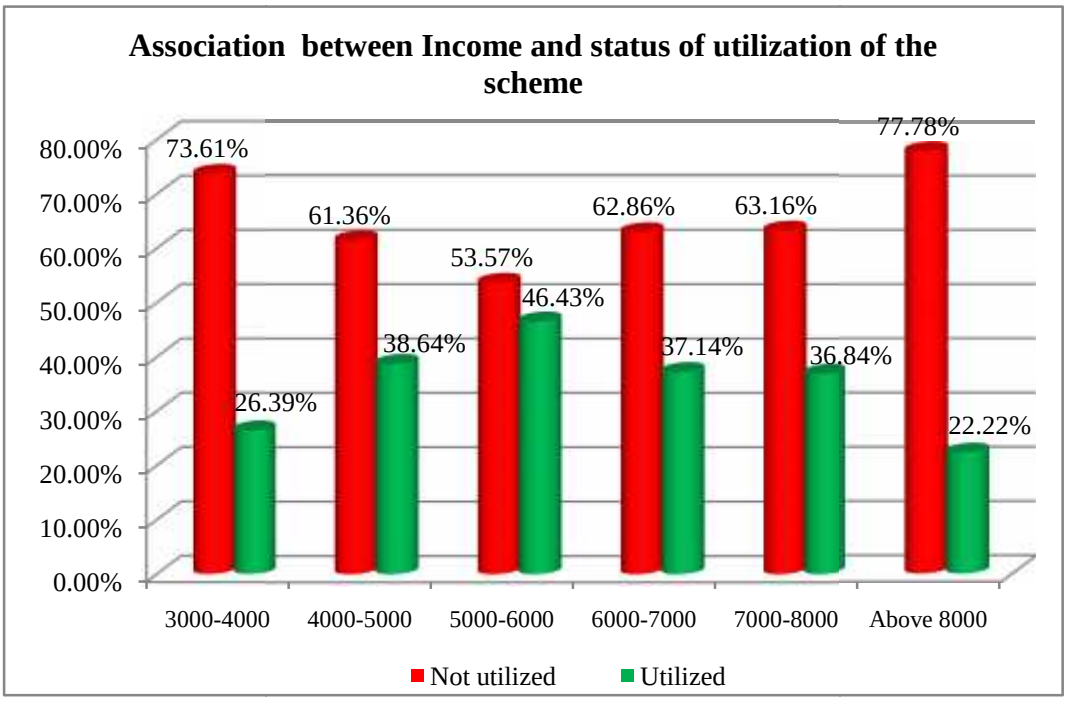
In the not utilized group 217 (66.56%) were Hindus and 16 (48.48%) of them belonged to Muslim and other minority religion. In the utilized group 109 (33.44%) were Hindus and 17 (51.52%) of them were from Muslim and other minority religion. There is Significant association between Religion and utilization of the scheme (p =0.0380*) .

Table: 5.11 Association between Income and utilization of the scheme

Income in Rs. (Monthly)	Not utilized	%	Utilized	%	Total
3000-4000	53	73.61	19	26.39	72 (100%)
4000-5000	81	61.36	51	38.64	132 (100%)
5000-6000	30	53.57	26	46.43	56 (100%)
6000-7000	22	62.86	13	37.14	35 (100%)
7000-8000	12	63.16	7	36.84	19 (100%)
Above 8000	35	77.78	10	22.22	45 (100%)
Total	233	65	126	35	359 (100%)

X^2: 9.6440, df: 5, p-value: 0.0040*

Figure: 5.11.1



The income and utilization of the scheme is analyzed as below; from not utilized group 53 (73.61%) had an income of Rs. 3000-4000, 81 (61.36%) income was between Rs. 4000-5000, 30 (53.57%) were in the income bracket of Rs. 5000-6000, between Rs. 6000-7000 there were 22 (62.86%), in the income range of Rs. 7000-8000 there were 12 (63.16%) and above Rs. 8000, 35 (77.78%). In the other utilized group 19 (26.39%) of the family members income was from Rs. 3000-4000, 51(38.64%) had an income of Rs 4000-5000, 26 (46.43%) families had income range of Rs. 5000-6000, 13 (37.14%) were in the income bracket of Rs. 6000-7000 and 10 (22.22%) of the family members had income above Rs. 8000/- per month.

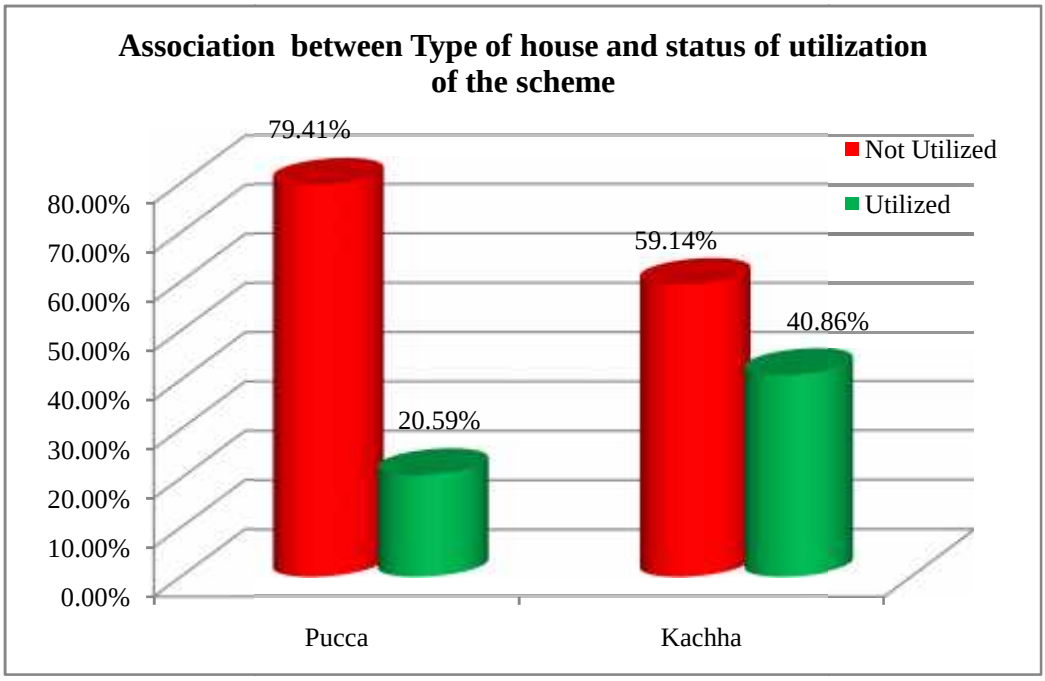
There is significant association between the family income and utilization of the scheme(p value = 0.0040*) .

Table: 5.12 Association between Type of house and utilization of the scheme

Type of house	Not utilized	%	Utilized	%	Total
Pucca	81	79.41	21	20.59	102 (100%)
Kachha	152	59.14	105	40.86	257 (100%)
Total	233	65	126	35	359 (100%)

X^2: 13.1680, df: 1, p-value: 0.0001*

Figure: 5.12.1



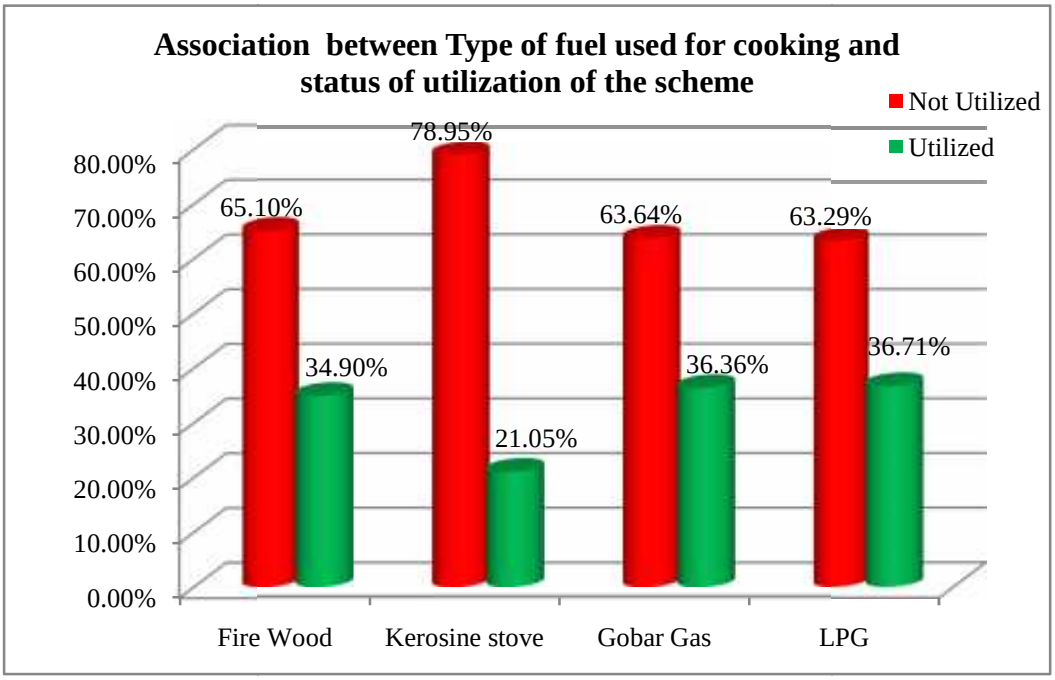
In the not utilized group 81 (79.4%) reside in Pucca house and 152 (59.14%) of them in Kachha house. Where as in utilized group 21 (20.59%) stay in Pucca house and 105 (40.86%) reside in Kachha house. Type of house is significant factor in status of utilization of the scheme (p value=0.0001*).

Table: 5.13 Association between Type of fuel used for cooking of food and utilization of the scheme

Type of cooking medium	Not utilized	%	Utilized	%	Total
Fire Wood	97	65.10	52	34.90	149 (100%)
Kerosine stove	15	78.95	4	21.05	19 (100%)
Gobar Gas	21	63.64	12	36.36	33 (100%)
LPG	100	63.29	58	36.71	158 (100%)
Total	233	65	126	35	359 (100%)

X^2: 1.8510, df: 3, p-value: 0.4840

Figure: 5.13.1



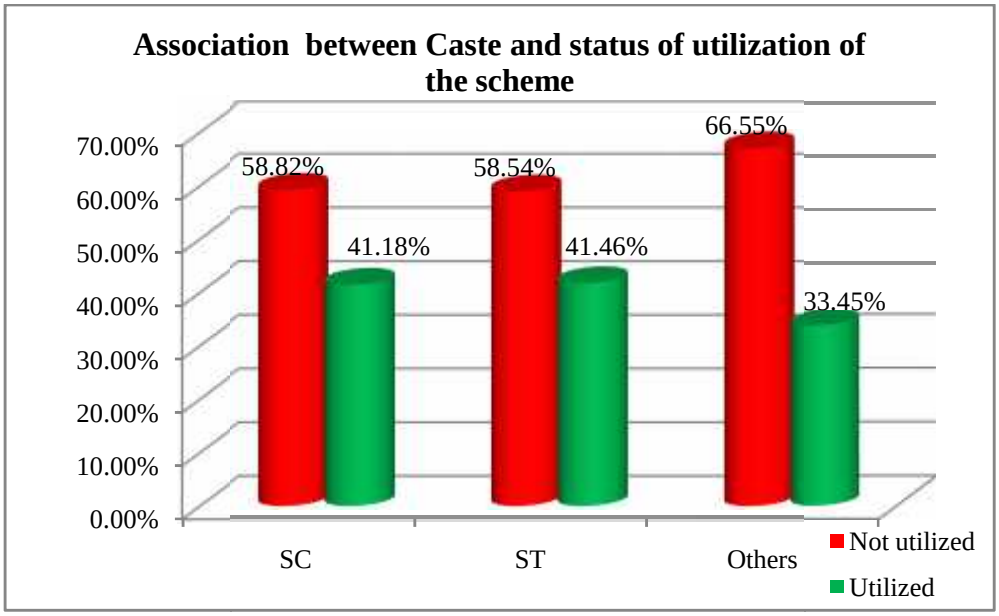
In the not utilized group of 233 families 97 (65.10%) cook their food by fire wood, 15 (78.95%) use kerosene stove, 21 (63.64%) use gobar gas and 100 (63.29%) of them cook their food on LPG. 126 families who have utilized the scheme for their children 52 (34.90%) use fire wood, 4 (21.05%) Kerosene stove, 12 (36.36%) are cooking their food on gobar gas and 58(36.71%) of the families use LPG as cooking medium. Source of cooking medium is not a significant factor in status of utilization of the scheme.

Table: 5.14 Association between Caste and status of utilization of the scheme:

Caste	Not utilized	%	Utilized	%	Total
S.C	20	58.82	14	41.18	34 (100%)
S.T	24	58.54	17	41.46	41 (100%)
Others	189	66.55	95	33.45	284 (100%)
Total	233	65	126	35	359 (100%)

X^2: 1.6190, df: 2, p value: 0.0050*

Figure: 5.14.1



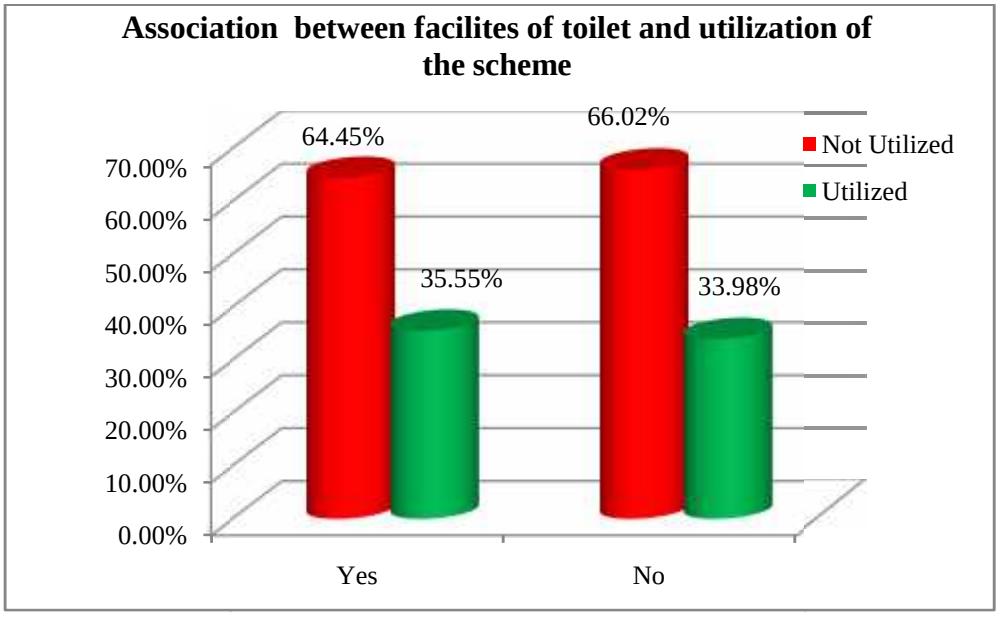
Total 359 participants were study subjects among them 233 did not utilize the scheme and 126 children took benefit of the scheme. Amongst total 34 Schedule Caste, 20 (58.82%) did not utilize the scheme and 14 (41.18%) utilized the scheme. Amongst Schedule Tribe group of 41, 24 (58.54%) has not utilized the scheme and 17 (41.46%) did utilize the scheme. In a group of others consisting of general category of 284, 189 (66.55%) has not utilized the scheme and 95 (33.45%) could utilize the benefit of the scheme. Caste is the significant factor in status of utilization of the scheme (p-value= 0.0050*).

Table: 5.15 Association between facilities of the toilet and utilization of the scheme.

Facilities of toilet	Not utilized	%	Utilized	%	Total
Yes	205	64.06	115	35.94	320 (100%)
No	28	71.79	11	28.21	39 (100%)
Total	233	65	126	35	359 (100%)

X^2: 0.0790, df: 1, p-value: 0.8000

Figure: 5.15.1



Amongst 233 those who did not utilize the facilities of the scheme 205 (64.06%) have toilet facilities in their home, 28 (71.79%) had no facilities of toilet. In another group of 126 families who utilized the scheme; 115 (35.94%) had toilet facilities and 11 (28.21%) did not have toilets. There is no significant association between toilet facilities and status of utilization of the scheme.

Table 5.16: Association between utilization with other factors by chi-square test

Factors	Descriptions	Not utilized	%	Utilized	%	Total	%	Chi-square	p-value
Age of child in months	<12	28	56	22	44	50	13.9	4.473	0.107
	Dec-36	118	70.2	50	29.8	168	46.8		
	>37	87	61.7	54	38.3	141	39.3	0.853	0.356
Gender	Male	112	62.6	67	37.4	179	49.9		
	Female	121	67.2	59	32.8	180	50.1		
Birth order	One	63	48.8	66	51.2	129	35.9	36.837	0.0001*
	Two	105	66	54	34	159	44.3		
	Three and more	65	91.6	6	8.45	71	19.8	0.501	0.479
Male children	No	55	61.8	34	38.2	89	24.8		
	Yes	178	65.9	92	34.1	270	75.2	8.07	0.0040*
Female children	No	54	53.5	47	46.5	101	28.1		
	Yes	179	69.4	79	30.6	258	71.9	115.598	0.0001*
Age of mother in years	<25	87	41.8	121	58.2	208	57.9		
	>=26	146	96.7	5	3.31	151	42.1		
Occupation of mother	Skilled	8	88.9	1	11.1	9	2.51	2.744	0.254
	Agriculture	6	75	2	25	8	2.23		
	House Wife	219	64	123	36	342	95.3		
Education of mother	Illiterate	17	54.8	14	45.2	31	8.64		
	Primary	70	70	30	30	100	27.9	4.957	0.175
	High School	124	66.3	63	33.7	187	52.1		
	PUC+	22	53.7	19	46.3	41	11.4		
Religion	Hindu	217	66.6	109	33.4	326	90.8	4.3	0.0380*
	Muslim and others	16	48.5	17	51.5	33	9.19		
Caste	S.C	20	58.8	14	41.2	34	9.47	1.619	0.445
	S.T	24	58.5	17	41.5	41	11.4		
	Others	189	66.6	95	33.5	284	79.1		
Age of father in years	<=26	0	0	45	100	45	12.5	95.14	0.0001*
	>=27	233	74.2	81	25.8	314	87.5		

Occupation of father	High Skill	105	58.3	75	41.7	180	50.1	7.187	0.0281*
	Agricultural Labour	119	72.1	46	27.9	165	46		
	Men at Home	9	64.3	5	35.7	14	3.9		
Education of father	Illiterate	26	70.3	11	29.7	37	10.3	6.979	0.137
	Primary	57	55.9	45	44.1	102	28.4		
	High School	104	65.8	54	34.2	158	44		
	PUC	40	72.7	15	27.3	55	15.3		
	Degree	6	85.7	1	14.3	7	1.95		
Agricultural land	Yes	118	66.3	60	33.7	178	49.6	0.299	0.584
	No	115	63.5	66	36.5	181	50.4		
Source of drinking water	Tap	104	63	61	37	165	46	2.069	0.558
	Well	29	65.9	15	34.1	44	12.3		
	Hand Pump	10	83.3	2	16.7	12	3.34		
	Public Water Tank	90	65.2	48	34.8	138	38.4		
Income	3000-4000	53	73.6	19	26.4	72	20.1	9.644	0.086
	4000-5000	81	61.4	51	38.6	132	36.8		
	5000-6000	30	53.6	26	46.4	56	15.6		
	6000-7000	22	62.9	13	37.1	35	9.75		
	7000-8000	12	63.2	7	36.8	19	5.29		
	Above 8000	35	77.8	10	22.2	45	12.5		
Type of house	Pucca	81	79.4	21	20.6	102	28.4	13.168	0.0001*
	Kachha	152	59.1	105	40.9	257	71.6		
Electricity	Yes	230	65.5	121	34.5	351	97.8	2.697	0.101
	No	3	37.5	5	62.5	8	2.23		
Cooking medium	Fire Wood	97	65.1	52	34.9	149	41.5	1.851	0.604
	Kerosene stove	15	79	4	21.1	19	5.29		
	Gobar Gas	21	63.6	12	36.4	33	9.19		
	LPG	100	63.3	58	36.7	158	44		
Addiction of father	No Habit	116	59.8	78	40.2	194	54	8.182	0.085
	Tobacco	54	68.4	25	31.7	79	22		
	Smoke	16	64	9	36	25	6.96		

	Alcohol	27	84.4	5	15.6	32	8.91		
	Combinations	20	69	9	31	29	8.08		
Food	Vegetarian	75	70.1	32	29.9	107	29.8	1.803	0.179
	Non Vegetarian	158	62.7	94	37.3	252	70.2		
Family	Joint Family	149	63.7	85	36.3	234	65.2	0.444	0.505
	Nuclear Family	84	67.2	41	32.8	125	34.8		
No. of family members	1--5	111	62.7	66	37.3	177	49.3	1.016	0.602
	6--10	102	66.2	52	33.8	154	42.9		
	11+	20	71.4	8	28.6	28	7.8		
Television	Yes	163	62.2	99	37.8	262	73	3.077	0.079
	No	70	72.2	27	27.8	97	27		
Two wheeler	Yes	103	64.4	57	35.6	160	44.6	0.035	0.851
	No	130	65.3	69	34.7	199	55.4		
Mobile	Yes	205	64.1	115	35.9	320	89.1	0.912	0.339
	No	28	71.8	11	28.2	39	10.9		
Toilet	Yes	165	64.5	91	35.6	256	71.3	0.079	0.779
	No	68	66	35	34	103	28.7		
Distance from village of nearest hospital	1-10kms	67	62.6	40	37.4	107	29.8	0.748	0.688
	11-20kms	76	63.9	43	36.1	119	33.2		
	>=21kms	90	67.7	43	32.3	133	37.1		
	Total	233	64.9	126	35.1	359	100		

*p<0.05

Table 5.17: Multiple logistic regression analysis to assess the influence of socio demographic characteristics on utilization

Factors	Categories	Estimates	S.E.	OR	95% C.I. or OR		p-value
					Lower	Upper	
Age of child in months	<12	1					
	12--36	-0.59	0.50	0.55	0.21	1.49	0.2400
	>37	0.14	0.52	1.16	0.42	3.19	0.7820
Gender	Male	-0.28	0.58	0.75	0.24	2.33	0.6240
	Female	1					
Birth order	One	1					
	Two	-0.09	0.41	0.91	0.41	2.02	0.8200
	Three and more	-1.75	0.74	0.17	0.04	0.74	0.0180*
Male children	No	1					
	Yes	-0.07	0.51	0.93	0.34	2.56	0.8930
Female children	No	1					
	Yes	-0.16	0.59	0.85	0.27	2.69	0.7870
Age of mother in years	<=25	1					
	>=26	-3.83	0.67	0.02	0.01	0.08	0.0001*
Occupation of mother	Skilled	-3.98	1.98	0.02	0.00	0.90	0.0440*
	Agriculture	-0.81	1.10	0.45	0.05	3.87	0.4640
	House Wife	1					
Education of mother	Illiterate	0.07	0.97	1.07	0.16	7.12	0.9460
	Primary	-1.52	0.75	0.22	0.05	0.95	0.0430*
	High School	-1.00	0.67	0.37	0.10	1.37	0.1360
	PUC+	1					
Religion	Hindu	1					
	Muslim and others	1.56	0.67	4.73	1.28	17.46	0.0200*
Caste	S.C	2.00	0.71	7.41	1.83	29.94	0.0050*
	S.T	0.32	0.65	1.37	0.38	4.90	0.6280
	Others	1					
Age of father in years	<=26	1					
	>=27	-5.14	1.24	0.01	0.00	0.07	0.0001*
Occupation of father	High Skill	1.89	0.99	6.62	0.96	45.74	0.0500*
	Agricultural Labour	1.31	0.99	3.71	0.53	25.72	0.1850
	Men at Home	1					
Education of father	Illiterate	4.66	1.82	105.08	2.99	3695.50	0.0100*
	Primary	5.39	1.83	218.04	6.05	7855.17	0.0030*
	High School	4.72	1.82	112.12	3.16	3981.49	0.0100*
	PUC	4.64	1.86	103.91	2.69	4010.59	0.0130*
	Degree	1					

*p<0.05

Factors	Categories	Estimates	S.E.	OR	95% C.I.for OR		p-value
					Lower	Upper	
Agricultural land	Yes	0.01	0.27	1.01	0.60	1.72	0.9650
	No			1			
Source of drinking water	Tap			1			
	Well	-0.34	0.41	0.71	0.32	1.58	0.4070
	Hand Pump	-0.86	0.89	0.43	0.08	2.41	0.3330
	Public Water Tank	-0.03	0.31	0.98	0.53	1.79	0.9350
Income	3000-4000	0.27	0.50	1.31	0.50	3.47	0.5810
	4000-5000	0.71	0.43	2.03	0.87	4.70	0.1010
	5000-6000	1.38	0.48	3.98	1.55	10.24	0.0040*
	6000-7000	0.71	0.54	2.04	0.70	5.91	0.1920
	7000-8000	0.94	0.66	2.56	0.71	9.28	0.1520
	Above 8000			1			
Type of house	Pucca			1			
	Kachha	1.33	0.32	3.77	2.03	7.02	0.0001*
Electricity	Yes	-2.80	0.69	0.06	0.02	0.23	0.0001*
	No			1			
Cooking medium	Fire Wood	0.12	0.29	1.13	0.64	1.99	0.6850
	Kerosene stove	-0.46	0.65	0.63	0.18	2.27	0.4840
	Gobar Gas	0.23	0.48	1.26	0.49	3.21	0.6320
	LPG			1			
Addiction of father	No Habit			1			
	Tobacco	-0.45	0.32	0.64	0.34	1.20	0.1660
	Smoke	-0.15	0.49	0.86	0.33	2.24	0.7540
	Alcohol	-1.44	0.57	0.24	0.08	0.73	0.0120*
	Combinations	-0.58	0.48	0.56	0.22	1.44	0.2310
Food	Vegetarian			1			
	Non Vegetarian	0.60	0.29	1.82	1.04	3.19	0.0360*
Family	Joint Family	-0.50	0.33	0.61	0.32	1.16	0.1320
	Nuclear Family			1			
No. of family members	1--5	0.44	0.50	1.55	0.58	4.15	0.3790
	6--10	-0.12	0.47	0.89	0.35	2.26	0.8090
	11+			1			
Television	Yes	0.92	0.34	2.50	1.28	4.90	0.0080*
	No			1			

Two wheeler	Yes	-0.32	0.30	0.73	0.41	1.31	0.2870
	No			1			
Mobile	Yes	-0.18	0.44	0.84	0.36	1.97	0.6810
	No			1			
Toilet	Yes	0.08	0.32	1.09	0.58	2.04	0.8000
	No			1			
Distance from village of nearest hospital	1-10kms			1			
	11-20kms	-0.06	0.33	0.95	0.50	1.81	0.8680
	>=21kms	-0.27	0.33	0.76	0.40	1.46	0.4120

*p<0.05

Chi-Square test is used for association for two attributes. In this study Chi-Square is considered as the best choice for association. Further, instead of unadjusted odds ratio, in this study multiple logistic regression analysis is performed. It means adjusted odds ratio are presented in the study.

Association between Socio-Economic Factors with status of utilization (Odds Ratio)

- **Birth Order of Child and utilization of scheme:** Parents with three and more children have significantly lower odds (OR=0.17, 95% CI: 0.04-0.74) as compared to two children (OR= 0.91, 95% CI: 0.41-2.02) and parents with only one child (OR=1).

- **Age of mother and utilization of scheme:** Mother of the age group >=26 have significant lower odds (OR=0.02, 95% CI: 0.01-0.08) as compared to the mothers belonging to the age group of <=25 (OR=1).

- **Occupation of mother and utilization of scheme:** The mother working as skilled person have significant lower odds (OR=0.02, 95% CI: 0.01-0.90), than agricultural labour (OR=0.45, 95% CI: 0.05-3.87) and as compared to house wife (OR=1).

- **Education of mother and Utilization of the scheme:** The illiterate mother have a significant higher odds (OR=1.07, 95% CI: 0.16-7.12), than High school educated (OR=0.37, 95% CI: 0.1.-1.37) and as compared to Primary educated father.

- **Occupation of Father and utilization of the scheme:** The father working as a high skilled person have significant higher odds (OR=6.62, 95% CI: 0.96-45.74), than agricultural labour (OR=3.71, 95% CI: 0.53-25.72) and as compared to men at home.

- **Age of father and utilization of scheme:** Father of the age group >=27 have significant lower odds (OR=0.01, 95% CI: 0.01-0.07) as compared to the fathers belonging to the age group of <=26 (OR=1)

- **Religion and Utilization of the scheme:** Muslim and other minorities have significant higher odds (OR=4.73, 95% CI: 1.28-17.46) and have utilized 4.73 times more as compared to Hindu parents (OR=1)

- **Caste and utilization of the scheme:** Schedule Caste parents have significant higher odds (OR=7.41, 95% CI: 1.83-29.94), Scheduled Tribes (OR=1.37, 95% CI: 0.38-4.90) as compared to others.

- **Income and utilization of the scheme:** The family with income band of Rs. 5000-6000 per month have significant higher odds (OR= 3.98, 95% CI: 1.55-10.24), Rs.7000-8000 -(OR= 2.56, 95% CI:0.71-9.28), Rs. 6000-7000 (OR= 2.04, 95% CI:0.70-5.91), Rs. 4000-5000 (OR=2.03, 95% CI: 0.87-4.70), Rs. 3000-4000 (OR= 1.31, 95% CI: 0.50-3.47) as compared to income of above Rs. 8000+ (OR=1)

- **Type of House and utilization of scheme:** children residing in Kachha house have significant higher odds (OR= 3.77, 95% CI: 2.03-7.02) as compared to children staying in Pucca house (OR=1)

- **Addiction of father and utilization of scheme:** Father with addiction of alcohol have significant lower odds (OR= 0.24, 95% CI: 0.08-0.73), combination of habits (OR= 0.56, 95% CI: 0.22-1.44), smoker (OR= 0.86, 95% CI: 0.33-2.24), tobacco chewers (OR= 0.64, 95% CI: 0.34-1.20) as compared to father with no habits (OR=1)

- **Type of food and utilization of scheme:** Non vegetarians have significant higher odds in utilization of the scheme (OR=1.82, 95% CI:1.04-3.19) as compared to vegetarians.

- **Presence of Television and utilization of scheme:** Families with television in their homes have higher significant odds (OR=2.50, 95%CI: 1.28-4.90) as compared to families with no television.

The other factors like Utilization of scheme among age group of child, Owning of agricultural land, Source of drinking water, Number of family members in the home, Whether it is joint or nuclear family, the medium of cooking source, availability of Two wheeler, Mobile, Toilet, Distance from village to NWH is not a significant factor in utilization of the scheme.

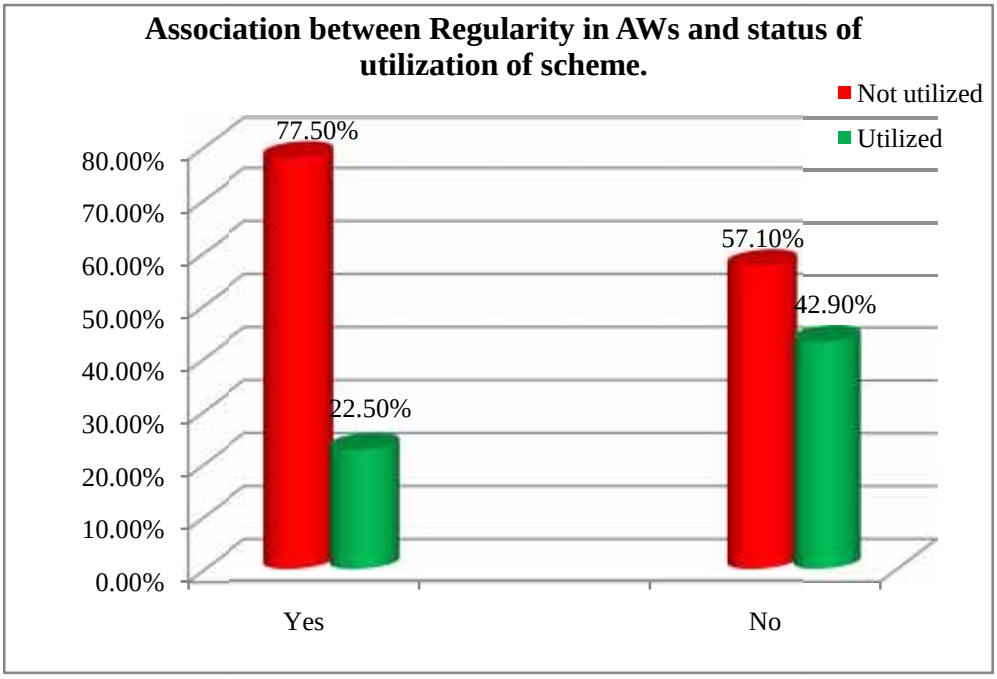
ASSOCIATION BETWEEN OTHER FACTORS BY CHI-SQUARE TEST & STATUS OF UTILIZATION OF THE SCHEME.

Table: 5.18 Association between Regularity in attending AWs and status of utilization of the Scheme

Regularity in Attending AWs	Not utilized	Utilized	Total
Yes	93 (77.5%)	27 (22.5%)	120 (100%)
No	12(57.1%)	9 (42.9%)	21(100%)
Total	105 (74.46%)	36 (25.54%)	141 (100%)

X^2: 12.578, df: 1, p value: 0.002* (***218 children <36 months do not attend AWs.)**

Figure: 5.18.1



It is to be noted that children >36 months only attend AWs. Amongst 120 children who regularly attend AWs, 93 (77.5%) of the children have not utilized the scheme and 27 (22.5%) have utilized the scheme. In another group of 21 who do not attend AWs regularly, 12 (57.1%) did not utilize the scheme and only 9 (42.9%) utilized the scheme.

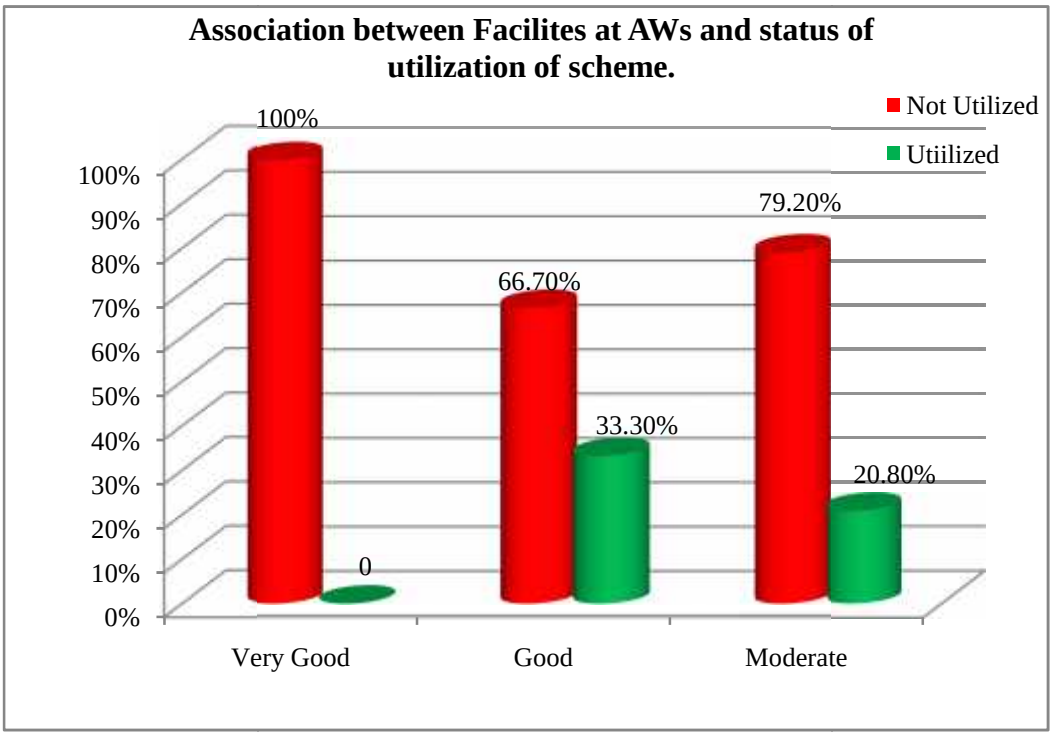
The association between regularity in attending AWs and status of utilization of the scheme is a significant factor in utilization of the BSS (Chi Square = 12.578, p = 0.002*).

Table: 5.19 Association between facilities at AW's and status of utilization of the Scheme

	Not Utilized	Utilized	Total
Very Good	12 (100%)	0	12 (100%)
Good	50 (66.7%)	25 (33.3%)	75 (100%)
Moderate	43 (79.2%)	11 (20.8%)	54 (100%)
Total	105 (74.46%)	36 (25.54%)	141(100%)

X^2: 12.578, df: 2, p Value: 0.002* (*218 children <36 months do not attend AWs)

Figure: 5.19.1



Amongst total 233 study participants. 218 children <36 months do not attend AWs. The facilities at AWs are rated very good by 12 (100 %) who did not utilize the facilities of the scheme. 50 (66.7) % who have not utilized the scheme have responded the facilities as good, 25 (33.3%) rated the facilities of AWs as good. Amongst 54 participants, 43 (79.2%) who have not utilized rated the facilities as moderate and 11 (20.8%) who have used the scheme have said the facilities at AWs as moderate. However, the feedback from 218 could not be taken as the children <36 months are not enrolled for AWs.

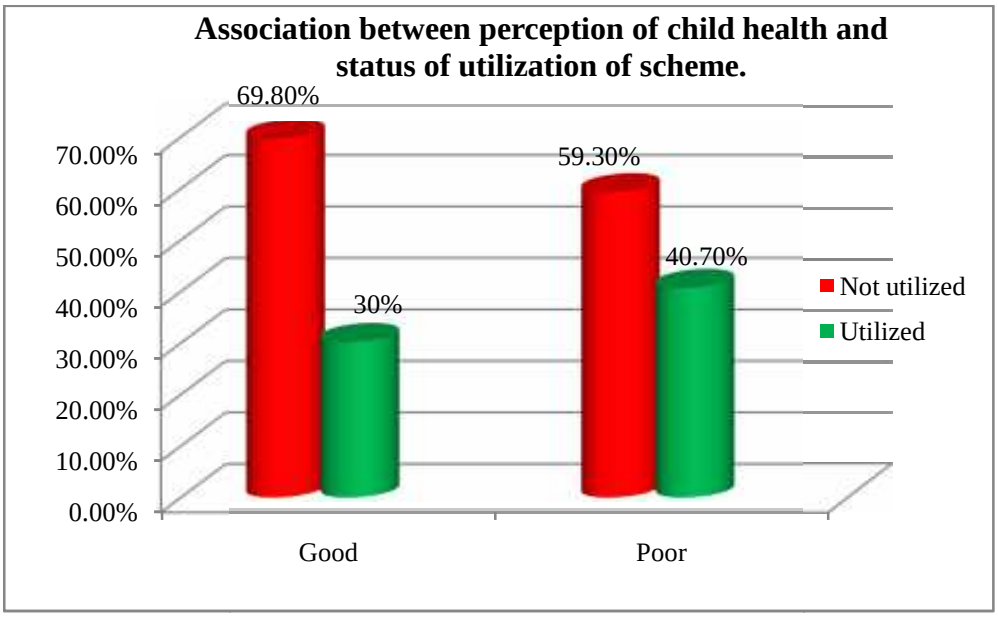
The association between facilities at AWs and status of utilization is significant (Chi Square = 15.582, P = 0.004*).

Table: 5.20 Association between Perception of child health and status of utilization of the Scheme

Perception of child health	Not utilized	Utilized	Total
Good	134 (69.8%)	58 (30.2%)	192 (100%)
Poor	99 (59.3%)	68 (40.7%)	167 (100%)
Total	233 (65%)	126 (65%)	359 (100%)

X^2: 4.331, df: 1, p Value: 0.03741*

Figure: 5.20.1



Parents were also asked the question as perception of child health as they believe good or poor. Among 192 parents who perceived the child health as good, 134 (69.8%) had not utilized the scheme and 58 (30.2%) of them utilized the scheme. 167 Parents who reported their child health as poor, amongst them 99 (59.3%) had not utilized the scheme and 68 (40.7%) of them had utilized the scheme.

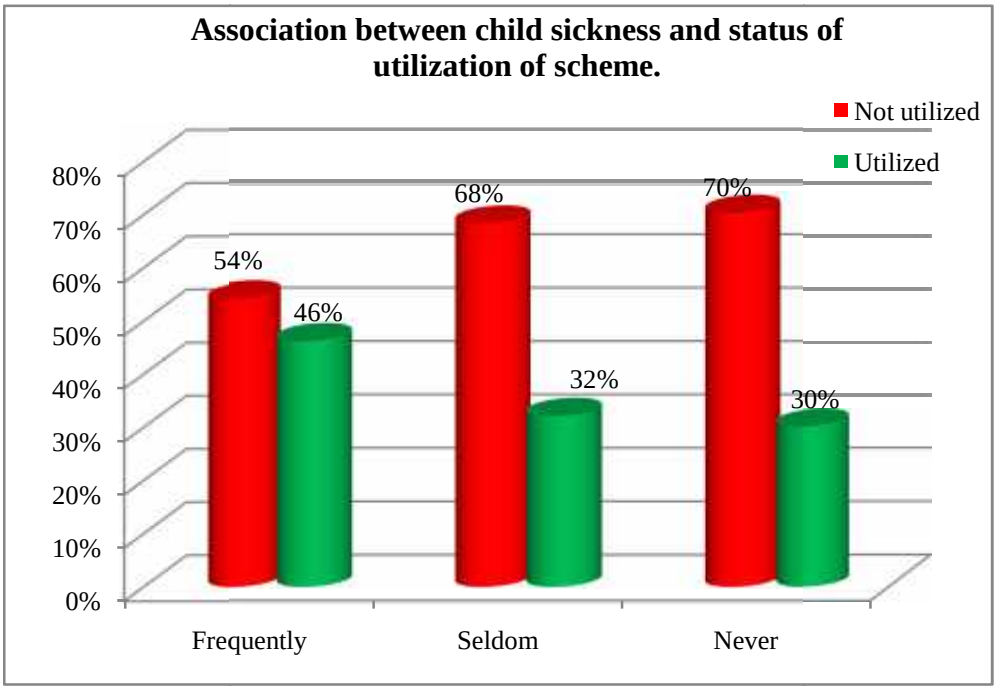
The association between perception of child health and Status of utilization of scheme is found to be significant (Chi Square = 4.331, P = 0.037*)

Table: 5.21 Association between child sickness and status of utilization of the Scheme

Child sickness	Not utilized	Utilized	Total
Frequently	48 (54%)	41 (46%)	89 (100%)
Seldom	136 (68%)	64 (32%)	200 (100%)
Never	49 (70%)	21 (30%)	70 (100%)
Total	233 (65%)	126 (35%)	359 (100%)

X^2: 6.343, df: 2, Sig: 0.042 *

Figure: 5.21.1



Mothers' were also questioned on health status of their children; 48 (54%) children fall frequently sick, 136 (68%) seldom and 49 (70%) children never reported to be sick by their mothers. In the group which utilized the facilities of BSS for their children reported as below; 41 (46%) reported as children frequently fall sick, 64 (32%) seldom and 21 (30%) children never felt sick.

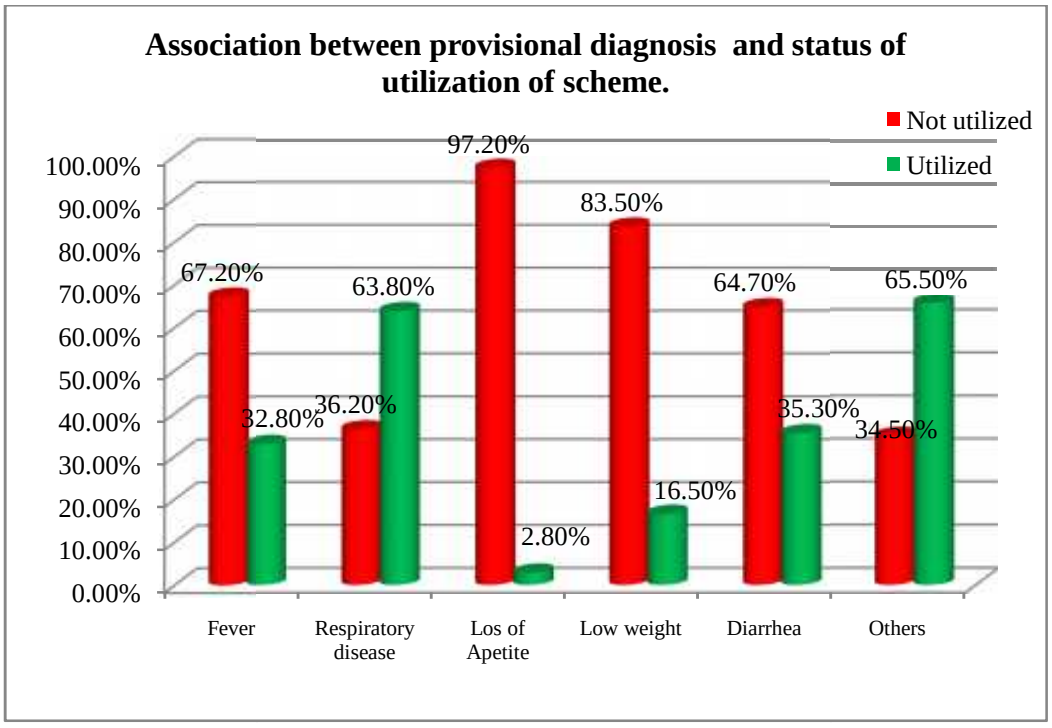
Association between child sickness with respect to status of utilization is significant (Chi Square = 6.343, P = 0.042*). It means that, frequent child sickness is a significant factor in status of utilization.

Table: 5.22 Association between provisional diagnosis of child in health camps and status of utilization of the Scheme

Provisional diagnosis	Not utilized	Utilized	Total
Fever	45 (67.2%)	22 (32.8%)	67(100%)
Respiratory disease	21 (36.2%)	37 (63.8%)	58 (100%)
Loss of Appetite	35 (97.2%)	1 (2.8%)	36 (100%)
Low weight	91 (83.5%)	18 (16.5%)	109 (100%)
Diarrhea	22 (64.7%)	12 (35.3%)	34 (100%)
Others	19 (34.5%)	36 (65.5%)	55 (100%)
Total	233 (65%)	126 (35%)	359 (100%)

X^2: 6.343, df: 5, p value: .0001*

Figure: 5.22.1



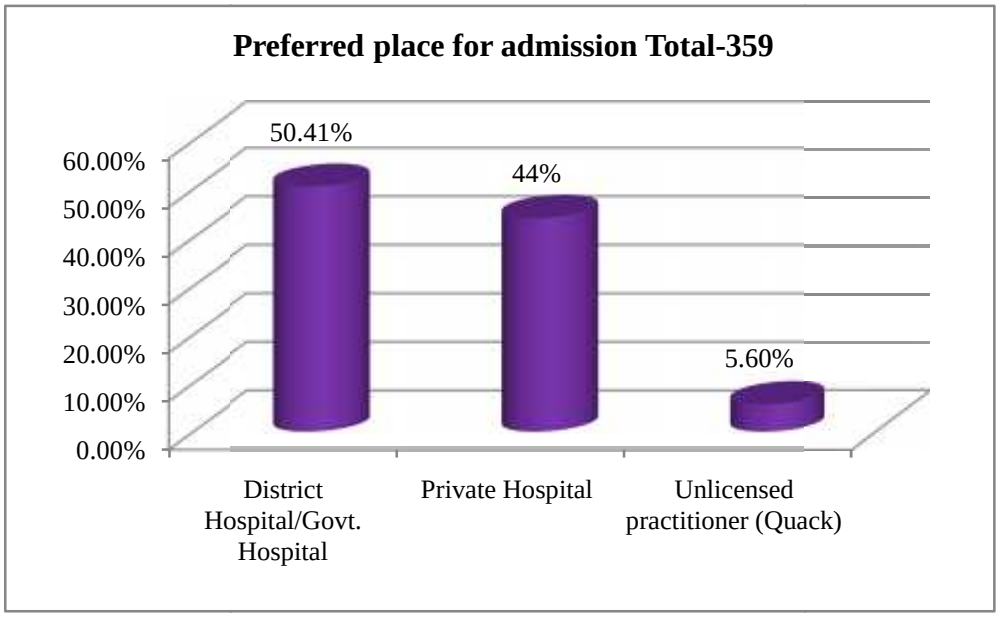
Health camps were conducted for the beneficiaries in their nearest PHCs/Sub Centre's and the children were provisionally diagnosed by Pediatricians as follows in the non-utilized category; 45 (67.2%) children had fever, 21 (36.2%) of the children were suffering from Respiratory disease, 35 (97.2%) children reported loss of appetite, 91 (83.5%) children were victims of low weight, 22 (64.7%) were having Diarrhea and 19 (34.5%) children reported with various other ailments. In the utilized group 22 (32.8%) children had fever, 37 (63.8%) were affected with respiratory disease, 18 (16.5%) had low weight, 12 (35.3%) haddiarrhea and 36 (65.5%) were victims of various other ailments. The 2nd group children were admitted and utilized the facilities of the BSS.

Low weight and Loss of appetite is not considered as major health issue among the not utilized group of study participants. The children with respiratory problems have utilized the scheme more than any other health conditions. The association between the provisional diagnosis and Status of utilization of scheme is significant (Chi Square = 76.402, P = 0.001*)

Table: 5.23 Association between treatment of choice and status of utilization of the Scheme

Preferred place for treatment	Total
District Hospital/Govt. Hospital	181 (50.41%)
Private Hospital	158 (44%)
Unlicensed practitioner (Quack)	20 (5.6%)
Total	359 (100%)

Figure: 5.23.1

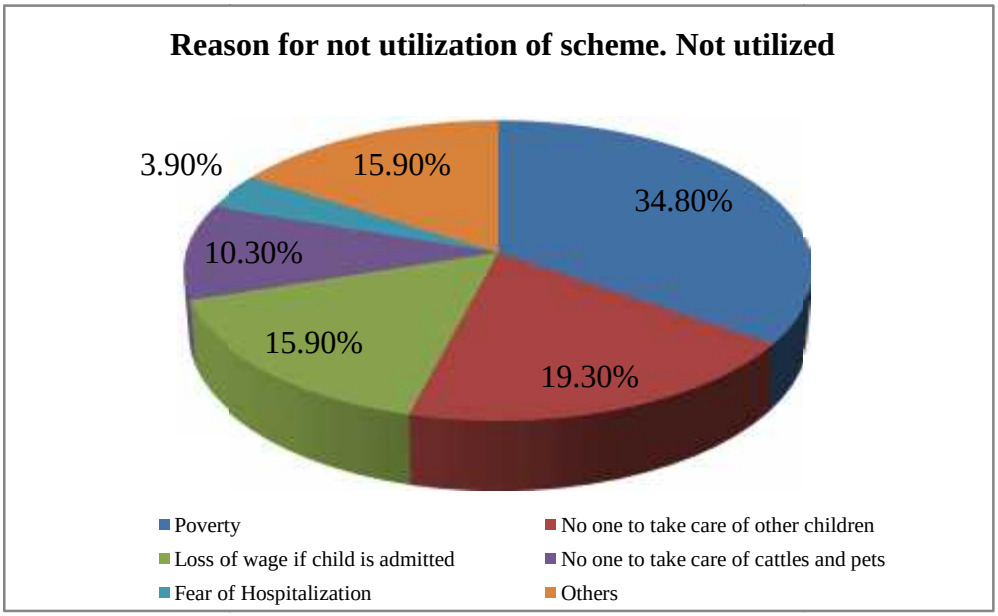


The health seeking pattern of the parents was probed after the health check-up camp, to know the preferred place of treatment for their children. Total respondents were 359 among them 181 (50.41%) preferred to get admitted and take treatment at District Hospital/Government hospitals. 158 (44%) of them preferred admission in Private Hospital and 20 (5.6%) of the respondents preferred to be treated locally by unqualified person.

Table: 5.24 Reason for not utilization of the Scheme

Reason for not utilization of the Scheme	Not utilized
Poverty	81 (34.8%)
No one to take care of other children	45 (19.3%)
Loss of wage, if child is admitted	37 (15.9%)
No one to take care of cattle's and pets	24 (10.3%)
Fear of Hospitalization	9 (3.9%)
Others	37 (15.9%)
Total	233 (100%)

Figure: 5.24.1

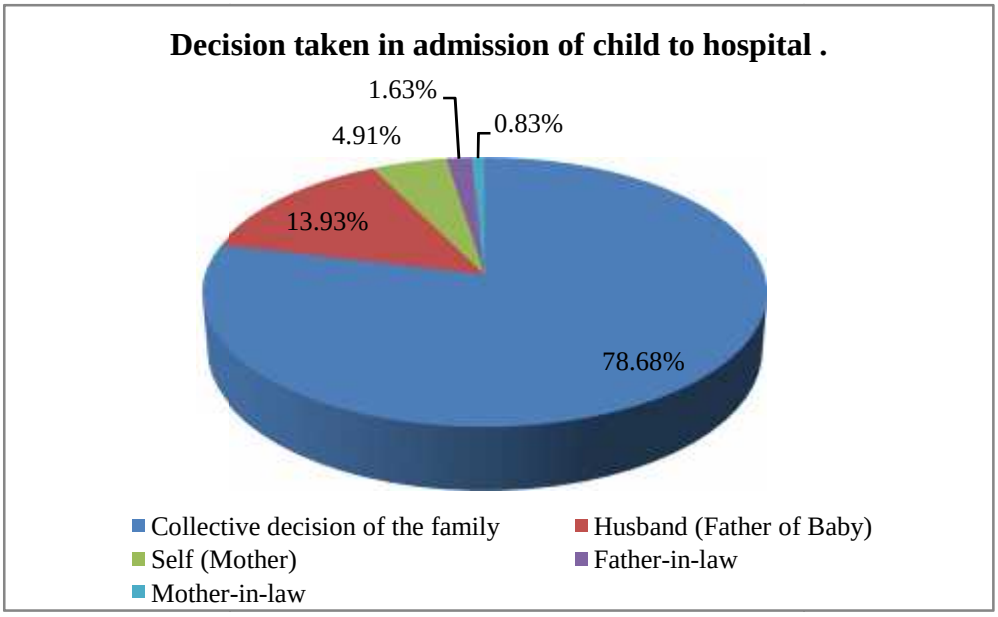


The fundamental point of why parents do not utilize the BSS was also analyzed as majority of the studies restricted to poor awareness level about the scheme was the main reason for underutilization of the different health schemes. Apart from awareness the study established following various socio-economic reason for non-utilization of the scheme that are; The priorities are 81 (34.8%) have cited Poverty as the major reason for underutilization, 45 (19.3%) of parents feel that, If one child is admitted no one to take care of other children back in home, 37 (15.9%) have expressed that, if the child is admitted to the hospital parents would lose their wages, equally 37 (15.9%) have quoted other reason like marriage in the family, village festival, etc. and 9 (3.9%) raised element of fear of hospitalization has also emerged in the study for non-utilization of the scheme.

Table: 5.25 Decision taken in admission of child

Decision taken in admission of child	Utilized
Collective decision of the family	96 (76.2%)
Husband (Father of Baby)	20 (15.9%)
Self (Mother)	7 (5.6%)
Father-in-law	2(1.58%)
Mother-in-law	1 (0.8%)
Total	126 (100%)

Figure: 5.25.1

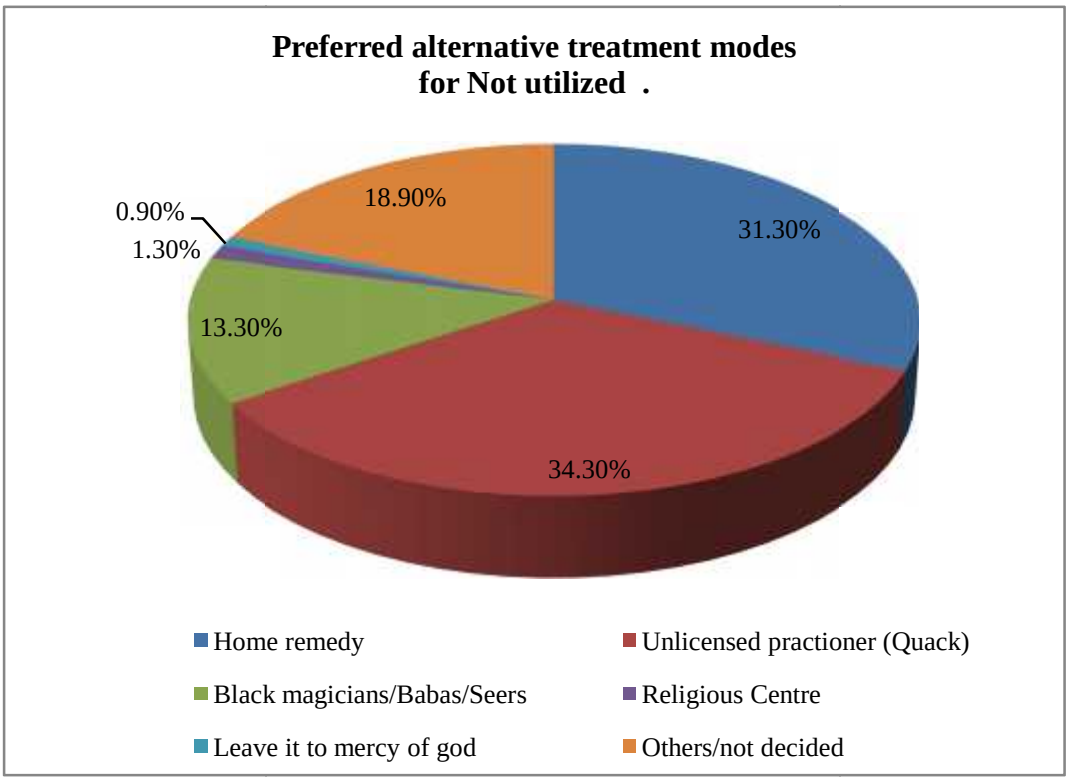


The decision of admission of child to hospital is the important decision to be taken in the family. It is In-Laws decide in 2 % of cases and the husband decides in 20 (15.9%) episodes self (Mother) decides in just 7 (5.6%) cases but the majority of the times it is the collective decision of the family i.e., 96 (76.2%)

Table: 5.26 Use of Alternative to prescribed medicine (For not utilized only)

Preferred Alternative treatment modes	Response
Home remedy	73 (31.3%)
Unlicensed practitioner (Quack)	80 (34.3%)
Black magicians/Babas/Seers	31 (13.3%)
Religious Centre	03 (1.3%)
Leave it to mercy of god	02 (0.9%)
Others/not decided	44 (18.9%)
Total	233 (100%)

Figure: 5.26.1



In spite of all the efforts there is group of 233 mothers who refused to accept the treatment under BSS. In such a case the investigator found out where they seek treatment other than prescribed allopathic treatment. 73 (31.3%) of the mother look for home remedy, 80 (34.3%) prefer unlicensed practitioner (quack) due to convenience; mothers take their children to either religious centre or leave it to mercy of god in 5 (2.2%) cases. Parents visit Black magicians; Seers in 31 (13.3%) cases. 44 (18.9%) families were undecided about the future treatment for the children.

Table: 5.27 Association between knowledge of BSS and status of utilization of the Scheme

Knowledge about BSS	Not Utilized	Utilized	Total
Balasanjeevini	40 (72%)	15 (28 %)	55 (100%)
Don't Know	193 (63.5 %)	111 (36.5%)	304 (100%)
Total	233 (65%)	126 (35%)	359 (100%)

X^2 = 1.746, df: 1, p Value: 0.186

Amongst 55 study subjects 40 (72%) of them had not utilized the scheme and 15 (28%) of them utilized the BSS. 304 of them who never heard about the scheme amongst them 193 (63.5 %) had not utilized the BSS and 111 (36.5%) were admitted to the hospital and utilized the scheme.

There is no significant association between the knowledge about scheme and utilization of BSS.

Figure: 5.27.1

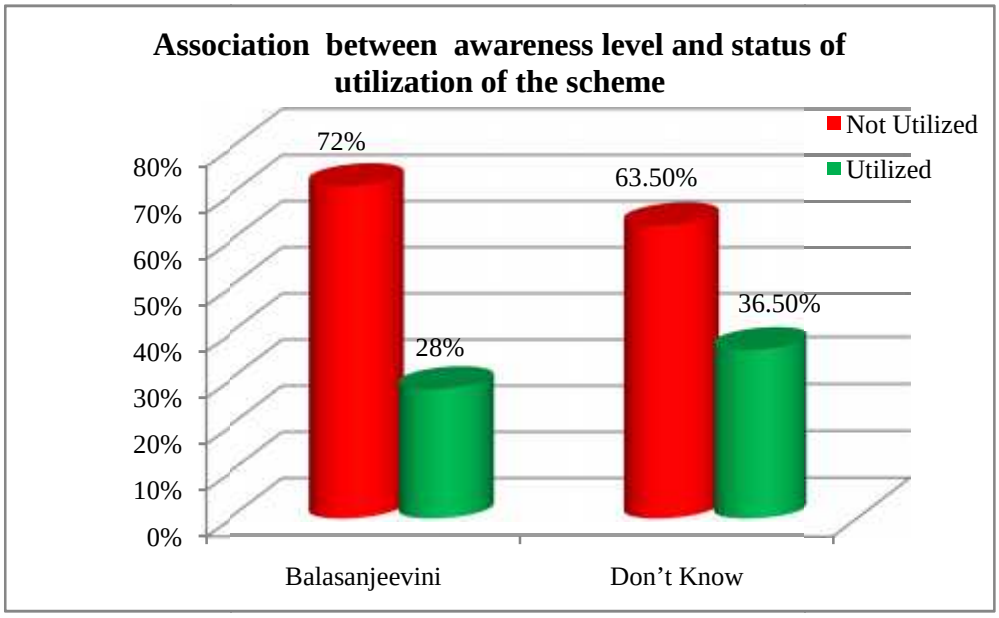


Table: 5.28 Source of Information about BSS (Beneficiaries knew from)

Source of information about BSS	Beneficiaries knew from
Health Worker/ANM	09 (16.3%)
AWW	45 (81.8%)
PHC/UHC Staff	01 (1.8%)
Total	55 (100%)

Majority of the BSS beneficiaries knew about the scheme from AWWs i.e, 45 (81.8%), Health workers/ANM provided information to 9 (16.3%) and only one received information about the benefits of the scheme from PHC staff.

Figure: 5.28.1

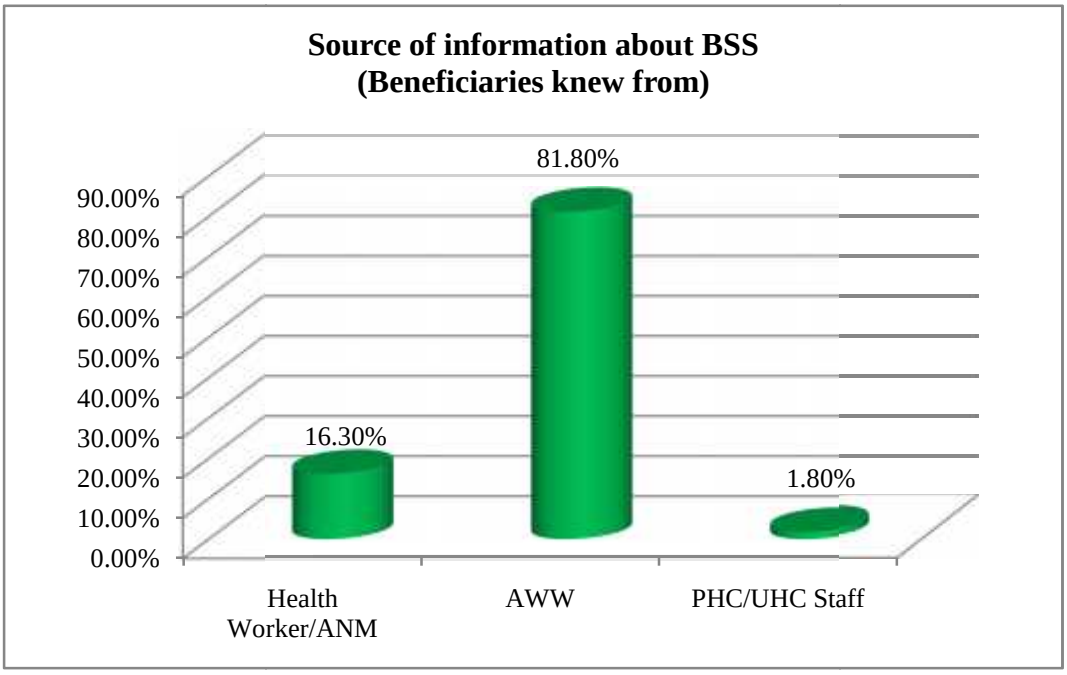
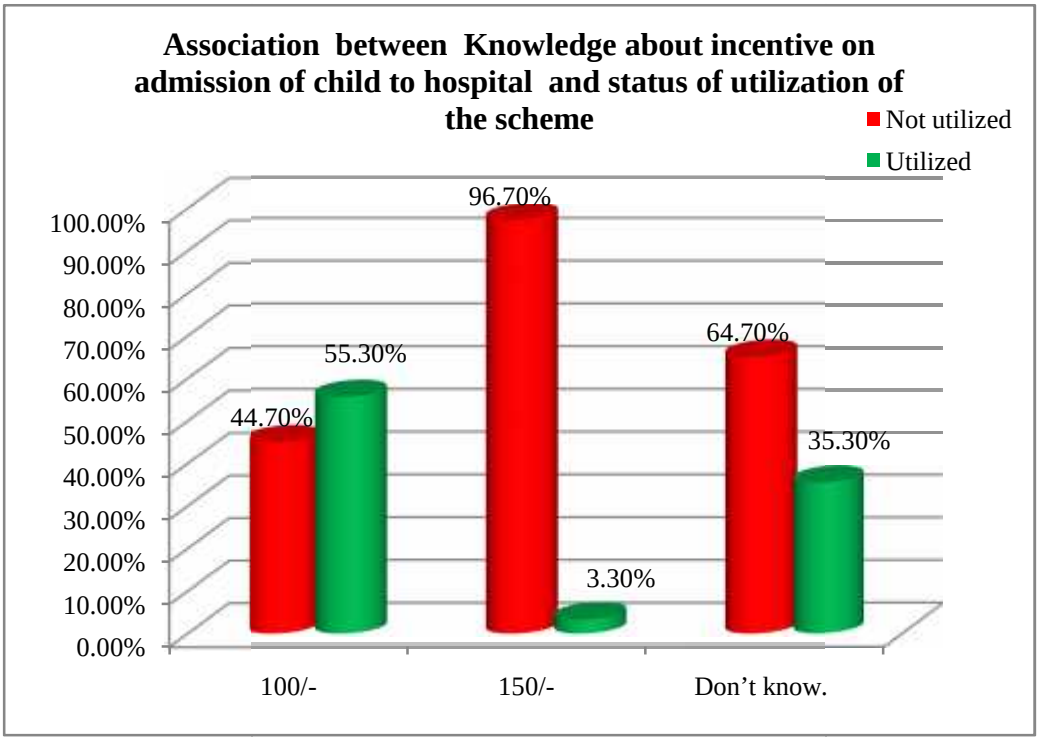


Table: 5.29 Association between knowledge about incentive to parents (Loss of wages) on admission of child to hospital and status of utilization of the Scheme

Knowledge of incentive to beneficiaries (Rs/Per day)	Not utilized	Utilized	Total
100/-	21 (44.7%)	26 (55.3%)	47 (100%)
150/-	29 (96.7 %)	01(3.3 %)	30 (100%)
250/-	02 (100 %)	--	02 (100%)
Don't know.	181 (64.7 %)	99 (35.3%)	280 (100%)
Total	**233 (65%)**	**126 (35%)**	**359 (100%)**

X^2 = 22.851, df= 3, p value= 0.001*

Figure: 5.29.1

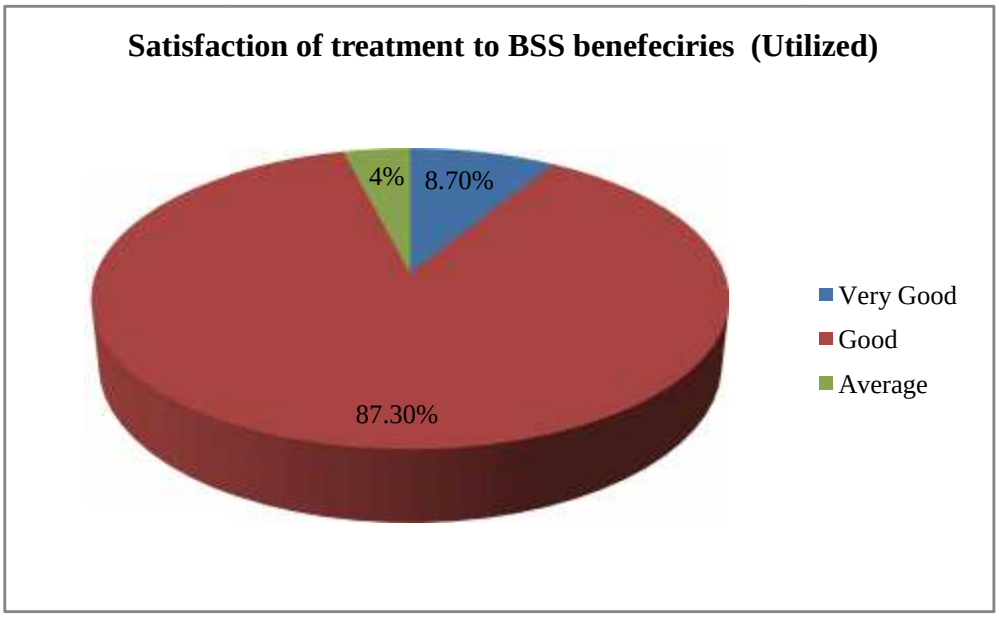


If the child is admitted to the Hospital an incentive of Rs. 100/- is paid to the parents to partially defray the loss of wages. Among 47 participants who said Rs. 100/- as incentive, 21 (44.7%) of them had not utilized and 26 (55.3%) had utilized the scheme. 30 participants responded incentive as Rs. 150/- among them 29 (96.97%) has not utilized and only 01(3.3 %) has utilized the scheme. 280 participants had no information about the incentive, amongst them 181 (64.7 %) of them have not utilized and 99 (35.3%) of them took benefit of the scheme. The association between knowledge about incentive and status of utilization of the scheme is found to be significant (p value=0.0001*)

Table: 5.30 Satisfaction of treatment at Net Work Hospital for BSS beneficiaries

Satisfaction of treatment for BSS beneficiaries	Response
Very Good	11 (8.7%)
Good	110 (87.3%)
Average	05 (4.0%)
Total	126 (100%)

Figure: 5.30.1



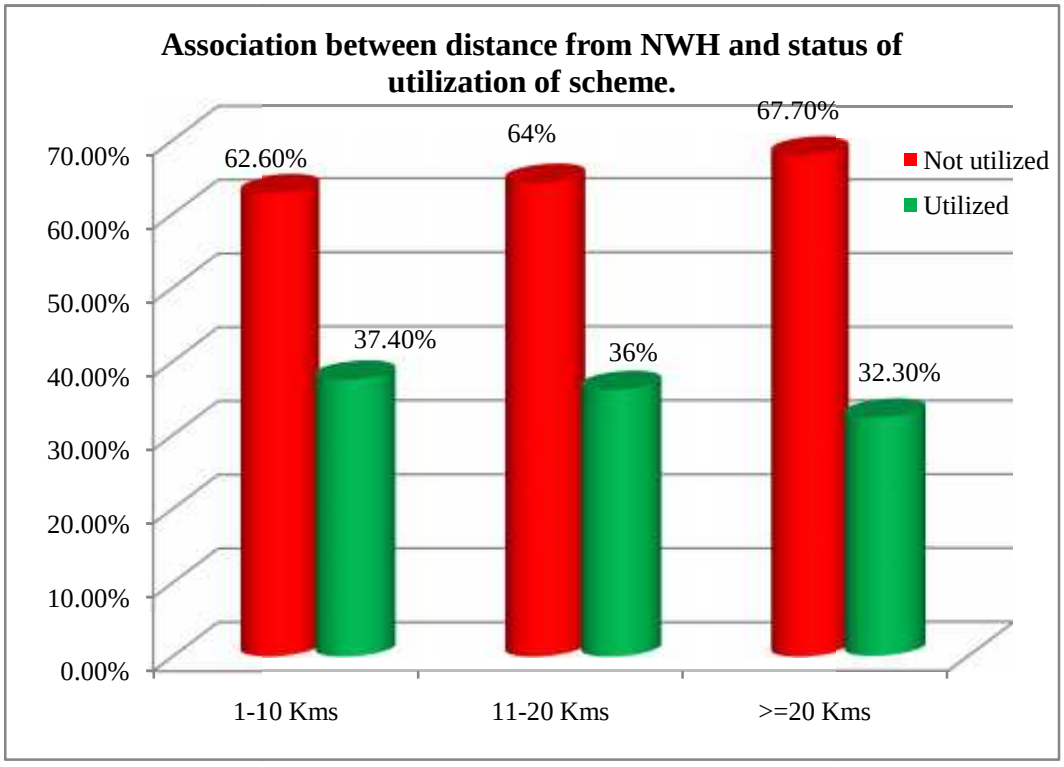
The feedback about the satisfactory treatment under the BSS was obtained from the beneficiaries which is as follows; 11 (8.7%) rated the treatment under the BSS in NWH was very good, 110 (87.3%) respondents termed it as good and 05 (4.0%) rated it as average. It can be stated that the overall in-patient treatment under the BSS for children is rated as Good by parents.

Table: 5.31 Association between distance from village to NWH and status of utilization of the Scheme

Distance from Village to NWH	Not Utilized	Utilized	Total
1-10 Kms	67 (62.6%)	40 (37.4%)	107 (100%)
11-20 Kms	76 (64%)	43 (36%)	119 (100%)
>=20 Kms	90 (67.7%)	43 (32.3%)	133 (100%)
Total	233 (65%)	126 (35%)	359 (100%)

X^2 = 0.7480, df: 2, p Value: 0.6880

Figure: 5.31.1



107 study participants whose distance from NWH to their place of residence (village) is between 1-10 Kms among them 67 (62.6%) have not utilized the scheme, 40 (37.4%) have utilized the scheme. 119 participants who are at a distance of 11-20 Kms; 76 (64%) of them did not utilize the scheme and 43 (36%) had utilized the benefit fo the scheme. Parents staying >= 20 Kms away from NWH in this group of 133, 90 (67.7%) of them not taken benefit of the scheme and 43 (32.3%) of the parents admitted their child and utilized the scheme. The association between distance from villages to NWH is not a significant factor in status of utilization of the scheme.

Table: 5.32 Comparison of Utilization of scheme

Variables	Not utilized(not admitted)		Utilized(admitted)	
	Mean	**SD**	**Mean**	**SD**
Age in months	37.12	16.61	26.87	20.18
Birth Order	1.94	0.91	1.83	0.87
No. Of Children	2.27	0.95	2.05	0.87
No. of Male Children	1.03	0.78	0.99	0.71
No. of Female Children	1.28	1.18	1.06	0.99
Age of Mother	25.62	3.07	25.85	3.85
Total Number of Family Members	6.26	2.54	6.27	3.07
Expenses for health care per child/per year*.	1840.62	2287.93	3148.02	5157.23
Distance from Village of Nearest Hospital	16.67	8.68	16.06	6.86

*****The amount spent for child's health care differs very vastly. The bare minimum amount being Rs. 500/- . In few cases parents have spent more than 35,000/- for children. Hence there is a wide variation and S.D is more than mean.

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Results

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Conclusion

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Recommendations

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Annexures

6. DISCUSSION

STRENGTH OF THE STUDY

Majority of the studies on low socio-economic children have concentrated on evaluation of ICDS program like preschool education, physical infrastructure of AWs, Monitoring of ICDS program, challenges in scaling up of ICDS activities, restructuring, funding modes, training facilities offered to AWWs and Supervisors, Supplementary Nutrition Program (SNP), verification of documents[82-88] etc. However, the study conducted in Borough, Kolkota[80] has addressed only the issue of pre-school benefit and weather health check-ups are conducted regularly.

Very few studies are conducted with the aim of finding caregivers (Mothers) perception/feedback about the services offered at AWs. Ultimately it is the care givers opinion matters the most as they are the major stake holders who can feel the AW services on day to day basis. In this study the attempt has been made to find out the caregivers perception about the services offered through AWs. The findings of the study of Belagavitaluk are as follows;

- 85 % of the children attend AWs regularly (Table 5.18)
- 61.7% of mothers expressed satisfaction regarding facilities at AWs (Table 5.19)
- 53.5 % of the mothers perceive their child health is good (Table 5.20)
- Almost 30 % of children are suffering from poor weight to their age (Table 5.22)
- Health seeking behavior of 6% of parents is with Quacks (Table 5.23)
- Poverty is the overriding factor in underutilization of BSS i.e., 35% (Table 5.24)

Children born in various countries live a full, healthy life of different years depending on, in which country they are born. The child born in Sweden or Japan is likely to live up to 80 years or above. The baby born in Brazil can live up to the age of 72-75 years. In India it is 65-67 years. In few African countries it could be less than 50 years. The above evidence is an enough of indication to prove that the socio-economically strong nations have better quality of life and high life expectancy and it is vice-versa with low socio-economic countries. Health inequities are a matter of great concern and many young & productive lives have been victims of social & economic disparity. Scaling-up the socio-economic conditions of the needy is the only solution to bring remarkable change in health scenario of the country.

We searched through various literatures to find out the reasons for low utilization of Public Health Schemes by beneficiaries majority of the previous studies have established that, poor awareness[104,105], poverty[106,107] distance from hospital[108] non-medical out of pocket expenses[109] language barriers etc.

But no significant investigation is conducted to establish the intricate compulsions of Indian poor families in underutilization of public health schemes. The multi-disciplinary research approach between medicine, social sciences and management is a rare phenomenon and no path breaking studies are conducted. The present investigation has gone deep into the family compounding factors that precipitate in under-utilization of health scheme. The investigative parameters included viz; If one child is hospitalized who will take care of other small children in a nuclear family, Fear of Hospitalization, Cattles and pets need to be taken care, loss of wage is an issue as majority of them are dependent on daily earnings. This study

will open newer insight into the socio-economic aspects which are not comprehensively addressed in earlier studies.

The study was conducted in Belagavitaluka of Belagavi District of Karnataka State to know the Socio -Economic determinants in utilization of the BSS amongst the BPL families of 0 to 6 years children. The awareness level of mothers in utilization of scheme for children was evaluated. The barriers in utilizing the scheme were also studied extensively. If mothers do not utilize the scheme where do they further seek the treatment for their sick children was also investigated in the present study. The researcher selected a calculated sample size of 359 respondents from Belagavitaluk. On this representative sample, a survey was conducted to find out the extent of awareness and barriers encountered by mothers in utilization of the scheme. An interview schedule was used to collect data for the study. This data collection instrument comprised of Socio-economic status, prevalence of disease among children, when child is unwell where do parents seek the treatment, awareness level about the scheme and other open as well as close ended questions. The results obtained were statistically analyzed in SPPS-20 software.

6.1 Brief Socio-economic profile of the families:

SES was measured by education, income, occupation and in the type of house the beneficiaries live.

In the current study total study subjects (children) were 359 among them 233 (64.90%) parents did not utilize the health facilities of BSS for their children, only126 (35.09%) parents utilized the benefits for the BSS for the children. Further, extensive

investigation was carried out to establish the health seeking behavior of caregivers. The results are as follows;

In this study, total 359 children were study subjects among them 179 (49.8%) were male and 180 (51.2%) were female children in the age group of 0 to 6 years (Table-4.1.1). Majority of the participants belong to Hindu religion 326 (90.8%) and 33 (9.2%) were belonging to Muslims & other minority religions (Table-4.1.6). About 314 (87.7%) of mothers were within the age group of 25 to 29 years with mean age of 26 years (Table 4.1.3). About 287 (79.9%) mothers were educated up to high school level, 41 (11.4%) mother were educated between PUC to degree level and 7 (2%) mothers' underwent adult education. There were 30 (8.3%) mothers who were unable to read or write (Table 4.1.4). 180 (50.1%) of the households did not own any agricultural land however 179 (49.9%) of the households had agriculture land (Table-4.2.1). 102 (28.4%) of the households stayed in Pukka (Concrete) House remaining 257 (71.5%) families live in Kachha (Mud & Stones) house, sheds or huts (Table-4.2.3). The food habits of the families are 107 (29.8%) are vegetarians and 252 (70.1%) are non-vegetarians (Table - 4.1.10). 234 (65.2%) children belong to joint families and 125 (34.8%) children hail from nuclear families (Table- 4.1.9). About 160 (44.5%) families have two wheelers in their homes and 199 (55.5%) do not possess any vehicles (Table -4.2.6). It was found in the study that, 256 (71.4%) of the households have toilet facilities and 103 (28.6%) did not have toilet facilities in the home (Table – 4.3.3). Regarding the average household income, the income level of 260 (72.4%) families is between Rs.3000 – 6000 per month. Only 99 (27.5%) of the household income is between Rs. 6000 to 8000 and above (Table 4.2.2).

6.2 Occupation of Mothers (Table 5.5): In our study, about 4.45 % of mothers were engaged in skillful jobs, 54.4% were working as Agriculture laborers and 40.94% were housewives. In contrast in the study[79]. 89 % of the mothers were house wives, mere 1.2 % was cultivators and 8.8% were engaged in skillful works. It is quite evident from study[79] that majority of them were house wife and were not involved in any income generation activity for the family. Further, Belagavitaluk has favorable climate, fertile land, receives good rains and mothers' are engaged in agricultural activates and add-on income to the family. The study conducted in Udupi in Karnataka represents 77.7% of mothers as housewife, 21 % of them perform semi-skilled jobs and 2 % in government jobs. Main occupation of particularly BPL families in Udupi is fishing. The study has not considered fishing as occupation in its data collection[81].

6.3 Education of Mothers (Table 5.6): Educated and empowered mothers are fairly good in identifying early childhood health problems. In the present study, about 79.9% mothers were educated up to high school level. 11.4% mothers' were educated between PUC to degree level and 2% mothers underwent adult education. 8.3% of mothers were unable to read or write (illiterates). The similar level literacy of mothers' is reported in the study[79]. However, a study conducted in coastal district of Udupi in Karnataka, 30% of the mothers were educated up to primary level, 63% of them were educated up to High school and 7 % of the mothers were illiterates The study highlights that even after 71 years of Independence the education levels of female has not substantially increased. Majority of the females stop their education at 10^{th} standard. Education is one of the key factors in brining socio-economic change thus the health standards of the family and children. Educated mothers' recognizes the health complications of the child in its earliest stage and take appropriate remedial

measures to avoid further complications[89]. Maternal education plays an important role in substantially reducing childhood diseases[90]. A study conducted in Iran is also consistent with other studies highlights that educated mothers provide better health care to children but adds on working women have given low birth weight babies[91].

The study conducted on adopted children also substantiates that mothers education has positive impact on children health[92].Our study also depicts almost similar level of education between those who utilized the BSP facilities or not (Table-3).

6.4 Religion (Table 5.10): Majority of the participants i.e., 90.8% of them were belonging to Hindu religion and 9.2% were Muslims & other minority religions. The findings of the Study conducted in Borough, Kolkata has also same results i.e, 82.3% were Hindus and 17.3 % belonged to Muslims & other minorities[79]. Another study conducted in Coastal Karnataka showed similar results with respect to religion[81].

6.5 Income (Table 5.11): 56.8 % of the respondents in the present study group has monthly income betweenRs. 3000/- to 5000/- and 25.3 % of them have income between 5000 to 7000/- remaining 17.5% have monthly income above Rs7,000/- and above. Almost similar income brackets and are reported in studies conducted at East Delhi & South Indian populations[123, 124].

Astudy conducted in Manipal, Karnataka on BSS has also reported that 95 % of beneficiaries are from lower class income group (Class V), 4 % from lower middle incomegroup (Class IV) and 1% from middle class income group (Class III). The socio economic background of the study also is concurrent with our study[125]. As per the B G Prasad scale (2014) majority of the subjects in the present study i.e; 262 (73%) belongs to Class V Socio-economic status. 95(26.46%) represent Class IV and

only 2 (0.56%) fall into Class III socio-economic class. In the present study as per the B G Prasad Scale (2014), the Socio-economic class of study subjects is low.

6.6 Quality of food at AW's (Table 4.4.3) In the present study 92% of the mothers have rated the quality of food served at AWs is good and only 8% of the mothers have expressed their dissatisfaction. Similar results are found in study conducted on ICDS program in West Bengal reported 88 % of mothers were satisfied with the quality of food being served to AW children [79]. In another study 95 % of the beneficiaries have rated the quality of food was good and 5 % were dissatisfied with quality of food served at AW's [79]. 72% of the mothers have endorsed the quality of food[8]. More or less the quality of food served at AW's is same and close to 90 % of the beneficiaries are satisfied with the quality of food and is in consistent with the present study.

6.7 Prevalence of childhood disease among study participants (Table 5.22): In this study, 30% of the children in the age group of 0 to 60 months were under weight. Pondicherry based similar study reported 22.3% children were below than normal weight. Pondicherry has highest literacy rate and low weight for child age in that state is less compared any other Indian States[93].NFHS-3 reported 27% children are suffering from low weight in Delhi. The presence of low weight in our study is slightly higher than studies conducted at Pondicherry and Delhi[94]. Delhi & Pondicherry being highly educated, economically strong states with easy availability, accessibility of good medical care are the factors for reduction in low weight in those states.

In our study, 16% of the children reported to be suffering from respiratory disease which is similar to the studies conducted in Delhi slum and resettlement colony of Delhi[95,96].

The prevalence of diarrhea among children in the present study is 9.4% and is almost similar to the studies[96, 103].

18.6 % of the children are reported to be suffering from some sort of fever (unknown origin) as reported by caregivers which is slightly higher than the study conducted in Bangladesh which recorded 12.2% children in the same age group had fever[97]. NFHS-4 reported prevalence of fever is 13 % among the children up to the age of 60 months[81].

In the current study 19.3% of the caregivers did not utilize the facilities of the BSS; similar results are found in refusing to take treatment for fever in the study conducted in Myanmar[98]; also more or less 12.5 % caregivers had not taken treatment for malarial fever in another study[99]. It is noticed in the study that the caregivers utilization of BSS is poor in case of fever i e., 17.5 % utilized BSP and 19.3% did not utilize the BSS facilities and services.

10% of study subjects had loss of appetite in our study which was almost same as that study conducted in Bangladesh[97].

15% children had other medical problems like ear discharge, congenital disorders, etc., (Table-31). Prevalence of childhood disease in Belagavitaluka is almost similar to the other studies.

6.8 Preferred Place of admission of child to hospital (Table 5.23): A probe was conducted to the participants to find out the preferred treatment destination for secondary care for the unwell child. In this study 50% of them preferred District Hospital/Governmenthealth care facilities Hospital for secondary care to the child. A study conducted by KasturiSen on Health reforms presented that in West Bengal

19.8% and in Tamil Nadu 40.1% of the population seek treatment in Public health facility[120].

44% of them prefer Private Hospitals for secondary care. 67.8% of vulnerable population in West Bengal prefers Private health facility for secondary care and more or less equal percent of population in Tamilnadu 58.9 %[120]seek treatment in Private hospitals.

In this study 6% caregivers visit unlicensed doctors (quacks); in a study[120] 2.3% visit Traditional healers & 10.1 % prefer other forms of treatment options.

In our study 50% of the caregivers prefer Government Hospital as treatment option for secondary care. However, only 22.7% participants of the study conducted by Indrani Gupta prefer treatment in Government hospitals[114].In another study conducted in Bangladesh only 10.2% utilized Government health facilities[115]. The low uptake of government facilities in cited studies could be due to poor infrastructure, non-availability of specialists' doctors and inaccessibility of the government hospital. District Hospital Belagavi is preferred place for treatment to the children because it has established Pediatric Department, well qualified and experienced Pediatricians with NICU, PICU, NRC and is easily accessible to the clients and is situated in heart of city. Further, District Hospital Belagavi is a teaching hospital of Belagavi Institute of Medical Sciences, Belagavi. In the current study 44% prefer treatment in Private Hospital and 5.5% visit quacks; but in the other studies[114,115] 35.22% & 31.1% prefer private facilities and 12.63 % & 3.6% prefer treatment from unqualified personnel.

6.9 Reason for not utilization of the scheme (Table - 5.24): We searched through various literatures to find out the reasons for low utilization of Public Health Schemes

by beneficiaries; majority of the previous studies have established that, poor awareness[104, 105], poverty[106, 107] distances from hospital[108] non-medical out of pocket expenses[109] language barriers etc.

But no significant investigation is conducted to establish the intricate compulsions of Indian poor families in under utilization of public health schemes. The multi-disciplinary research approach between medicines, social sciences is a rare phenomenon and no path breaking studies are conducted. The present investigation had explored the family compounding factors that precipitate in under-utilization of health scheme.

Almost 35% of respondents had quoted that the poverty is the main determinant in underutilization of the BSS, which is consistent with other studies[111, 112,113]. 19.3% parents had not sought treatment under the BSS which is alarmingly high as there was no one to take care of other children back in home.16% of the mothers had expressed the loss of wage, if child is admitted to hospital. 9% of the mothers have expressed fear of hospitalization, 10.3% of mothers have informed that if the child is admitted to hospital there will be nobody to take care of their cattle and pet and 16% of them had given various other reasons like a marriage in family, festivals, customs, etc.A study published from University of Wales also recommended the parents and other children need to be accommodated to take care of the sick child[110].

6.10 Use of alternative to prescribed medicine (Use of alternative treatment options) – (Table- 5.26) In spite of all the efforts there is group of 233 caregivers who refused to accept the treatment under BSS. In such a case the investigator found out where they seek treatment other than prescribed allopathic treatment. 73 (31.3%)

of the mothers look for home remedy, 80 (34.3%) prefer village unlicensed doctor (quack) due to convenience; mothers take their children to either religious centre or leave it to the mercy of god in 5 (2.2%) cases. Parents visit black magicians; seers in 31 (13.3%) cases. 44 (18.9%) families are undecided about the future treatment for the children.

6.11 Awareness level of BSS – (Table5.27): In the present study 15.3 % of them who have utilized the facilities of the BSS could recall the name of scheme. In a similar study conducted in tribal belt of Thane, Maharashtra for the ANC beneficiaries 55.4%[116] of the beneficiaries were aware of the scheme; other studies conducted on awareness level of beneficiaries of the health schemes also have recorded an awareness level between 55-85%[117,118,119] . Poor utilization of the current study is associated with low awareness level among the mothers. Surprisingly 17.2% of the caregivers who did not utilize the scheme were aware of the BSS. The above statement proves that overall awareness level of BSS was dismally low among its beneficiaries.

6.12 Source of Knowledge about BSS – (Table 5.28): Majority of the BSS beneficiaries knew about the scheme from AWWs i.e, 45 (81.8%), Health workers/ANM provided information to 9 (16.3%) and only one received information about the benefits of the scheme from PHC staff.

6.13 Monetary benefit under the BSS (5.29): About 13% of the study population in the present study were aware of the exact nature of monetary benefit under the BSS (Rs.100/- per day). In a study[116] over 65 % beneficiaries were aware of the monetary assistance. 8.5% quoted a wrong monetary figure of Rs. 150/- which is higher than

the stipulated by the government. Almost 78% of them were not aware of the monetary benefit of the scheme and is the reason for under-utilization of the scheme.

6.14 Experience of Hospitalization (Table – 5.30): 8.7% of the beneficiaries have rated the services under BSS as very good, 87% as good and about 4% of the mothers have expressed the services as average. Almost 96 % of the beneficiaries have rated as good and is a significant factor in utilization of scheme.

7. CONCLUSIONS

1. Total 359 Children were advised admission by Pediatricians in the health camps conducted in their designated blocks.

2. The health seeking behaviors of mothers for 0 to 6 years children of the BPL families in Belagavitalukwas found to be very poor. 233 (65%) did not sought care (not utilized) under BSS & 126 (35%) sought care (utilized) the benefit of the scheme.

3. Over 50% of BSS beneficiaries prefer District Hospital for admission of their childrenthan Private hospital.

4. Lack of awareness & gaps in Knowledge about BSS is observed in 181 (77%).

5. Caregivers who have utilized the scheme have expressed satisfaction 121(95%) of the treatment offered at Hospital under the BSS.

6. Poor Health seeking behaviorin 233 (65%) may result in manifestation of disease in more serious forms for which further study is required.

7. Poverty, Over 75% of Beneficiaries income of <7000/- per month, 65% live in kachha house, 51% of them cook food on firewood, 48% of fathers have some sort of addiction, 50% of them have no land- all prove poor socio-economic background

8. The study suggests that, need to proactively educate the beneficiaries in the community for optimum utilization of the public health schemes by beneficiaries

8. SUMMARY

This research study titled 'Socio-economic determinants in utilization of Balsanjeevini Scheme in children of 0 to 6 years of age in Below Poverty Line families of BelagaviTaluka' is an observational study. The study is conducted in Belagavitaluk.

The Integrated Child Development Services (ICDS) program is one of the important programs of the Government of India. ICDS comprehensively addresses the nutrition, health and pre-school needs of children from 0 to 6 years of age.

BSS is the ambitious program of W & CWD of Government of Karnataka. The scheme funds for free treatment/surgery in the recognized Hospitals which are known as Net Work Hospital (NWH). The recipients of the BSS are children of BPL families between the age group of 0-6 years. The sole purpose of the scheme is to offer best of the medical services to reduce mortality and morbidity of the children.

The Government of Karnataka has taken immediate steps to address the health problems associated with children up to the age of 6 years through BSS. The children were screened for ailments at PHCs, Sub-Centres (SC) or AWs in the designated blocks. Children requiring further interventions were referred to KLES Dr.PrabhakarKore Charitable Hospital for further management. The investigator through this study has identified under laying socio-economic cause of why parents don't bring their children to Hospitals for further treatment at the right time. The study has also unearthed the reasons for apathy of parents in delaying or refusing for the treatment/surgery/investigations for the needy children. The study further

suggested corrective actions for effective implementation of the BSS. The delay or neglect on the part of parents may lead to mortality and morbidity in children.

The Objective of the study was to know Socio-Economic determinants in utilization of Balsanjeevini scheme in children of 0 to 6 yrs of age in Below Poverty Line families of BelagaviTaluka.

- Health Check-up camp for needy BPL Children in the age group of 0 to 6 years was conducted at nearest PHC/UHC/SCs/AWCs.
- Children who need further investigations/management referred to KLE Dr.PrabhakarKore Charitable Hospital, Belagavi for further management.
- Data was obtained from who sought care and who did not sought care under the scheme.

In this study, total 359 children were study subjects among them 179 (49.8%) were male and 180 (51.2%) were female children in the age group of 0 to 6 years. Majority of the participants belong to Hindu religion 326 (90.8%) and 33 (9.2%) were belonging to Muslims & other minority religions.

About 315 (87.7%) of mothers were within the age group of 25 to 29 years with mean age of 26 years. About 287 (79.9%) mothers were educated up to high school level. 107 (29.8%) were vegetarians and 252 (70.1%) were non vegetarians. 234 (65.2%) children belong to joint families and 125 (34.8%) children hail from nuclear families. Regarding the average household income, the income level of 260 (72.4%) families is between Rs.3000 – 6000 per month.

The health seeking behaviours of mothers for 0 to 6 years children of the BPL families was observed to be poor. 233 (65%) did not sought care (not utilized) the benefit of the BSS & 126 (35%) sought care (utilized) the benefit of the scheme. District Hospital is the preferred destination than Private hospital amongst BSS beneficiaries. Poverty, Over 75% of Beneficiaries income <7000/- per month, 65% live in Kachha House, 51% of them cook food on firewood, 48% of Father have some sort of addiction, 50% of them have no land proves poor socio-economic background. Single window to process scheme related documents for smooth utilization of the scheme is to be considered. The study recommends that wide range of IEC activities to be conducted to create awareness about the schemes.

9. RECOMMENDATIONS

- Recommendation to improve health seeking behaviour amongst family members includes encourage the parents to utilize the facilities of the BSS. IEC activities need to be strengthened. Health education and interaction with mothers to be conducted frequently on the childhood diseases in AW centres, schools, religious places and meetings to improve health seeking behaviour among mothers.
- The present Government policies for improving the overall socio-economic and demography of the poor children need to be reviewed and robust policies to be framed.
- Improvement in the conditions of daily living is essentially required– the situations in which people are born, grow, live, work and age.
- The study recommends urgent need for women empowerment. Particularly on health & hygiene to reduce the burden of childhood diseases.
- Abrupt stopping of BSS is a major setback to deserving BPL families.
- Single window to process scheme related documents for smooth utilization of BSS is recommended

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11. ANNEXURES

ANNEXURE -1 ETHICAL CLEARANCE CERTIFICATE

KLE UNIVERSITY
(Formerly known as KLE Academy of Higher Education & Research, Belgaum)
[Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide Government of India Notification No.F.9-19/2000-U.3(A)]
'Accredited 'A' Grade by NAAC
Office of the Registrar, KLE University,
JNMC Campus, Nehru Nagar, Belgaum-590 010, Karnataka State, India
☎: 0831-2444444/2493779 FAX: 0831-2493777 Web: http://www.kleuniversity.edu.in E-mail: info@kleuniversity.edu.in

Ref.No.KLEU/Ethic/14-15/ D -71 26th May 2014

To,
Mr. Pramod N Sulikeri
Ph.D.Scholar,2013-14
K.L.E. University,
Belgaum.

Dear Research Scholar

The KLE University Ethics Committee on Human Subjects for Ph. D Research Project met on 29th April 2014 to consider your application for approval of the research project

"SOCIO-ECONOMIC DETERMINANTS IN UTILIZATION OF BALSANJEEVINI SCHEME IN CHILDREN OF 0 TO 6 YEARS OF AGE IN BELOW POVERTY LINE FAMILIES OF BELAGAVI TALUKA"

After review of the documents submitted by you and satisfactory explanations provided to the members, the committee has provided approval for this research project.

You are requested to report to Ethical Committee of the following:

1. Any deviation from or change of the protocol.
2. Any changes in study documents.

(Dr. Hema Dhumale)
Member Secretary,
Ph.D. Ethical Committee(Human),
K.L.E. University, Belgaum

(Dr. Sudha A. Raddi)
Chairman
Ph.D. Ethical Committee(Human),
K.L.E. University, Belgaum

CC to: - The Director Academic Affairs, KLE University
- The Director Research Foundation, KLE University
- The Registrar, KLE University
- Special Officer to Hon. Vice Chancellor, KLE University, Belgaum

ANNEXURE -2 PHOTOGRAPHS

MEETING WITH CDPO (RURAL) & ANGANWADI SUPERVISORS

Health Checkup Camp for 0 to 6 Year. Children

ANNEXURE -3

QUESTIONAIRE

Socio-Economic Background of Study Participants

Sl.No	**Name of Child:**
Age/Gender:	**Birth Order:**
No. of Children:1/2/3/4/5	**Child:** Male (1) /Female (2)
Village:	**PHC (1)/UHC (2)/Sub Centre (3):**
Provisional Diagnosis:	**Name of Mother/Age:**
Education of Mother: Primary(1)/ High School(2)/ PUC(3)/Degree(4)/ Adult Education(5)/ Illiterate(6)	
Occupation of Mother: Skilful (1)/ Moderate Skill (2)/ Agricultural labour(3)/ House maker(4)	
Religion: Hindu (1)/ Muslim (2)/ Christian (3)/ Jain (4)/ Others (5)	
Caste: SC (1)/ ST (2)/ Others (3)	**Name of Father/Age**:
Education of Father: Primary(1)/ High School(2)/ PUC(3)/ Degree(4)/ Adult Education(5)/ Illiterate(6)	
Occupation of Father: Skilful (1)/ Moderate Skill (2)/ Agricultural labour (3)/ Men at Home (Not working) (4)	
Habit of Father: No Habits (1)/ Chewing Tobacco (2)/ Smoking (3)/ Alcohol consumption (4)/ Combination (5)	
Education of Father: Primary(1)/ High School(2)/ PUC(3)/ Degree(4)/ Adult Education(5)/Illiterate(6)	
Type of food: Vegetarian (1)/ Non-Veg (2).	**Type of family:** Joint Family (1)/ Nuclear Family (2)
Total No. of family members:	
Total Monthly income (SES): 3000-3999(1)/4000-4999(2)/5000-5999(3)/6000-6999(4)/7000-7999(5)/8000+	
Source of Drinking water: Tap(1)/Well(2)/Hand Pump(3)/Public Water Tap(4)/Others(5)---	
Electric Connection to Home: Yes(1)/No(2)	**Agricultural land:** Yes (1)/ No (2)
Type of House: Pucca(1)/Kachha(2)/Shed(3)/Hut(4)/Others	**Cooking Medium:** Fire Wood(1)/Kerosene stove(2)/Gobar gas(3)/LPG(4)
TV: Yes(1)/No(2)	**Two Wheeler:** Yes(1)/No(2)

Mobile: Yes(1)/No(2)	**Toilet:** Yes(1)/No(2)

(Please Note: Qn. No. 1 to 4 is for children above 3 years who attend AWs).

Questionnaire

Qn. 1. Does the child go to Anganwadi regularly?

1. Yes
2. No

Qn. 2. How are the facilities at Anganwadi.

1. Very Good
2. Good
3. Moderate
4. Poor

Qn. 3.How is the quality of food being served at Agnawadi

1. Very Good
2. Good
3. Moderate
4. Poor

Qn. 4. The learning ability of child after joining Agnanwadi has it improved

1. Yes
2. No

Qn. 5. Is the child active like any other children?

1. Yes
2. No

Qn. 6. Is your child healthy (Perception about child health)?

1. Yes
2. No

Qn. 7. Does your child fall sick?

1. Frequently
2. Seldom
3. No

Qn.8. With what disease, your child is suffering from (since two weeks or more)

1. Fever/Infection
2. Respiratory disease (Cough & Cold)
3. Loss of appetite
4. Low Weight
5. Diarrhea
6. Others

Qn.9. After Health Check-up of child, has it improved its health condition (impact of health camps).

1. Good
2. Poor

Qn. 10. If your child is advised admission, Where do you take your child for further treatment (Place of Secondary Treatment).

1. Dist. Hospital
2. Private Hospital
3. Unlicensed Practioner (Quack)

Qn.11. For your child to get well soon you insist the Doctor to give

1. Tablets
2. Injection
3. Leave it to the judgment of Doctor

Qn. 12. Your child is advised admission, why are you not able to admit the child,
(This question is applicable for those parents who does not seek admission)
(If child is admitted, skip the question. Mark as Not applicable)
Tick appropriate item.

1. Nobody at home to take care of other children
2. Fear of Hospitalization
3. No one to take care of our cattle's
4. Poverty
5. Loss of wages/job
6. Others

Qn. 13. Once it comes to Childs admission to Hospital, Who takes the decision.

1. Mother-in-law
2. Father-in-law
3. My husband
4. My Self (Mother)
5. Collective decision of the family members

Qn. 14. If you don't admit the child at Hospital, then where do you take the child? (Use of alternative medicine) (Applicable to not admitted patients)

1. Home remedy
2. Unlicensed Practioner (Quack)
3. To Temple/Mosque/Church
4. I Leave it to mercy of god
5. Black Magicians/Babas/Seers
6. Others

Qn.15. Name the scheme which offers free treatment to BPL children. (To test the awareness about the title of the scheme)

1._____
2. Not knowing the name of Scheme.

Qn. 16. Where did you get the information about the scheme ?.

1. Health Worker (ASHA)
2. Anganwadi worker
3. PHC Staff
4. UHC Staff
5. Television
6. News paper
7. Television
8. Radio
9. Gram Panchyat
10. Neighbors
11. Pamphlets
12. From Hospitals (Private)
13. Not knowing

Qn. 17 . If Child is admitted, How much incentive is paid to parents (due to loss of wages)

1. Rs. 100/-
2. Rs. 150/-
3. Rs. 200/-
4. Rs. 250/-
5. Don't know.

Qn.18. What is your experience at Hospital (For admitted children only) .

1. Very Good
2. Good
3. Average
4. Bad

Qn. 19. Distance from Place of residence to Hospital ----------

Qn.20 . Approximate Expenses for health care per child/per year----------

ANNEXURE -4

CONSENT FORM

Title of the Study :

Socio-Economic Determinants in Utilization of Balsanjeevini Scheme in Children of 0 to 6 years of Below Poverty Line families of BelagaviTaluka.

Objective/Purpose of the Study :

You are being invited to participate in this study , To know Socio-Economic determinants in utilization of Balsanjeevini scheme in children of 0 to 6 years of age in BPL families of BelagaviTaluka.

Procedures :

This project is not funded by the any organization. We would like to collect some information about you, your spouse, your family and your baby. This information will be kept confidential and will be coded without your name or any other identifying information about you. Health Camps are being organized by Department of Pediatrics of J N Medical College in your nearest Primary Health Centres. Your child will be examined by Specialist. If child is advised further admission/investigation, You will be visited by our research staff or ASHA/ AnganwadiSupervisor at PHC/Anganwadi/your home. You will be asked questions about your Childs health, your family, home, work,

education, habits, income, social practices, beliefs, diet, etc. This is the research data that we will be collecting about your Socio-economic status. This will take about 20-25 mins.

Withdrawal :

Participation in this study is voluntary. If you don't wish to participate in this study, you will not lose any benefits to which you are entitled. You are free to withdraw your consent and to discontinue participation in this study at any time.

Risks & Benefits;

The investigator will not promise or guarantee that you will receive any direct benefit being part of the study. There are no physical risks involved to the participants in this study.

Privacy & Confidentiality:

Your identity will not be revealed. All information collected will be coded so as to keep your identity confidential.

Financial Incentives for participation:

The cost of the study will be borne by the Researcher. There will be no payment to you for participating in this study.

Authorization to Publish the Results:

The results of the study will be used for teaching and medical publications. However, the participants' identification will be kept confidential.

Questions :

If you have any questions about this study, please call PramodSulikeri, Research Scholar at 98443 66188 or Dr. A S Godhi, Principal, J N Medical College, Belgaum 0831 2471350 or Dr. SudhaRaddi, Chairman, Human Ethical Committee, KLE University, Belgaum , Phone No. 0831-2444444.

Consent Statement:

I am making a voluntary decision whether or not to participate in this study. My signature below indicates that I have decided to participate, and I have read (or been read) the information provided above and I was given the opportunity to ask questions and that they have been answered to my satisfaction and that I have received a copy of this signed consent form.

_____	_____
Participants Name	Participants Signature/thumb print
_____	_____
Research Scholar Name	Research Scholar Signature
_____	_____
Witness Name	Witness Signature

Date: _____

ANNEXURE- 5

PUBLICATION

IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
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Leveraging the Integrated Child Development Scheme for better health outcomes in children up to the age of 6 years; an observational study in Belagavi taluka.

Pramod N Sulikeri[1], Prof. Dr. A S Godhi[2]
[1]*Research Scholar, KLE University, Belagavi, Karnataka, India*
[2]*MS, FRCS Prof. in Department of Surgery & Former Principal Jawaharlal Nehru Medical College, Belagavi, Karnataka, India & Research Guide.*

Abstract:
Introduction:
'Balsanjeevini' is the health care scheme for the children of 0 to 6 years of age belonging to Integrated Child development Scheme (ICDS) of Below Poverty Line Families (BPL). The scheme is implemented by Women and Child Welfare Department, Government of Karnataka. Children up to the age of six years, who need higher treatment/surgery are referred to recognized Net Work Hospitals (NWH) for further management.
Objective:
1. To study functioning of Anganwadi centres and awareness about Balsanjeevini scheme among care-takers in Belagavi taluka.
2. To find-out working pattern of Anganwadi workers (AWWs) and suggest corrective action to enhance their competency
Methodology:
The health camps were conducted for Integrated Child Development Scheme (ICDS) children in over 14 Primary Health Centres (PHCs) of Belagavi Taluka covering over 50 villages between December, 2013 to March, 2015. Over 4550 children were examined by team of Pediatricians of Jawaharlal Nehru Medical College, Belagavi. The health check-up camps were conducted under aegis of 'Balsanjeevini' scheme with the help of AWWs of Women & Child Welfare Department.
Conclusion:
Over 51% of care-takers are not aware of benefits of the Balsanjeevni scheme. The basic causes that haunt children health are unhealthy living conditions, overcrowded houses, poor sanitation, drinking of impure water, consuming stale food, food being cooked on firewood causes smoke and poor ventilated homes. Illiteracy, poverty, smoking and alcohol consumption by head of family are aggravating factors.
Implementation of social security programs and ensure its reach to right beneficiary, free universal education, advancement in socio-economic conditions can only reduce the burden of diseases on parents and can save their dearly earnings.

Key Words: Integrated Child Development Scheme, Anganwadi, Nutrition, Nutrition Rehabilitation Centre, Below Poverty Line.

Prime Minister Shri. Narendra Modi's goal of making India the human resources capital of the world will succeed only if malnutrition is addressed immediately and ambitiously. India has made significant progress over the past few years in reducing the levels of malnutrition in the country, which unfortunately still remain high."

"The Swachh Bharat Mission can be a game-changer because good sanitation practices can help address malnutrition. I look forward to learning from India's experience and exploring ways of working together to increase the impact of current initiatives."

Jim Yong Kim,
World Bank Group President

I. INTRODUCTION

The Integrated Child Development Scheme (ICDS) is one of the flagship program of the Government of India initiated in the year 1975, seeking to comprehensively address the Nutrition, Health and Pre-school

needs of children of 0 to 6 years of age group[1]. Human development starts in a child's earliest years, in the first 1000 days of life. Beginning with a woman's pregnancy and following through to the first two years of a child's life, appropriate nutrition, early stimulation and learning, a safe environment are crucial for a child's overall development[2]. Right food, proper health care, early learning opportunities, clean water and sanitation are essential for healthy growth of all children. The absence of these essential requirements can not only have an irreversible impact on the child's development, but also undermine the country's future economic productivity[3]. Improving nutrition in the early years can raise adult wages by 5-50 percent and reducing stunting can increase Gross Domestic Product by 4-11 percent[4].

The first six years constitutes the most crucial period in life of children. This is the period the foundations are laid for cognitive, social and emotional language, physical/ motor development and cumulative lifelong learning[5]. The World Bank estimates that India is one of the highest ranking countries in the world for the number of children suffering from malnourishment. The prevalence of underweight children in India is among the highest in the world, and is nearly double that of sub-Saharan Africa with consequences on productivity, economic growth because of increased morbidity and mortality[6]. The poverty, illiteracy and ignorance are the risk factors for under-nutrition. Children in Below Poverty Line families are more malnourished than those in Above Poverty Line families. Children of Muslim households and those belonging to Scheduled Caste, Scheduled Tribe face higher rates of malnourishment. The appropriate weight and height is highly dependent on the Socio-Economic status of the population[7]. In fact, according to World Health Organization, about fifty percent of infant and child mortality may be associated with malnutrition[8]. National Health Family Survey in its 2016 report presented the grim picture that, 34% children are under weight, 37% children are stunted and over 50% children are anemic. These children would perform badly in school, college and business in their later part of life[9].

Objectives of the study

1. To study functioning of Anganwadi centres and awareness of Balsanjeevini scheme among its beneficiaries in Belagavi taluka.
2. To study working pattern of Anganwadi workers (AWWs) and suggest corrective action to enhance their competency.

II. METHODOLOGY

42 health check-up camps were conducted covering over 50 villages in Belagavi taluka between December, 2013 to March, 2015. Over 4550 children were examined by team of Pediatricians of Jawaharlal Nehru Medical College, Belagavi. 480 children were referred to District Hospital or KLES Dr. Prabhakar Kore Hospital, Belagavi for further management. In the study period the research scholar visited over 200 Anganwadi centres covering 50 villages. Less than 15% Anganwadi centres are said to be model and as per prescribed standards. Much desired to be done to improve the standards of existing Anganwadis.

III. DISCUSSION

We suggest simple, yet powerful and cost effective following steps for effective implementation of ICDS program. These initiations shall bring positive changes in the lives of children and their families and could be game changer in decreasing childhood diseases. Participation of family and community is essence of the success.

1. Health Check-up and referral of children

Children need to be examined by qualified medical practitioner preferably by Pediatricians at least once in two months. Identification of early symptoms and treatment is crucial for the successful outcome. Children with severe malnourishment need to be identified and referred to Nutritional Rehabilitation Centers (NRC). Children suffering from Gastroenteritis, Pneumonia, Fever, Diarrhea, Mental Retardation, Congenital anomalies, etc should be referred on priority to higher centers for further management. Mothers/care-takers should be counseled on the importance of nutritious food and need for health check-up. For better outcomes in children, Anganwadi centres should serve quality food prepared in hygienic conditions. Emphasis must be laid on importance of hand wash before food consumption. Hand washing practice and its importance needs to be highlighted to all AWWs and mothers. In early age, inculcating hand wash practice an educational and practical intervention produces sustainable positive change. Water and sanitation facilities must be made available at home and pre-school. A comprehensive knowledge about importance of hand washing program should be used

to improve low-cost but highly effective initiative that will meaningfully reduce the burden of transmissible disease among children in rural settings [10,11]. Men folks must also join in the care and upbringing of children.

2. Awareness Programs

Information, Education and Communication (IEC) are the fundamental factors in transforming society. Communities are deprived of various health benefit schemes mooted by Government. IEC activities act as a spring board to connect to the people and gain information about various schemes [12]. Village meetings (Grama Sabhas) must provide ample of opportunity to Female Health Worker, Accredited Social Health Assistants (ASHAs) and AWWs to share the information about Balsanjeevini, Rastriya Swasthya Bima Yojana (RSBY), Yeshaswini & Vajpayee Arogya Shree scheme, etc and their utilities for the needy. Information booklets, pamphlets and posters must be displayed in various locations of villages. Public participation is essence and programs like "Swach Bharath Mission" to be carried out in villages in periodical intervals by involving youths. ANC, vaccination, family planning, benefits of spacing and other national programs to be implemented religiously. The study conducted in Belagavi taluka highlights that, Over 51% of parents were not aware of Balsanjeevini scheme launched by Women & Child Welfare Department in the study area. Worst is over 75% beneficiaries were not having information for whom the scheme is being implemented.

3. Break to Superstition

In the modern scientific age superstation has no room. However, innocent people are being deceived by jugglers, mantrikas-tantrikas. It is unfortunate that, children are being sacrificed to gain unknown fortunes. The atrocities on children particularly in lower strata of the society are reported to be high. Women & Child Welfare Department, Social Welfare Departments are required to be vigilant and expected to educate the masses and uncover the mystery of jugglers. Women self help groups and youths must join their hands in educating masses.

4. Need for Improvement in Anganwadi infrastructure :

Over 80% of Anganwadis in urban Belagavi do not have their own buildings and the hired once don't have basic amenities. Children are forced to sit in small rooms which do not have sufficient ventilation and lighting. Overcrowding of children in small rooms leads to exposing of children to cross infections. As per the ICDS guidelines, it is imperative to have at least two rooms for each Anganwadis but only one room is available in which their learning activities, cooking and storing of ration takes place [13, 14]. It is also noticed that rats and pests are found in few of the Anganwadis their presence is dangerous to children. Toilets, place for hand wash, tiny play grounds for children are not be found. Neat and clean rooms with abundant natural light, sufficient air flowing and kitchen for cooking, toilets to attend to natural calls and safe drinking water are essential to develop good habits in early childhood.

5. Training enhances performances

The existing training system for AWWs is old, outdated and lacks in direction. The present training schedule needs major revamping. It is recommended to invite guest resource persons who can instill confidence among AWWs and draw out best performance from them. Their role in reducing Infant Mortality Rate (IMR) /Maternal Mortality Rate (MMR) is tremendous, hence the quality of training has to be taken to the next level [15]. Result oriented training sessions with measurable outcomes must be planned and implemented by inviting external resource personnel.

6. Quick supply of medicines

The basic Pediatric drugs stock is poor in majority of PHCs. The medicines being prescribed after the Health camps (conducted under Balsanjeevini scheme) are not being supplied on the same day to children. The prescription is sent to the approval and procurement from Child Development Project Officer (CDPO). The severely ill children are deprived of emergency medication and delay in administration of drugs in few rare diseases may lead to disastrous outcome. It is recommended to provide prescribed medicines to children on the site of the health camps.

7. Need for reengineering

Slightest change in the approach towards children by parents is expected to produce better results. Breastfeeding within 30-45 mins of child birth. Educating mothers on exclusive breast feeding for first six months, Universal immunization, Vitamin A supplementation, routine health check-ups, ensuring highest order of cleanliness in homes, feeding child at regular intervals, administrating anti worm mediations once in six months, use of toilets, stopping of open defecation, inculcating hand wash with soap and water after visiting toilets and washing hands before consumption of food could keep children away from majority of the diseases

[16] . Supply of right quantity and quality of ration to the homes to 6 months to 36 months children needs to be strictly adhered. Attendance of children from 36 months to 60 months at Anganwadis is reported to be 60-70% only. It is the responsibility of AWWs to ensure highest attendance of children. The prescribed quality and quantity of food need to be served as per the food chart. In the Global Hunger Index report 2016, India stands at 97th position among 116 countries. It speaks volumes about starvation of our children particularly in lower strata of the society and children quality food to survive [17]

8. Parents/care-takers participation:

Unhealthy foods are fed in abundance to children by parents particularly in villages. Such foods compound the health conditions like loss of appetite, pain abdomen, vomiting, loose stools, throat infections are reported to be common among children. Fried chips, pappad, chocolates, ice-creams, half-cut fruits sold on street side are offered by parents on daily basis to children. Consequently, these poor quality foods are the reasons for majority of avoidable illnesses. Massive awareness, education interventions by trained counselors to parents/care-takers is immediate need of the hour. Our own experience of frequent interactions, group meetings, discussions and counseling among parents and AWWs of Kadoli, Yellur, Hirebagewadi, Shahapur, Vadagaon, Damne, Peernawadi, Kakati, villages of Belagavi taluka regarding importance of healthy food has encouraging results. But, much desirous to be done.

9. Need for Community Nutritional Rehabilitation Centers (CNRC).

The health camps were conducted for needy children in over 14 PHCs of Belagavi covering over 50 villages' between Dec, 2013 to March, 2015. Over 4550 children were examined by team of Pediatricians of J N Medical College and KLE Centenary Charitable Hospital. At least 480 children were referred for further examination/investigations/ admissions. Parents seek admission for severely sick conditions like fever, Upper Respiratory Tract Infection, Gastro Enteritis, etc, however parents do not prefer to admit severely malnourished children in hospital based NRCs. Parents presume malnourishment is not a disease and they refuse to admit child to NRCs. Even if, child is admitted at hospital based, NRCs 3/4th of the parents seek discharge from NRCs owing to various reasons like family responsibilities, poverty, festivals, marriages, etc [18]. It is recommended to keep the child for initial work up in hospital based NRCs and then children may be shifted to CNRCs [19]

On pilot study basis it is recommended to a create CNRCs at Vantamuri & Hudali PHC areas where predominantly Scheduled Tribe population is very high and the need for CNRC is highly desirable. The CNRC should function like day care centre with PHC medical officer examining children at least once in a week. Top priority must be given to timely feeding of nutritious food, medication and sanitation. Parent's participation and educating them on child upbringing and health practices must go on side by side by trained counselors.

10 Challenges by Convent Schools to Anganwadi's :

Belagavi sub-urban and villages adjoining Belagavi city has influence of convent schools. At least 15-20% children from Kakati, Yellur, Kadoli, Mutaga, Majagon, Camp, Vadagavi, Shahapur, etc have shifted their children from Anganwadi to convent schools. There is an exponential mushrooming of convent schools in the last couple of years, parents are attracted by uniform, shoes, school bags, benches, English medium education and other modern facilities offered by convent schools. There is virtual competition among the parents to influence each other to shift from Anganwadis to convent schools. In an informal group discussion conducted with parents at Kakati village reveals that, majority of the parents of BPL have made loans to admit their wards to convent schools. Further, more worrying factor is, convent schools do not offer free supplementary nutrition food to children. Perhaps, these children may still starve of hunger and may land in to the bracket of underweight. By taking the present trend into consideration, it may be said that, the concept of Angnawdi may loose its existence in the years to come. It is the high time that policy makers must review ICDS program and charter plans to further improve in the existing system.

IV. CONCLUSION

The observation made by this study were, awareness about Balsanjeevini is poor among parents. Much desirous to be done by CDPOs, AWWs, ASHAs, PHC and NWH staff to popularize the scheme amongst its beneficiaries.

Diseases in children can be temporarily contained by regular health check-up, medication, nutrition or admission to hospital. The basic causes that haunt children health are unhealthy living conditions, overcrowded houses, poor sanitation, drinking of impure water, consuming stale food, food being cooked on firewood causes smoke, poor ventilated homes, smoking, alcoholism, illiteracy, poverty, etc are the influencing factors.

Implementation of social security programs and ensure its reach to right beneficiary, free universal education, supply of free nutritious food to the children, better housing and advancement in socio-economic conditions can substantially reduce the burden of diseases in BPL children and parents can save their dearly earnings.

Ethical Clearance: Human Ethical Committee of KLE University, Belgaum has granted permission to conduct the Study vide letter No. KLEU/Ethic/14-15/D-71 dated 26th May, 2014
Financial Support & Sponsorship: Nil
Conflict of Interest: There are no conflict of interests

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Research Article

UTILISATION AND AWARENESS OF 'BALSANJEEVINI' HEALTH SCHEME AMONGST MOTHERS IN FOUR PRIMARY HEALTH CENTRES OF BELAGAVI TALUKA

Pramod N Sulikeri[1] and Godhi A S[2]

[1]KLE University, Belagavi
[2]Department of Surgery & Former Principal Jawaharlal Nehru Medical College, Belagavi, Karnataka, India

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ABSTRACT

Background: "Balsanjeevini Scheme" (BS), is implemented by Women & Child Welfare Department, Government of Karnataka. The main objective of the 'BS' is to reduce mortality and morbidity among Children of 0 to 6 years of age belonging to Below Poverty Line (BPL) families under Integrated Child Development Scheme (ICDS). The 'BS' provides upto 50,000/- to the sick neonates and Rs. 35,000/- to the children from 1 month to 6 years who are admitted to the recognised Net Work Hospitals (NWHs).

Methods: The study was conducted in four select Primary Health Centres (PHCs) of Belagavi Taluka, Karnataka to explore utilisation of 'BS'.Health Check camps were conducted for needy ICDS children by Department of Paediatrics of Jawaharlal Nehru Medical College (JNMC), Belagavi. Pre designed, pre-tested questionnaire were administered to collect information on the house hold socio-economic and demographic data, literacy, disease the child is suffering from, occupation of mother & father, habits, supply of drinking water were recorded. Also information on utilization and awareness of 'BS' was recorded.

Results: Out of 319 children examined in health camps, 110 eligible children were referred for higher investigations/admission to recognised NWH i.e., KLE Dr.Prabhakar Kore Charitable Hospital, Belagavi. 46 (42%) parents admitted their children to NWH and utilized the treatment under the 'BS'. However, 64 (58%) parents did not utilise the facilities of the 'BS'.

Conclusion: Uptake of the 'BS' among eligible children was low (58%). Community level awareness programs are needed to improve utilization among its beneficiaries.

INTRODUCTION

The first six years are the most important years in the life of children; during this period the foundations are laid for intellectual, social and emotional language, physical/motor development and cumulative lifelong learning.[1]

The ICDS programme is one of the flagship programmes of the Government of India, aiming to comprehensively address the nutrition, health and pre-school needs of children under 0 to 6 years of age. Balsanjeevini Scheme is the ambitious program of Women and Child Welfare Department of Government of Karnataka. The scheme funds for free treatment/surgery in the designated Hospitals. The beneficiaries of the scheme are children of BPL families in the age group of 0-6 years. The sole purpose of the scheme is to offer best of the healthcare services in the designated NWHs to reduce mortality and morbidity among the children. The prevalence of malnourishment in children in India is among the highest in the world, and is nearly double that of sub-Saharan Africa with adverse effects on productivity and economic growth because of increased morbidity and mortality, states World Bank.[2]

The poverty, illiteracy and ignorance are the risk factors for under-nutrition,[3]. Children in low-income families are more malnourished than those in high-income families. Children of minority households and those belonging to scheduled castes or tribes also have higher rates of malnourishment. This phenomenon of malnutrition is more rampant in the rural India. Whether children have appropriate height and weight is highly dependent on the socio-economic status of the population.[4] Children of families with lower socio-economic status are faced with sub-optimal growth. While children in similar communities share similar levels of nutrition; but within the same community child nutrition is found to vary

Corresponding author:* **Pramod N Sulikeri
KLE University, Belagavi

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from family to family, depending on the parents' characteristics, household traditions, customs and places of residence. It is expected that with improvements in socio-economic welfare, child nutrition will also improve [5] In fact, according to WHO, about fifty percent of infant and child mortality may be associated with malnutrition[6]

The ICDS has been functioning for over four and half decades in the country; it has failed to address its objectives, due to which children health management continues to be dismal. A systematic capacity building approach is proposed to improve the health of mothers and development children in India. This approach entails rejuvenation of India's public health, rather than the ICDS, as a major facilitator of maternal and child health improvements [7].

What is 'Balsanjeevini' Scheme?

'Balsanjeevini' scheme not only addresses the problems of malnourishment but also takes care of viral fever, neonatal care, neurological disorders, diarrhea, congenital anomalies, infections, all surgical procedures, etc. BS funding for in-patient treatment of child is to the tune of Rs.50,000 to the new born and Rs. 35,000/- to the children above 1 month of age. The scheme also provides an incentive in the form of loss of work/wage at the rate of Rs.100/ per day to the parents of the children on admission to the Hospital [8].

Justification of Study

The Government of Karnataka has taken immediate measure to address the health problems of children up to the age of 6 years through BS. NWHs have taken lead to examine the children at their PHCs/Anganwadis in the designated blocks. Children who require further interventions are referred to NWHs. But unfortunately, even after repeated follow-ups by Child Development Project Officers (CDPOs), Anganwadi Supervisors, PHC staff and NWHs, parents do not bring their wards for further admission/investigations to NWHs resulting in mortality and morbidity among ICDS children.

Objective

1. To study the utilization of 'Balsanjeevini' scheme amongst mothers.
2. To investigate the awareness and knowledge about of 'Balsanjeevini' scheme amongst care-takers.

METHODOLOGY

Study sites and population

A study was conducted to know the socio-economic background of parents and assess the utilization, awareness and knowledge about of 'Balsanjeevini' scheme among mothers of Primary Health Centres (PHC) of Handignur, Kadoli, Kinaye & Bendigeri of Belagavi Taluka, Karnataka. Department of Paediatrics of Jawaharlal Nehru Medical College (JNMC), Belagavi conducted Health Check-up camps with the support of Anganwadi Supervisors/workers. In the health camps 319 eligible children were examined. Table (1) depicts the utilization and not utilization statistics.

Table 1 Health Check-up camps conducted at PHCs

PHC	No. of children examined	Children utilised scheme facilities	Children not utilised scheme facilities.
Handignur	95	12 (11.4%)	12 (11.4%)
Kadoli	120	12 (14.4%)	18 (21.6%)
Kinaye	87	12 (10.4%)	14 (12%)
Bendigeri	127	10 (12.7%)	20 (25%)
Total	319	46 (42%)	64 (58%)

Study design

A cluster sample survey was conducted on mothers of children up to 6 years of age who attended health camps in PHCs of Handignur, Kinaye, Kadoli & Bendigeri encompassing 21 villages of Belagavi taluka. The study was aimed to investigate the degree to which knowledge influences utilization, acceptability and smooth implementation of BS [9-11]. The pre designed, pre tested questionnaires were administered. Written informed consent was obtained from the participants prior to the interview.

Data Collection

The utilization of the scheme was determined by inverse sampling method. The data was gathered from the participants who utilized the services (46) and from those who did not (64). A total of 110 respondents who were advised further treatment after the health check-up were selected for the study. Data was collected from the mothers who utilized the services of 'Balsanjeevini' scheme during their hospital stay. Another group who refused admission (did not utilize the scheme) data was collected by visiting to their homes. The purpose of the study was explained to the parents and informed consent was obtained from the mothers. The house hold socio-economic and demographic data, literacy, disease the child is suffering from, occupation of mother & father, habits, supply of drinking water, etc were recorded.

DISCUSSION

The disease-wise break-up of the children who have utilized the facilities of the scheme is mentioned in table (2) and who did not utilize the facilities of the Scheme is shown is table (3)

Group I (Utilised BS): The study reveals that, 46 children have utilised the services of the BS. 19.6% (9) children had fever/infection, 30.4% (14) children were suffering from cough cold (Respiratory infection), in 13% (6) children weight was not matching to their age, 8.7% (4) children were suffering from Gastroenteritis and 28.3% (13) were victim of other ailments Viz; mental retardation, epilepsy, congenital heart diseases, delayed milestones, etc.

Group II (Not utilized BS): The study also established the fact that, the parents of 64 children did not avail the benefit of the scheme. Parents may underestimate the seriousness of the disease. However, the progression of the disease could be fatal. Children diseases cannot be neglected as they can aggravate rapidly leading to mortality or morbidity. 15.6% (10) children had fever/infection, 12.5% (8) had respiratory problems, 10.9 % (7) children reported loss of appetite and 53.1 % (34) children had poor weight compared to their age.

1.6% (1) child had Gastroenteritis's and 6.2 % (4) children had other medical problems.

sickness in children. Diarrhoea leads to malnutrition while malnutrition aggravates the course of diarrhoea.

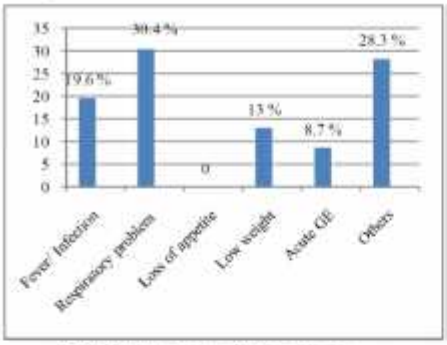


Table 2 Utilized Services (Disease patterns)

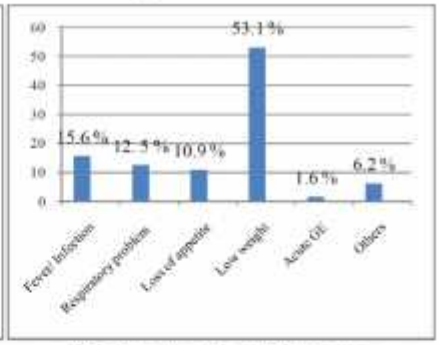


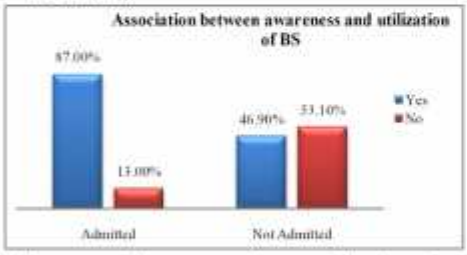
Table 3 Not utilized Services (Disease patterns)

Others - Mental retardation, epilepsy, congenital heart diseases, delayed milestones, etc

Association between utilization of 'BS' and awareness regarding treatment for 0 to 6 years BPL family children

	Awareness about BS				
Admission status	**Yes**	**No**	**Total**	**Chi square value**	**P-value**
Admitted	40 (87.0%)	6 (13.0%)	46 (100.0%)	18.581	0.001 (**)
Not admitted	30 (46.9%)	34 (53.1%)	64 (100.0%)		
Total	70 (63.6%)	40 (36.4%)	110 (100.0%)		

(** = P-Value < 0.05)



Significant association was seen between utilization of service and awareness regarding 'BS' for 0 to 6 years BPL family children. We observe that among those who were aware, 87% of the participants had admitted their children, and 46.9% had not admitted (P- Value < 0.05). From this we can state that previous awareness increases rate of admission and utilization of service.

Association between Malnourishment & Child sickness

From the table (2 & 3) it can be interpreted that, low weight among children in the aforesaid PHCs is common and regrettably majority of the parents refused to utilize the services of scheme; 53% of malnourished children care-takers refused to get admitted to Hospital based Nutritional Rehabilitation Centre (NRC) and this is the major cause of concern. Parents do not recognise malnourishment as disease. Malnourished children fall prey to the disease quickly as their resistance to disease is poor. Various studies have clearly established strong association between malnourishment and

Lactose intolerance is a common cause of persistent diarrhoea[12]. Childhood malnutrition is an important risk factor for child mortality and contributes close to 50% of child deaths world wide Reducing the prevalence of malnutrition may contribute to the success of child survival strategies[13,14]. Pneumonia accounts for nearly one in five deaths world wide among children less than 5 years of age. Important risk factors associated with pneumonia in children include a lack of exclusive breastfeeding, malnutrition, poverty, cigarette smoke, air pollution and other common co-morbid conditions. It is important for clinicians and public health administrators to consider the barriers and work on reducing malnourishment to implement primary pneumonia prevention strategies [15,16]. Improving caretaker skills to recognize danger signs in child illnesses may improve health-seeking behaviour. Integrated Management of Child Illnesses (IMCI) programmes must be accessible to the poor in order to increase health care seeking and bring about improvements in child survival [17].

Need for further study

1. Those who did not utilize the benefit of the 'BS' need to be probed, on questions like what were the barriers for underutilization.
2. Parents refused to accept higher treatment in NWH. Then where did they seek treatment and what is the condition of the children who did not utilize the facilities of the scheme need to be probed.

CONCLUSIONS

Considering the findings in this study, it is important that community-based interventions need to be formulated and implemented in order to improve child health. Educational interventions which target both the literate and illiterate women in society are necessary for effective utilization of the scheme. Governments announce public health schemes for the benefit of the needy population, but lack of awareness amongst the beneficiaries is the main reason for underutilization. It is equally important that all the documents required to utilize the scheme must be made available at single window. The scheme envisages that the document processing and admitting the child is the responsibility of AWWs, but unfortunately it is not

happening as designed. Malnourishment control is the one of the oldest and toughest challenges to the Clinicians, Health care administrators and policy makers. All the stake holders like Child Development Project Officers (CDPOs), AWW Supervisors, ASHAs, PHC and NWH staff are required to create awareness among the beneficiaries for better utilization of the 'BS'

Acknowledgments

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"SOCIO-ECONOMIC DETERMINANTS IN UTILIZATION OF BALSANJEEVINI SCHEME IN CHILDREN OF 0 TO 6 YEARS OF AGE IN BELOW POVERTY LINE FAMILIES OF BELAGAVI TALUKA."

An Errata submitted to

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[Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide Government of India Notification No.F.9-19/2000-U.3(A)]

Under the Guidance of

Prof. Dr. A S Godhi

PROF. DEPARTMENT OF SURGERY, J N MEDICAL COLLEGE &

FORMER PRINCIPAL, J N MEDICAL COLLEGE, BELAGAVI.

Doctor of Philosophy

In the Faculty of

INTER-DISCIPLINARY RESEARCH

By

Mr.PRAMOD N SULIKERI

Registration No: KLEU/Ph.D./DOUN13023/2013-14

JUNE-2020

Errata submission of the thesis:

Examiner-1

Observations	Clarifications/corrected as	Corrected thesis copy page no.
I. Introduction and Justification: More information with regards to justification is required. Ph.D thesis with only one objective that is Socio-Economic Determinants with respect to utilization of Balsanjeevini program needs more justification.	**Justification:** Balsanjeevini Scheme is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and mortality among BPL children of 0 to 6 years of age. The scheme offered a treatment cover of Rs 50,000/- to neonatal (up to one month after birth) and Rs 35,000/- from 1 month to 72 months children. Parents accompanying the child also receive Rs 100/- as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment covering 18 broad spectrum of diseases. The scheme was launched in the year 2011 by Government of Karnataka; Women & Child development Department is the implementing agency of the BSS. The needy sick children are referred by Medical Officer of PHC/CHC/Taluka Hospital/District Hospital to recognized NWHs for secondary and tertiary care. The referral letter is issued by concerned CDPO. The payment is made to NWHs by Department of Women & Child Welfare, Government of Karnataka. Initially only Medical College Hospitals with tertiary care facilities were identified as NWH. Later private Hospitals also joined and recognized as NWH. Memorandum of Understanding was signed between NWH and Women & Child Welfare Department for smooth and effective implementation of the scheme in NWHs. Severe acute malnutrition is considered as a major cause of child death, or it can also increase the case fatality rate in children suffering from widespread childhood illnesses as diarrhea and pneumonia. The Government of Karnataka has taken immediate measure to address the health problems associated with children up to the age of 6 years through BSS. NWHs are assigned with the responsibility to screen the children at nearby PHCs, Sub-Centers (SC) or AWs in the designated	Page 11-13

blocks. Children who require further interventions are referred to NWHs. But unfortunately, even after repeated follow-ups by Child Development Project Officers (CDPOs), Anganwadi Supervisors and NWHs, parents do not bring their wards for further admission/investigations citing socio-economic issues and family compulsions, which may lead to mortality and morbidity. The medical aid not given at the right time to the child may lead to dangerous out come. Hence, the investigator through this study has identified under laying socio-economic cause of why parents don't bring their children to Hospitals for further treatment at the right time. The study has also unearthed the reasons for apathy of parents in delaying or refusing for the treatment/surgery/investigations for the needy children. The study further suggested corrective actions for effective implementation of the BSS. The delay or neglect on the part of parents may lead to mortality and morbidity in children.

The scheme was implemented to prevent financial burden to the BPL families who could not afford the secondary and tertiary care. Further, tertiary care is not available in majority of the Government hospitals to overcome this difficulty the Government of Karnataka has identified the tertiary care hospitals for the treatment of needy children. There were instances, the parents refused for further investigations and treatment for their sick children quoting various socioeconomic reasons. That prompted the investigator and conducted Functional Group Discussion (FGD) before taking up this research project, with all the stake holders such as Medical Officers, CDPOs, Anganwadi Supervisors, Anganwadi Workers, ASHA workers and Parents. In the discussions, it was noted that various socio-economic reasons were projected by parents in refusing to accept the treatment. Hence, the investigation was carried out to know the socio-economic determinants in utilization for the BSS in children of 0 to 6 years in BPL families of Belagavi taluka.

Diseases covered under BSS:

Acute Infections	Encephalitis-Meningitis
Neurological treatment	Acute Malaria
Anemia, Malnutrition	Blood related disorders
Diabetes	Renal Problems (Urology/Nephrology)
New born level 3 treatment	Liver disease
Complex Gastroenteritis	Surgery of New born
Snake/Poisonous insect bite	O P Poison
Cardiac problems	Trauma/Accident

II Review of literature: Intervention study mentioned in page no 13 as review article does not suit to your study set up ; give clarification	a) The study shows how children cope with their fears associated with hospitalization and how they explain their experiences. Pre-school children are vulnerable to the effects of stress, fear and anxiety during hospitalization. The children admitted to hospitals had more fears than the children at kindergarten. These fears and emotions are explained in this study. Fear among children on hospitalization is a common phenomenon. Parents, Hospital staff need to address their problems by making the coping strategy is the gist of the literature. Children admitted to hospital cope better, when they are with parents, toys and friendly nurses, caring nurses and support staff can make them comfortable.	Page 19
b) Article on out of pocket expenditure and health care seeking behavior out pocket expenditure information in your study is not done.	Even though beneficiaries take treatment under the BSS. There are bound to be expenses over and above BSS approved amount for child's treatment in the hospital. It is highlighted in the last but one row of the page 115 of thesis. Expenses per child is Rs. 3148/-	Page 123
III Materials & Methods a) Mentioning of exclusion criteria as a reverse of inclusion criteria is not acceptable.	Changes are made as suggested by examiner. Only inclusion criteria are projected. In exclusion criteria children who are not registered with ICDS program are excluded from study and is corrected as suggested by examiner.	Page 49
Study setting Study setting cannot be based on health camps, it should be based on either house to house survey or a record based line listing of cases.	**Study setting:** Screening of the children who are sick and needs further management in NWHs is the criteria for selection of study subjects. Conventional house to house survey or line listing of cases is cumbersome and was observed to be not feasible in this study. In the present study investigator is selecting sick children through screening camps and referring them to Net Work Hospital (NWH) for further investigation/management. Definitive identification of children who are sick needs further treatment is identified at the camp site by Doctors only. Further, who does not utilize the BSS and those who utilized the BSS at NWHs are the study subjects. Camps were conducted in all the 12 sub centers covering 68 villages on pre-determined dates. All the sick children were screened by Pediatricians of the NWH.	Page 44-46

IV) Sampling can be based on Population Proportion to Size (PPS method)	**Sampling:** The sampling technique from house to house survey and population proportion to size were found not feasible for this study as the investigator is not competent to identify the sick children. On the advice of the Statistician, the inverse sampling technique was considered. In case of house to house survey we may not find the sick child and needing utilization/not utilization of BSS, the sickness in child and advising admission is decided by Doctor/Nurse. In case of house to house survey the investigator is neither a doctor nor a nurse, I must have made bias and could have advised wrongly for admission. The scope of the study is to identify sick child who needs admission which will always be decided by Doctor in the health screening camps. AWWs mobilized sick children to attend the camp, where by the most needy could be given benefit of the BSS. Hence, Inverse sampling technique with minimum 5 admissions from Sub-Centre was considered for the study. The criteria of selection of subjects is presented in the form of chart on page 45	Page -56
1. Skilled people utilization of BSS program is less; requires justification	In the present study it is noticed that skilled persons utility towards BSS is reported to be less, because the skilled population is better educated, slightly economically better off than other groups of the study. Skilled group of people may prefer visiting private hospitals than utilizing BSS.	Page-80
2. 15% of the children are not utilizing BSS program how you ensure enrollment of the children in your study.	Health screening camps conducted with the help of AWs is the first step towards enrollment. Motivating parents to utilize the BSS for sick children by visiting NWHs.	Page-45-46

Mr.PRAMOD N SULIKERI
Research Scholar

Date:

Prof. Dr. A S GODHI
Guide

Date:

Errata submission of the thesis:

Examiner-2

Observations	Clarifications/corrected as	Corrected thesis copy page no.
Abstract: The objective mentioned in the script is different and mentioned under objectives is different. There is no consistency:	In the script of abstract, the objective term is used to explain the progress that is needed to get destination, it is explained as specific action plan broken in to small activates. In the broad sense it involves the study, planning, socio-economic background of families and activities conducted during the study	Page xiv
When there is only objective why heading as Objectives is used?	The sub-heading, objectives is typographical error and is corrected as Objective.	Page xv
More information about BSS was expected	As per the suggestions of examiner, information about BSS is included in abstract. Balsanjeevini Scheme is the ambitious program of the Women & Child Welfare Department, Government of Karnataka. It is to bring down morbidity and mortality among BPL children of 0 to 6 years of age. The scheme offered a treatment cover of Rs 50,000 to neonatal (up to one month after birth) and Rs 35,000 from 1 month to 72 months children. Parents accompanying the child also receive Rs 100/- as an incentive (loss of wages). Children can avail treatment for diseases such as pneumonia, anemia, diabetes, malaria, malnourishment covering 18 broad spectrum of diseases. The scheme was launched in the year 2011 by Government of Karnataka; Women & Child development Department is the implementing agency of the BSS. Anganwadi Workers/ Supervisors, CDPOs play an important role in implementing the scheme.	Page xv
Conclusion number four looks like observation, could have framed in better fashion.	As per the suggestions of the examiner the conclusion 4 is reframed. The poor socio-economic background of the population is evident from the study, 75% beneficiary's income is < 7,000/- per month. 65% live in Kachha house, 51% of them cook their food on firewood, 48% of fathers' are victims of one or the other addictions. Half of the study population do not own any land shows that poor socio-economic background of the study participants.	Page xvi

Key word mentions Anganwadi which has not appeared in the script.	The keyword Anganwadi is mentioned in the brief introduction about BSS.	Page xvi
Introduction: NFHS 3 has been referred when results of NFHS 4 are available	As per the remarks of examiner NHFS 4 results are included in Introduction: There is considerable improvement in health conditions of children less than 5 years compared to the reports of NFHS-3. The prevalence of underweight (weight-for-age) was 37.6% in NFHS-3 and it has come down to 35.2% as per the findings of NFHS-4. Further, under 5 mortality was 54 per 1000 births as per NFHS-3 and it is reported to be 32 as per NFHS-4 report. There were 70.3% of children were anemic in the age group of 6 months to 59 months as per the reports of NFHS-3, however the findings of NFHS-4 , 60.9% children are anemic. The NFHS 4 results demonstrate that the improvements over NFHS 3 are significant for many key indicators, but there are considerable rural, urban and inter State disparities in key indicators. There is also a significant influence on non-health determinants – such as education, income level, access to water, sanitation and nutrition, clean fuel, etc, that impact health status.	Page 5-6
In Research when two variables are studied words association or correlation are used rather than 'connected'	The word connected was found in page 2, last Para, line 7, 6th word is changed as 'association' and also at page 126, line-3, 2nd word. At both the places connected word is replaced by 'association'	Page 7 & 134
Importance of the concept of 1000 days propagated by UNICEF was expected	The first 1,000 days of life - the period between conceptions to second birthday of a child is a important phase of a child. The foundations are laid for optimum health, growth, and neurodevelopment across the lifespan are established. But, in developing countries, poverty, malnutrition, weaken this foundation, leading to earlier mortality and significant morbidities such as poor health and substantial loss of neuro-developmental potential. In the modern era, under nutrition remains the major challenge worldwide. Both under nutrition and over nutrition are termed as 'malnutrition'. The malnutrition is shown to potentially reduce brain development. At least 200 million children living in developing countries fail to meet their developmental potential. Along with under nutrition, influences of infectious disease, environmental hazards, and household violence, contribute to this loss of potential. All other parameters are difficult to change but, nutrition can be well taken care by parents. Timely correction of nutritional deficits alone has been estimated to have the power to increase the world's	Page 4

	intelligence quotient by 10 points. The science suggests that it is far better policy to build the brain right in the first place through nutritional deficit prevention programs than to depend on replacement therapy once a deficit has occurred. Feeding the fetal, newborn, and young child brain is one of the best ways to achieve the goal.	
Some details of BSS were expected, otherwise also for BPL families' free treatment is expected in public institutions.	Public insurance schemes offered by various state Governments is included in the introduction: Schemes like Arogya Karnataka- Aysuhman bharath, Jyothi Sanjeevini and other important public health schemes brief introduction is provided as suggested by examiner.	Page 1-4
While commenting on functioning of ICDS word 'dismal' may have been avoided in scientific writing. There are plenty of references praising the functioning and achievements of ICDS.	As directed by examiner The word 'dismal' is replaced as 'needs further improvement'	Page 10
'Belagavi' and 'Belgaum' both words are used, uniformity is desired	At all the place in thesis 'Belgaum' is replaced as 'Belagavi'	At all places
Sex ratio has been mentioned. What is mentioned probably population sex ratio. In the context research child sex ratio may be more appropriate.	As suggested by examiner 'Sex ratio' is changed as 'child sex ratio'.	Page 14
Review of Literature:	As suggested by the examiner, Review of Literature has been divided into various Heads like Nutrition-SES, KAP, CAMs, JSY, Education background, etc.	Page 16
There is one reference about epilepsy among school children. The whole thesis is about children of one to six years,	The literature is quoted to stress that apart from main stream allopathic treatment for 'epilepsy' disease, 'Traditional Healers' (THs), Witch Craft and Black magicians help is also sought by people for any age group population. The literature is presented to substantiate that, superstations prevail over all groups of population.	Page 43

hence seems to be not relevant. Summary of Study	As per the advice of Examier, The brief summary of literature is presented and the detail synthesis is presented in discussion part of strength of the study	Page 124
Mention of government insurance schemes prevalent in other states may have been included.	Majority of the government health scheme are included in the Introductory part of the thesis.	Page 1-4
Mention of Rashtirya Bal Suraksha Karyakram (RBSK) was must	RBSK program is mentioned in Introduction part	Page 1
No where study period is mentioned	The study was conducted from June, 2014 to Jan, 2016.	Page 46
When Inclusion criteria are mentioned; it implies that others are excluded. There is no need to mention it again in exclusion.	As advised by examiner the changes are made. Only inclusion criteria is taken and in exclusion criteria children who are not registered with ICDS program are excluded from study.	Page 49
Pilot study was conducted in Hudali, PHC. Are the findings are included in the overall results?	The Pilot study results are not included in the overall results.	--
On page 43 under BPL paragraph mention of 'Mr. Rangrajan' is not relevant.	As suggested by examiner Mr. Rangrajan name is deleted	Page 52
How many camps were conducted and how many children were referred?	Belagavi Taluka has 13 PHCs, 1 CHC and 89 sub centers. 12 Sub centers were selected randomly and inverse sampling technique was used. At least 5 admissions from each sub centres was required to be positive. Screening camps were held in all of these sub centres between June 2014 to Jan 2016. At least two screening camps were held by Pediatricians. Over 3500 children were screened in the camps.	Page 46

Results Usually for studying perceptions Likert five point scale is used. Technically understanding and analysis becomes easy when odd numbered scale is used.	In this type of socio-economic based original studies, tailor made Likert five point scale will not fulfill all the study requirements. The investigator is prevailing on capturing complex social issues which vastly vary from participant to participant. The study is dealing with human behavioral problems and choices in regards to children health seeking behavior. Each question is carefully designed to fulfill the study requirements which also includes certain open ended questions.	--
Table 4.4.4. Title is not clear-improvement in what?	Corrected as, Learning ability of the child has improved after joining AWs.	Page 71
Table 5.8 It is difficult to believe that all fathers who were at home, were sick.	Table No 5.8 highlights that there are two groups such as BSS not utilized and utilized. Out of 233 (Not utilized group) only 9 fathers were sick and at home and among 126 utilized category only 5 fathers were sick and at home. All put together i.e, among 359 participants, only 14 (3.8%) of fathers were sick and at home.	Page 80
Table 5.13 Word cooking medium is used. Fuel used for cooking	Title is changed as fuel used for cooking.	Page 88
Table 5.16: All information is duplicate except last row.	It is presented in summarized form for quick glance and easy reference.	Page 91
For dichotomous variables Chi-square and odds ratio may have been given in the same table	The results presented are all adjusted odds ratios not unadjusted odds ratios. All adjusted odds ratios are only presented. The results are derived by performing multivariate logistic regression analysis.	Page 95-97
5.27 states only 55 women knew about scheme. Naturally the question about the source of information is to be asked to these women only. But 5.28 gives source of information for all the women.	It is corrected as suggested by examiner	Page 117
The information about incentives may have been included while describing BSS	As per the remarks of examiner, the Incentive part is included in introductory part.	Page 3-4

Table 5.32: There is wide variation in income. The S.D is far more than mean. Researcher may have used either median or interquartile range.	The amount spent for child's health care differs very vastly. The bare minimum amount being Rs. 500/- . In few cases parents have spent as high as 35,000/- for few children. Hence, there is a wide variation. Thus, S.D is more than mean.	Page 123
Discussion: Comparison with Kuppuswamy or Prasad Scale is totally missing**.**	Socio-economic comparison with B G Prasad scale is discussed as suggested by examiner.	Page 129

Mr.PRAMOD N SULIKERI
Research Scholar

Date:

Prof. Dr. A S GODHI
Guide

Date: