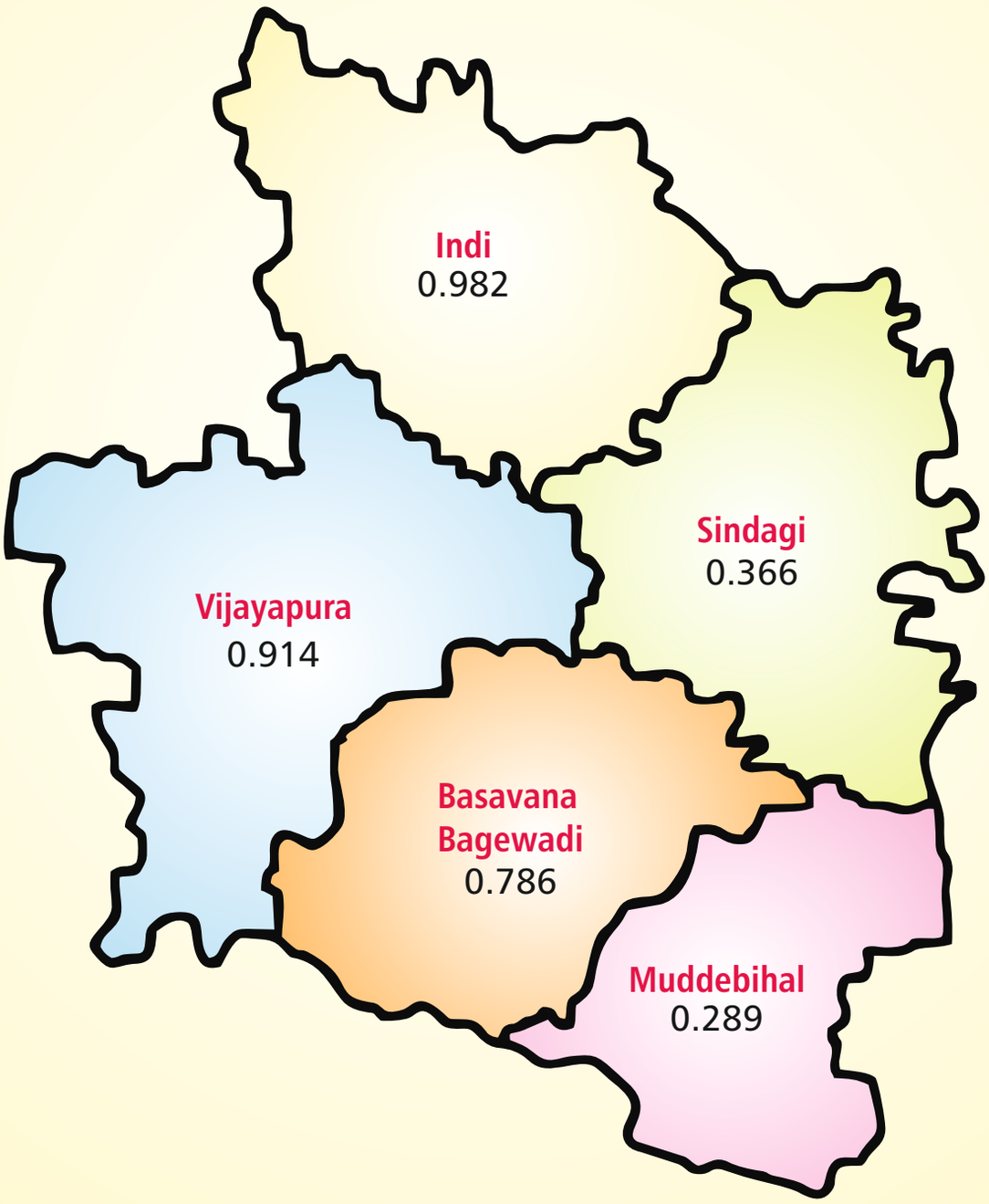
Chapter 5

HEALTH AND NUTRITION



HEALTH INDEX



Chapter Five

Health and Nutrition

5.1. Introduction

Health is the level of functional or metabolic efficiency of a living organism. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury or pain. The World Health Organisation (1946) defined health in its broader sense as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Health is generally achieved through a combination of physical, mental, emotional and social factors.

World Development Report 1993 stated: "Improved health contributes to economic growth in four ways: 1) it reduces production losses caused by worker illness; 2) it increases the enrolment of children in schools; and makes them better able to learn and 3) it makes resources available, for alternative uses, that would otherwise have been spent on treating illness, and 4) the economic gains are relatively greater for poor people, who are typically most handicapped by ill health".

Determinants of Health

There is a growing body of evidence about what makes people healthy. Each of these factors is important and at the same time interrelated. The following are important determinants of health; Income and Social Status; Social Support Networks; Education and Literacy; Employment / Working Conditions; Social Environments; Physical Environments; Personal Health Practices and Coping Skills; Hygiene; Healthy Child Development; Biology and Genetic Endowment; Health Services; Gender; Culture; Stress.

Components of Health

There are four components of health namely: Infant Mortality Rate; Maternal Mortality Rate; Life Expectancy at Birth and Nutrition. Infant mortality is the death of a child of less than one year of age. Childhood mortality is the death of a child before the child's fifth birthday. National statistics tend to group these two mortality rates together. Globally, ten million infants and children die each year before their fifth birthday; 99 percent of these deaths occur in developing nations. Infant mortality takes away society's potential physical, social and human capital.

According to the World Health Organization (WHO), maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Life expectancy is one of the dimensions of Human Development

Health is the level of functional or metabolic efficiency of a living organism. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury or pain.

Table-5.1: Vital Health Statistics (2011-12)

Indicators	India	Karnataka	Vijayapura District
Total Population	121,01,93,422	61,130,704	21,77,331
Sex Ratio (females per 1000 males)	940	968	954
Birth Rate (per 1000 population)	22.10	19.2	19.16
Death Rate (per 1000 population)	7.20	7.1	6.18
Life Expectancy at Birth	63.4	65.3	65.15
IMR (per 1000 live births)	47	35	34
MMR (Per 100,000 live births)	212	178	135

Source: Socio-Economic Survey, DSO, Vijayapura District 2011-12

Table-5.2 : Life Expectancy at Birth, Crude Birth and Death Rates for the District- 2011

Taluk	LEB	2011	
		Crude Birth Rate (Per 1,000)	Crude Death Rate (1,000)
Basavana Bagewadi	64.20	23.4	6.5
Indi	64.73	28.1	3.7
Muddebhihal	66.69	20.02	7.6
Sindagi	65.75	27.02	4.1
Vijayapura	66.73	27.0	9.0
District	65.15	19.96	6.18

Source: Vijayapura District At A Glance, 2011-12, p. 162

Malnutrition, in every form, presents significant threats to human health. Today, the world faces a double burden of malnutrition that includes both under nutrition and overweight.

Index (HDI), along with adult literacy, education and decent standard of living. It is also used in the construction of Gender Development Index (GDI). Life expectancy reflects the health of people of that country and it helps to measure the quality and access to health services they receive. Life expectancy at birth is the number of years a new born infant would be living, if prevailing patterns of age-specific mortality rates at the time of birth were to stay the same throughout the child's life.

Nutrition

Nutrition is the intake of food, considered in relation to the body's dietary needs. According to World Health Organization better nutrition is related to improved infant, child and maternal health, stronger immune systems, safer pregnancy and childbirth, lower risk of non-communicable diseases (such as diabetes and cardiovascular disease), and longevity. Healthy children learn better. People with adequate nutrition are more productive and can create opportunities to gradually break the cycles of poverty and hunger. Malnutrition, in every form, presents significant threats to human health. Today, the world faces a double burden of malnutrition that includes both under nutrition and overweight.

5.1.1. Health Profile of Vijayapura District

In 1871, the first ever allopathic dispensary was opened in Vijayapura district. Earlier to that and till second half of twentieth century, the Unani hakims and ayurvedic vaids had a marked presence. After independence, the government felt the need to expand the medical facilities. It opened hospitals and dispensaries at district and taluk places. Similarly, private hospitals and dispensaries were opened in large number after 1980s onwards. With help of several indicators, the health profile of Vijayapura district is developed as under:

Table-5.3: Taluk wise Details of Health Centres 2011-12

Sl. No.	Taluks	Allopathic Hospitals		Indian System of Medicine Hospitals		Private Hospitals		Primary Health Centres		Community Health Centres	
		Nos.	Beds	Nos.	Beds	Nos.	Beds	Nos.	Beds	Nos.	Beds
1.	Basavana Bagewadi	2	22	-	-	1	11	14	84	1	30
2.	Indi	4	44	-	-	5	55	14	84	2	60
3.	Muddebhihal	3	33	-	-	2	22	9	54	3	90
4.	Sindagi	2	22	-	-	5	55	9	54	3	90
5.	Vijayapura	63	693	1	70	63	693	14	84	-	-
	Total	74	814	1	70	76	836	60	360	9	270

Source: DSO, Vijayapura District 2011-12, p-46

From Table Nos. 5.1 and 5.2 it is clear that in respect of health, the performance of Vijayapura district is on par with the state and national averages. Further, from Table- 5.2 we can learn that Vijayapura district is experiencing second stage of demographic transition, where the birth and death rates decline.

5.1.2. Taluk Wise Details of Health Centres

Table-5.3 contains data pertaining to health centres and number of beds in different taluks of Vijayapura district.

Table-5.3 shows that, in the year 2011-12, there were 74 allopathic hospitals with 814 beds. There was only one hospital of Indian system of medicine with 70 beds. Further, there were 63 private hospitals with 693 beds, 60 PHCs with 360 beds and 9 CHCs with 270 beds. It satisfying to learn that between 2007-08 and 2011-12, the number of hospitals and beds has increased, enabling the extension of medical facilities. An important issue from human development point of view is that for better health people, should have access to medical facilities.

Table- 5.4: Density of Population (2011-12)

S.No	Taluk	Density Per Sq kms
1.	Basavana Bagewadi	176
2.	Indi	189
3.	Muddebhihal	193
4.	Sindagi	181
5.	Vijayapura	271
6.	Total	207

Source: Vijayapura District at a Glance 2011-12

5.2. Demography, Population by Place of Residence, Sex and Social Groups and Sex Ratio

The most important factor affecting social, economic and human



Table- 5.5: Decadal Growth Rate of Population

S.No	Taluks	1981-91	1991-2001	2001-2011
1.	Basavana Bagewadi	18.95	15.89	14.97
2.	Indi	24.09	16.78	18.97
3.	Muddebhihal	18.59	15.69	14.6
4.	Sindagi	26.13	16.28	21.12
5.	Vijayapura	24.84	20.35	26.64
6.	Vijayapura District	22.97	17.48	20.40
7.	State	21.12	17.51	15.67

Source: BDHDR,2008, and Census of India 2011.

Table- 5.6: IMR and CMR (2011)

Sl.No.	Taluk	IMR	CMR
1.	Basavana Bagewadi	38	49
2.	Indi	17	25
3.	Muddebhihal	62	80
4.	Sindgi	33	41
5.	Vijayapura	26	32
6.	District	34	39
7.	State	35	40

Source: SRS,2011

development is the size of population of a country. Other things remaining same, an increase in the population adversely affects per capita income and thereby standard of living. It is in this context that an attempt is to study decadal growth of population of Vijayapura district.

Density of Population

The Census Report of 2011 reveals that district's density of population is 207 per sq.km. It is well below than the state's density of population of 319 per sq.km. Within the district, Vijayapura has high density of population with 270.5 per sq.km, whereas Basavana Bagewadi has low density of population with 176.1 per sq.km. The Taluk-wise details are presented in Table-5.4.

Among the five taluks, Vijayapura taluk has recorded highest growth rate, i.e., 26.64 which is also higher than the district level growth rate. There are several reasons, for example, it has locational advantage, which attracts people from taluks and distant villages. It offers employment opportunities in construction and transportation activities. These two are fast growing areas where no specific education or training is required. We notice huge construction activities in and around Vijayapura city. Further, after the completion of UKP, the displaced people have bought lands, houses and other properties in and around Vijayapura. Of late Vijayapura has emerged as a hub of professional as well as non-professional education. It has become a health centre where there are quite a good number of private hospitals, in addition to the district civil hospital. The doctors' availability is 0.69 per thousand persons, which is almost double of the other taluks. It has 1.19 nurses per thousand people, which is nearly ten times higher than other taluks. Its water, fuel, health accessibility is higher than other taluks. It has advantage in respect of transport connectivity. On account of all these factors, the population density is also higher; it is 271 persons per sq.km.

Other issues such as rural and urban population, sex ratios are already discussed in the Second Chapter of this work under the broad heading of 'Demography'.

5.3. Infant Mortality Rate and Maternal Mortality Rate (IMR and MMR)

IMR and CMR are the two important indicators of health status of children. Infant mortality rate is the number of deaths of children less than one year of age per 1000 live births. Child mortality is the death of a child before its fifth birthday. Since two decades, increased efforts are being made to reduce IMR and CMR. In Karnataka IMR is 35 and in Vijayapura district it is 34 in 2011. IMR is marginally less in the district as compared to the state. IMR started declining gradually after 2005, when the National Rural Health Mission was launched. Data related to IMR and CMR of Vijayapura district is shown in Table- 5.6.

In Vijayapura district, in Indi taluk IMR is 17 and CMR is 25, which is low compared to other taluks of the district. IMR and CMR in other taluks are as follows: Basavana Bagewadi (IMR:38; CMR:49), Vijayapura (IMR:26; CMR:32), Muddebhihal (IMR:62; CMR:80), Sindagi (IMR:33; CMR:41). Muddebhihal records highest infant mortality and child mortality rates in the district.

5.3.1. Maternal Mortality Rate (MMR)

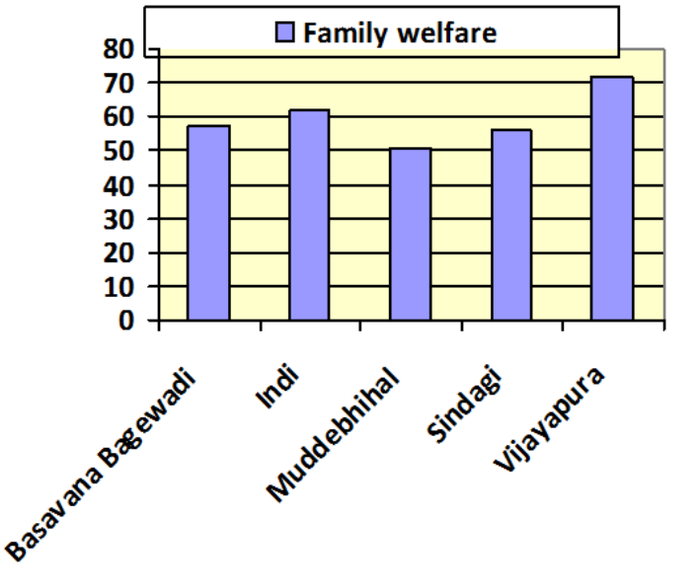
The maternal mortality rate is the number of female deaths per 100,000 live births by any cause related to or aggravated by pregnancy or its management. The WHO notes that the factors that increase maternal deaths globally are: severe bleeding/hemorrhage, infections, unsafe abortions, high blood pressure during pregnancy, obstetric labour, blood clots, malaria, anaemia, etc. Along with these, the other factors that increase MMR are lack of access to skilled medical care during child birth, the travel distance to the nearest clinic, barriers to accessing prenatal medical care and poor infrastructure, etc. Though Reproductive Rights are in existence since 1994, International

Table-5.7: Maternal Mortality Rate (2011)

Sl.No.	Taluk	MMR
1.	Basavana Bagewadi	115
2.	Indi	119
3.	Muddebhihal	155
4.	Sindagi	211
5.	Vijayapura	122
6.	District	135
7.	State	144

Source: SRS,2011

Graph 5.1: Family Welfare Centres in Vijayapura District



In Karnataka IMR is 35 and in Vijayapura district it is 34 in 2011.

Table-5.8: Progress of Family Welfare Programme (2007-08 to 2011-12)

Sl. No	Year	Family Planning Operations	
		Vasectomy	Tubectomy
1.	2007-08	9	12899
2.	2008-09	2	14114
3.	2009-10	61	12800
4.	2010-11	199	14282
5.	2011-12	101	15551
6.	Total	372	69646

Source: DSO, Vijayapura District 2011-12, p-47.

There were a total of 298 family welfare sub-Centres, of these 72 were located in Vijayapura taluk, followed by Indi (62), Basavana Bagewadi (57), Sindagi (56) and Muddebhihal (51). These Centres performed a total of 15652 sterilisation operations of which 101 were vasectomy and 15551 tubectomy cases.



Conference on Population and Development (ICPD) is not so successful in creating awareness about reproductive health, especially among rural women. Table- 5.7 sheds light on maternal mortality rate in Vijayapura district.

Figures in Table- 5.7 suggest that at the state level MMR is 144 and in Vijayapura district it is 135. It implies that in Vijayapura district MMR is low compared to the MMR in the state. In Vijayapura district, Sindagi recorded highest MMR, that is, 211 in 2011. It is followed by, Muddebhihal (155), Vijayapura taluk (122), Indi (119) and Basavana Bagewadi (115). MMR in all taluks of Vijayapura district is less than the state MMR excepting Sindagi. To reduce MMR still further, it is essential to create awareness regarding pre-natal and post-natal care issues.

5.4. Couple Protection Issues and Family Welfare Programmes

Family welfare is an integral part of health programmes. Over several decades, in the context of rapidly growing population, the Government of India, state and local governments have assigned special importance to the family welfare programmes. There are three dimensions of family welfare programmes namely (1) family centres and sub-centres (2) vasectomy and (3) tubectomy. Their details with respect to Vijayapura district are provided in Graph-5.1.

There were a total of 298 family welfare sub-Centres, of these 72 were located in Vijayapura taluk, followed by Indi (62), Basavana Bagewadi (57), Sindagi (56) and Muddebhihal (51). These Centres performed a total of 15652 sterilisation operations of which 101 were vasectomy and 15551 tubectomy cases. Maximum tubectomy cases (4991) were reported from Vijayapura taluk. Year-wise details are shown in Table- 5.8.

It is evident from Table- 5.8 that between 2007-08 and 2011-12 there is a significant increase in the number of vasectomy and tubectomy operations. During this period 69646 operations were performed. It can be inferred that people have now realised the importance of population control and small family. In the long run a small family helps in improving the level of human development. A small family is in a better position to provide education to its members and to arrange for required health needs.

5.5. Infrastructure and Health Personnel Facility

There are two types of hospitals, namely government and private hospitals. It is our experience that compared with the

government hospitals, the number of private hospitals is on the rise. Even though treatment there is costly, yet more patients prefer private hospitals simply because of better facilities which includes, among others, the number of beds and doctors. In the following paragraphs an attempt is made to study beds available in the public and private hospitals. Private hospitals include clinics and nursing homes.

5.5.1. Public and Private Hospital Infrastructure: Number of Hospitals and Beds

It should be fairly clear from the data in Table-5.9 that compared to the government hospitals the number of private hospitals and the beds therein, is high. The private hospitals (clinics + nursing homes) are more in Vijayapura taluk. There are 407 private hospitals with 1500 beds. The main reason is the presence of two medical colleges with their research centres. It is also evident from Table-5.8 that while there are only 05 public hospitals, the number of private hospitals is 645. Similarly, beds in the private hospitals (1720) are four times higher than in the public hospitals (480). This highlights the need for establishing more government hospitals. In the interest of access to and availability of medical facilities, it is necessary that the government should play a more proactive role.

5.5.2. Population Per PHC and Bed Ratio (2012-13)

An important aspect of health facilities is the size of population served by per PHC and the Bed Ratio. Table- 5.10 throws light on this particular aspect.

Table- 5.9: Public Hospital Infrastructure: Number of Hospitals and Beds (2011-12)

S.No.	Taluk	Taluk HQ Hospital	Private Hospitals	Beds
1.	Basavana Bagewadi	01	50	20
2.	Indi	01	101	80
3.	Muddebhihal	01	26	40
4.	Sindagi	01	61	80
5.	Vijayapura	01	407	1500
6.	Total	05	645	1720

Source: DHO, Vijayapura and BDG, 2011-12, p. 156

Table-5.10: Taluk-wise Health Infrastructure in the District: Population Per PHC and Bed Ratio (2012-13)

Taluk	Norm	Population per PHC	WHO Norm	Population Bed Ratio
Basavana Bagewadi	One PHC for every 20000-30000 persons	22521	1.9 beds for 1000 persons	1628:1
Indi		27369		1728:1
Muddebhihal		24980		1191:1
Sindagi		39794		1620:1
Vijayapura		30222		1236:1

Source: Computed with the help of previous Tables.

From Table-5.10 it should be clear that in Sindagi taluk for every 39,794 persons there was one PHC and in Basavana Bagewadi taluk there was one PHC for every 22,521. Similarly, in respect of population and bed ratio, it can be observed that it was lowest in Muddebhihal taluk (1191:1) and highest in Basavana Bagewadi taluk (1628:1). In the interest of better provision of health facilities, it is necessary that these ratios should be brought down. This requires huge investment and a proactive role by the government.

While there are only 05 public hospitals, the number of private hospitals is 645. Similarly, beds in the private hospitals (1720) are four times higher than in the public hospitals (480).



Table-5.11: Taluk-wise Health Infrastructure: Ambulances and Staff 2011-12

S.No	Taluk	National Norm	No. of Doctors per 1,000 population	National Norm	Ambulance population ratio
1.	Basavana Bagewadi	One ambulance for every one-lakh persons.	0.040	One doctor for every 2000 persons.	143850:1
2.	Indi		0.033		84281:1
3.	Muddebhihal		0.048		69702:1
4.	Sindagi		0.035		72643:1
5.	Vijayapura		0.048		131787:1
6.	District		0.040		100452:1

Source: Computed with the help of previous Tables.

Table-5.12 : Primary and Community Health Centres in Vijayapura District (2011-12)

S.No.	Taluk	Primary Health Centres		Community Health Centres	
		Nos.	Beds	Nos.	Beds
1.	Basavana Bagewadi	14	84	1	30
2.	Indi	14	84	2	60
3.	Muddebhihal	9	54	3	90
4.	Sindagi	9	54	3	90
5.	Vijayapura	14	84	0	0
6.	Total	60	360	9	270

Source: Vijayapura District at a Glance 2011-12, p-157



5.5.3. Ambulances and Staff Details

The number of doctors and the number of ambulances also affect the provision of health services. At the national level, population-doctor ratio is 1:2000. In respect of ambulances, the norm is one ambulance for every one lakh persons.

Compared to the national norm, in Vijayapura district this norm is better. It works out to be one doctor for every 2200 persons. Similarly, in case of ambulances, it can be said that, while the national norm is one ambulance for every one-lakh persons, at the district this norm is nearly met. However, in respect of Basavana Bagewadi and Vijayapura taluks, there is a need to increase the number of ambulances. In Vijayapura district, all sub-centres have one ANW, IMPW and a helper. Similarly, all sub-centres have medical kits, tables, BP apparatus and stethoscope.

5.5.4. Primary and Community Health Centres in Vijayapura District

Figures in Table- 5.12 indicate that in Vijayapura district each taluk has more than one primary and community health centres. Basavana Bagewadi and Indi taluks have 14 each primary centres with 168 beds in total. Similarly, Muddebhihal and Sindagi have 9 each primary centres with a total bed strength of 108 beds. In all, in the four taluks of Vijayapura there are 46 primary health Centres and 276 beds. Further, there are nine community health Centres with a bed strength of 270.

Table-5.13: Bed-Patient Ratio and Occupancy Ratio and Patient Visit Ratio in PHC/Sub-Centre – 2012

S.No	Taluk	Bed-Patient Ratio	Bed Occupancy Ratio	Average Patient visit Ratio to PHC (for 1 PHC/ year)
1.	Basavana Bagewadi	1265	86	7590
2.	Indi	845	145	5068
3.	Muddebhihal	1292	174	7751
4.	Sindagi	965	135	5789
5.	Vijayapura	1722	258	10333
6.	District	1217	160	7307

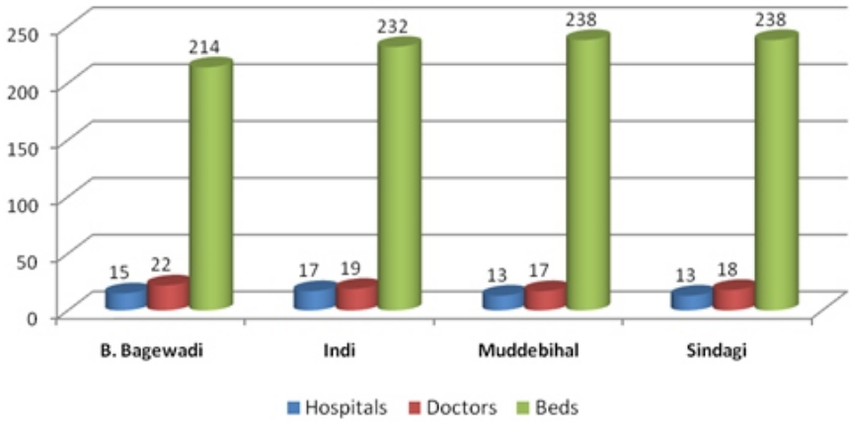
Source: District Health and Family Welfare Department, Vijayapura

Table-5.14: Hospitals, Doctors and Beds in Taluks (2011-12)

S.No.	Taluks	Hospitals	Doctors	Beds
1.	Basavana Bagewadi	15	22	214
2.	Indi	17	19	232
3.	Muddebhihal	13	17	238
4.	Sindagi	13	18	238
5.	Total	58	76	922

Source: Vijayapura District at a Glance 2011-12, p-157

Graph 5.2 : Hospitals, Doctors and Bed Strength at Taluks of Vijayapura District



[20] We are grateful to Dr. Bhakti Mahindrakar for providing certain inputs.

Table-5.15: Facilities in Rural Taluk Hospitals : 2011-12

Hospital	Pathology	Microbiology	Forensic Med.	Gen. Med.	Pediatrics	Neonatology	Psychiatry	Radio-diag.	Anesthesia	Dermatology	Resp. Diseases	Nuclear Med.	Gen. Sur.	Ortho. Sur.	Obst. & Gynac.	Ophthalmology	Rehabilitation
Indi	NA	NA	NA	A	NA	NA	NA	NA	A	NA	NA	NA	A	NA	A	NA	NA
Sindagi	NA	NA	NA	A	A	NA	NA	NA	A	A	NA	NA	NA	A	A	NA	NA
Basavana Bagewadi	NA	NA	NA	A	NA	NA	NA	NA	A	NA	NA	NA	A	NA	A	NA	NA
Muddebhihal	NA	NA	NA	A	A	NA	NA	NA	A	NA	NA	NA	A	NA	A	NA	NA

Source: Field Survey. Note: A-Available and NA- Not Available.

Indi has more number of hospitals (17) compared with the remaining three taluks. Basavana Bagewadi taluk has more doctors (22) than the other three taluks. Muddebhihal and Sindagi have more beds than the other taluks.

5.5.5. Assessment of Rural Healthcare Facilities in Vijayapura District

Rural dimension of health is far more important than the urban dimension for two clear reasons. First, the percentage of population living in rural areas is higher than in urban areas. Secondly, in rural areas, because of poor connectivity, the access to health facilities remains difficult. It is in this context that an attempt is made here to assess rural health care facilities in Vijayapura district. Table-5.13 sheds light on the number of hospitals, doctors and beds in all taluks of the district. It is found that, Indi has more number of hospitals (17) compared with the remaining three taluks. Basavana Bagewadi taluk has more doctors (22) than the other three taluks. Muddebhihal and Sindagi have more beds than the other taluks. It is clear that there is no consistency in the number of doctors, hospitals and beds. This anomaly can easily be corrected with appropriate administrative indicatives by the concerned authorities.

5.5.6. Facilities in Rural Taluk Hospitals

Another disturbing aspect of rural health facilities is that in government hospitals there is an absence of several key health facilities, because of which people are forced to get the same from private hospitals.

Table- 5.15 helps us to know that clinical facilities are not available in

respect of pathology, microbiology, forensic medicine, neonatology, psychiatry, radio-diagnosis, respiratory disease, ophthalmology and rehabilitation. Facilities are available for General medicine, anesthesia, obstetrics & gynecology and social and preventive medicine. Rural taluk hospitals are deficient in super speciality services and also ICU facilities for Cardiology, Endocrinology, Nephrology, Gastroenterology, Medical Oncology, Plastic Surgery, Neuro Surgery, Urology and Surgical Gastroenterology, ICU and CCU. All taluk hospitals have supportive services such as clinical laboratory and radiology. However, they lack in pathology, microbiology, blood bank, telemedicine, TMT, Ultra-sonography and echocardiography. However, surgical and related services like anesthesia, major & minor Operation theatre, Post Operative Ward and Labour Room are easily accessible in all the rural taluk hospitals. Life-saving critical care services are not available in any taluk level hospital. It is needless to say that the patients and their families have to rush to district hospital under a severe risk. Even though certain services are available but there is a shortage of staff capable of handling these services. Other services such as public transportation, ambulance, casualty, 24 hour power backup services, canteen, etc., are available. However, locker facilities and accommodation for patient's accompanists are not available.

Table-5.16: ANC Coverage - Percentage of Pregnant Women Registered and Received ANC from Anganwadis (2012)

Taluk	Percent of pregnant women registered and received ANC	Percent of pregnant women received full ANC (3 ANC visits + 90 IFA tablets+TT)	Percent of pregnant women who are anemic	Percent of pregnant women who are provided with nutrition	High Risk Pregnancies
Basavana Bagewadi	73.14	72.25	1.97	73.14	1.97
Indi	88.83	77.45	4.25	88.83	4.25
Muddebhihal	79.67	67.51	6.09	79.67	6.09
Sindagi	74.06	62.87	2.38	74.06	2.38
Vijayapura	123.43	63.75	16.77	123.43	16.77
District	92.05	68.67	15.00	92.05	15.00

Source: District Health Office and Family Welfare, Vijayapura, 2012.

Box No. 5.1
Puzzling Situation

Over the years, in Vijayapura district the number of hospitals, doctors, beds, paramedical and diagnostic facilities have improved. The establishment of two allopathic medical colleges, two ayurvedic medical colleges and one Unani medical college has greatly helped the people. In addition a number of private hospitals have also come up, some of which provide even advanced medical facilities. Despite this, it is found that a good number of patients rush to Solapur and Miraj for treatment. Even some of the local doctors are found suggesting their patients to rush to Solapur. On a visit to different hospitals in Solapur (08-02-2014), it was found that in some of the major hospitals 15-20 per cent of patients are from North Karnataka, especially from Kalaburagi and Vijayapura. This is an indication of deficient medical services. This situation needs introspection and immediate attention of the government as well as the private medical health service providers.

Life-saving critical care services are not available in any taluk level hospital. It is needless to say that the patients and their families have to rush to district hospital under a severe risk. Even though certain services are available but there is a shortage of staff capable of handling these services.

Table-5.17: Share of Institutional Deliveries (2011-12)

S.No.	Taluk	Percent
1.	Basavana Bagewadi	94.51
2.	Indi	89.79
3.	Muddebhihal	85.46
4.	Sindagi	91.88
5.	Vijayapura	94.27

Source: Sample Registered Survey 2011

Box- 5.2
Maternal Health in India

- India continues to contribute about a quarter of all global maternal deaths. WHO defines maternal mortality as the death of a woman during pregnancy or in the first 42 days after the birth of the child due to causes directly or indirectly linked to pregnancy.
- Globally, every year over 500,000 women die of pregnancy related causes and 99 percent of these occur in developing countries.
- The Maternal Mortality Ratio (MMR) in India is 254 per 100,000 live births according to Sample Registration System (SRS) Report for 2004-2006. There is a decline from the earlier ratio of 301 during 2001-2003.
- In the region, the MMR in China stands at 45, Sri Lanka at 58, Bangladesh at 570, Nepal at 830 and Pakistan at 320 in 2006.
- Wide disparities in MMR exist across states in India. The MMR ranges from 95 in Kerala to 480 in Assam.
- MMR has a direct impact on infant mortality. Babies whose mothers die during the first 6 weeks of their lives are far more likely to die in the first two years of life than babies whose mothers survive.
- Only 47 per cent of women in India have an institutional delivery and 53 percent had their births assisted by a skilled birth attendant. As many as 49 percent of pregnant women still do not have the desired three antenatal visits during pregnancy. Only 46.6 percent of mothers receive iron and folic acid for at least 100 days during pregnancy.

(Source:www.unicef.org/india/health)

Institutional deliveries are required in the interest of both mother and child. They minimise the number of MMR and also IMR. From this viewpoint, not only ANC but arrangement for institutional deliveries is also important.

5.6. Ante Natal Care Coverage and Anaemia Among Pregnant Women

Accredited Social Heath Activists (ASHA) workers are appointed to take care of pregnant women at district and village level. Generally there is a deficiency of iron and calcium amongst pregnant women which creates problems at the time of pregnancy. Timely care and medical assistance will help women to avoid this deficiency. Table-5.16 sheds light on ANC coverage in Vijayapura district.

Table-5.15 reveals that ANC coverage is available in different taluks of Vijayapura district but in varying degrees. In Vijayapura taluk 123.43 percent pregnant women registered themselves, whereas the registration in Basavana Bagewadi was 73.14 per cent, Indi 88.83; Muddebhihal 79.67 and Sindagi 74.06 percent. Registration is high in Vijayapura taluk for the reason that women from nearby places come to Vijayapura because of better transport connectivity. However, it is disturbing to note that the number of women actually availing this facility is less than the registration. For example, in Vijayapura 123.43 per cent women had registered but only 63.75 percent availed full facility. Thus, the gap is nearly 50 percent. In other taluks, the gap is not as large. For example, in Basavana Bagewadi 72.25%; Indi 77.45%; Muddebhihal 67.51% and Sindagi 62.87% women are actually availing this facility. Further, it is surprising to note that except Vijayapura, the percentage of anaemic pregnant women is very much less in all other taluks. While it 16.77 % in Vijayapura taluk, it is 1.97 in Basavana Bagewadi, 4.25% in Indi, 6.09% in

Table-5.18: Details of Immunization Programme in the Vijayapura District (2007-08 to 2011-12)

Year	DTP		Polio		BCG		Measles		TT
	Male	Female	Male	Female	Male	Female	Male	Female	Total
2007-08	48812		47775		49725		44251		46334
2008-09	35625		42022		42560		40863		43515
2009-10	25287	23477	24827	23090	26073	24202	23276	21606	49319
2010-11	27055	25115	27022	25084	28239	26213	25013	23219	54026
2011-12	25639	23670	25551	23611	26802	24760	23481	21676	54386

Source: DSO, Vijayapura 2011-12, p-48

Muddebhihal and in Sindagi 2.38%. Such being the case, women are likely to face risk during pregnancy.

5.7. Institutional Deliveries

Institutional deliveries are required in the interest of both mother and child. They minimise the number of MMR and also IMR. From this viewpoint, not only ANC but arrangement for institutional deliveries is also important. It is necessary that every pregnant woman should have access to it. Chances of future complications can be also reduced. In recent times on account of awareness about health on one hand and extension of medical facilities on the other, the number of institutional deliveries is increasing. Table-5.17 sheds light on the number of institutional deliveries in total deliveries in different taluks of Vijayapura district.

Data in Table-5.17 suggests that Basavana Bagewadi taluk has recorded (94.51) institutional deliveries followed by Vijayapura 94.27%, Sindagi 91.88%, Indi 89.79% and Muddebhihal 85.46%. At the district level, 91.88 percent institutional deliveries are recorded.

5.8. Children Immunization Programme

The details of the immunisation programme in Vijayapura district from 2007-08 to 2011-12 are shown in Table-5.18.

For long and healthy life and reducing the CMR, immunisation of children assumes much significance. In the context of Pulse Polio Programme in particular, it can be said that it has achieved tremendous success all over India and a day is not far ahead when India can be declared as a polio free country. Immunisation includes DTP, Polio, BCG, Measles, TT and Hepatitis B. At Vijayapura and Sindagi taluks, highest numbers of immunization have taken place. Similarly, between 2007-08 and 2011-12, there is a consistent increase in immunisation cases. The immunisation programme, thus, is met with a grand success.

For long and healthy life and reducing the CMR, immunisation of children assumes much significance. In the context of Pulse Polio Programme in particular, it can be said that it has achieved tremendous success all over India and a day is not far ahead when India can be declared as a polio free country.



Table- 5.19: Percentage of Malnourished Children in Vijayapura District 2011

S.No.	Taluk	% of Malnourished Children	% of children Born-underweight
1.	Basavana Bagewadi	43.87	9.54
2.	Indi	44.09	4.09
3.	Muddebhihal	45.33	12.45
4.	Sindagi	47.46	5.67
5.	Vijayapura	44.40	7.59
6.	District	45.20	11.10

Source: Sample Registered Survey

Box 5.3
Measles in India

- The respiratory disease, measles, remains a leading cause of death among young children, despite the fact that a safe and effective vaccine has been available for the last 40 years. Measles is an acute illness caused by a virus of the paramyxovirus family.
- It is one of the most contagious diseases and many children who do not have sufficient immunity, contract measles if exposed. During the first few weeks after contracting measles, a child's immune system becomes weakened, and a normal cold or diarrhea can become a life threatening illness.
- Globally, an estimated 450 people, mostly children, die every day from measles despite the fact that an effective and safe vaccine is available at low cost. It costs less than $1 to vaccinate a child against measles.
- A global goal to reduce measles deaths by 90 per cent by 2010 was set at the World Health Assembly in May 2005.
- Despite global successes in reducing measles deaths, an estimated 164,000 people died from measles in 2008, the latest year for which figures are available.
- In November 2010, the Government of India introduced a second dose of measles vaccination drive, in 14 high-risk states, targeting 134 million children, to prevent an estimated 60,000 to 100,000 child deaths annually.

(Source:www.unicef.org/india/health)

5.9. Underweight Children and BMI Ratio

The NFHS measures malnourishment among children with reference to 1) age and weight; 2) age and height and 3) height and weight. If the weight of a child is less than the norm, then it is considered as undernourished. Malnourishment adversely affects the growth of children and their learning ability. Data in Table-5.19 pertains to percentage of malnourished and underweight children in different taluks of Vijayapura district.

It may be seen from Table-5.19 that in Sindagi taluk, the percentage of malnourished children is 47.46 percent, which is higher than any other taluk of Vijayapura district. In Basavana Bagewadi taluk the percentage of such children is 43.87 percent, Vijayapura 44.40 percent, Indi 44.09 percent and Muddebhihal 45.33 percent. In respect of underweight children, their percentage is low in Indi taluk (4.09%) and highest in Muddebhihal taluk (12.45%). It is interesting to note that in Indi taluk the percentage of born underweight children is low compared to other taluks and at the same time IMR (17 per thousand) and CMR (25 per thousand) are also low in Indi taluk.

5.10. Communicable Diseases

There are two diseases which create social stigma, one is AIDS and the other is leprosy. Even though their incidence may not be too high, their control is in the interest of public health. Table-5.20 sheds light on the prevalence of these two diseases.

In Vijayapura district, the total number of AIDS patients was 2,426, out of

which 1494 (61.58%) were found in Vijayapura taluk alone. None of AIDS patient was cured. Compared to AIDS, the incidence of leprosy was much less, in total there were 141 patients. It is noted that the cure rate is very satisfactory. Out of 141 patients, 129 were completely cured. In respect of TB it is found here that in all in Vijayapura district there were 2324 TB patients, out of which 756 (44.31%) were in Vijayapura taluk. Here, cure rate and death rate are not as satisfactory as in the case of leprosy.

5.10.1. HIV

Compared with the other communicable diseases HIV/AIDS is the most threatening disease. In Karnataka, Vijayapura district has second largest number of AIDS patients. Table 5.21 shows number of HIV/AIDS patients between 2004 and 2012, according to a survey carried out in all ICTC centres in district.

Figures in Table No. 5.21 show that in 2004, out of 4522 patients who underwent HIV/AIDS test, 1092 (24.15%) were found HIV positive. The number of patients undergoing the test increased to 39254 in 2013 but only 1110 (2.82%) patients were found positive. This percentage has come down continuously. It was 4.01 percent in 2012 and 2.82 per cent in 2013. Government has undertaken several measures to control AIDS, most notably raising the awareness among people and providing medical help. Since it is an incurable disease, more efforts are required to create public awareness. Table- 5.22 contains data pertaining to HIV pregnant women.

From Table-5.22 one comes to know

Table- 5.20: AIDS and Leprosy in Vijayapura District 2011-12

	Basavana Bagewadi	Indi	Mudde-bhihal	Sindagi	Vijayapura
AIDS					
Patients	263	232	156	281	1494
Cured	00	00	00	00	00
Death	40	30	32	26	134
Leprosy					
Patients	28	22	35	30	31
Cured	19	18	34	23	30
Death	00	00	00	00	00
TB					
Patients	426	406	384	352	756
Cured	321	275	309	231	570
Death	40	30	32	37	80

Source: BDG, 2011-12, p. 160

Table-5.21: Details of HIV/AIDS Affected Persons 2004-13

Year	Common People		
	Patients who underwent test	Identified AIDS Patients	Percent
2004	4522	1092	24.15
2005	5458	1181	21.64
2006	3814	1271	33.32
2007	10064	2792	27.74
2008	10628	2622	24.67
2009	16482	2884	17.49
2010	24927	2694	10.80
2011	50183	2261	4.50
2012	48770	1960	4.01
2013 (up to December)	39254	1110	2.82
Total	214102	19867	9.27

Source: DAPCU, Vijayapura

Table-5.22: HIV/AIDS Pregnant Women (2004-13)

Year	Pregnant Women		
	Patients who underwent test	Identified AIDS Patients	Percent
2004	3410	67	1.96
2005	4782	122	2.55
2006	4418	91	2.05
2007	7613	110	1.44
2008	14157	168	1.18
2009	27672	172	0.62
2010	26387	153	0.57
2011	47701	121	0.25
2012	45863	91	0.19
2013 (up to December)	39693	54	0.13
Total	221696	1149	0.51

Source: DAPCU, Vijayapura

Table-5.23: Children Born to AIDS Affected Women (2008-13)

Year	Number of HIV affected women who gave birth	Number of women who received Neropean medicine	Number of Children tested for AIDS after 18 months	Number of Affected Children
2008	83	78	23	00
2009	122	112	42	00
2010	121	110	65	8(12.30%)
2011	101	93	66	3(4.55 %)
2012	105	95	74	1(1.35 %)
2013	72	70	75	2(2.67 %)

Source: DAPCU, Vijayapura

Yashasvini scheme is open to all the members of the rural co-operative society, members of self help group/Sthree Shakti Groups having financial transaction with the Cooperative Society/Banks, members of Weavers, Beedi Workers and Fisherman Cooperative Societies. The scheme has been designed so that women belonging to BPL families can avail totally cashless treatment in private hospitals.

that in 2004, 3410 women were tested against AIDS, but only 67 (1.96%) were found positive. This number increased to 122 (2.55%) in 2005. Thereafter, from 2006 onwards, the number of patients testing positive has declined continuously. In 2012, 45,863 women were tested against AIDS and only 591 (0.19%) were found positive. It helps us to arrive at a conclusion increasing number of men and women are now aware of AIDS. Table-5.23 throws light on the number of children born to women affected by HIV/AIDS.

It is evident from Table- 5.23 that in 2008 and 2009, 83 and 122 women respectively gave birth to children but their children were not found HIV positive. In 2010, 121 women gave birth to children out of which eight (12.30%) children were found HIV positive. Thereafter their number has declined. In 2012, 105 women gave birth to children and only one child (1.35%) was found HIV positive.

5.11. Performance of Various Health Schemes

There are certain schemes run and supported by the state and central governments, such as ESI, Vajpayee Arogyasri, Arogya Bhagya yojane, Yashasvini, Janani Suraksha, etc. Vajpayee Aarogyasri is a unique health insurance scheme being implemented by Government of Karnataka. The scheme provides financial assistance to urban poor families to meet their health needs. Serious diseases affecting heart, kidney, cancer, brain hemorrhage, burns and accident cases, etc., are covered under the scheme. Karnataka Government has introduced another unique scheme called Arogya Bhagya Yojane to its police personnel and their

families, which was launched in June 2002. This is a self-financing scheme managed through monthly contribution. Yashasvini scheme is open to all the members of the rural co-operative society, members of self help group/Sthree Shakti Groups having financial transaction with the Cooperative Society/Banks, members of Weavers, Beedi Workers and Fisherman Cooperative Societies. The scheme has been designed so that women belonging to BPL families can avail totally cashless treatment in private hospitals. Janani Suraksha scheme is the continuation of the previous, delivery allowance, scheme of the Central Government. The objective is to provide financial assistance to the poor pregnant women during delivery.

State government employee scheme is available in all hospitals whereas Vajpayee Arogyasri is available in all taluks except Basavana Bagewadi. Arogya Bhagya Yojane is available only in Muddebhihal. But Yeshasvini, Thayi Bhagya, Arogya Bhagya Yojane, central government employee's scheme, Bal-Sanjeevni, are not available in any taluk hospitals. Table-5.25 sheds light on schematic details of ASHA, Madilu and NRHM.

Under NRHM the central and state governments are making efforts to improve the reproductive health. This programme aims to increase deliveries at the institutional level and to provide ante-natal care. For this purpose ASHA workers are appointed to provide timely advice to the pregnant women. In this connection in Vijayapura district, in 2012, Rs.777.74 lakhs was spent. Further, under this programmes 11230 Madilu kits were distributed.

Table No. 5.24. Details of Persons Affected by Other Communicable Diseases (Other Than AIDS) 2012

S.No.	Taluk	Morbidity Rate	Percentage of Patients with other communicable diseases	Percentage of Patients with Other types of diseases
1.	Basavana Bagewadi	8.90	8.52	0.38
2.	Indi	6.33	5.16	1.17
3.	Muddebhihal	6.16	5.53	0.62
4.	Sindagi	4.19	3.48	0.75
5.	Vijayapura	6.66	5.24	1.42
6.	District	6.44	5.58	0.86

Source: District Health and Family Welfare Department, Vijayapura.

Table-5.25: Schematic Details of (with expenditure incurred and physical achievements) ASHA, Madilu, NRHM (2012-13)

Taluk		ASHA	Madilu	NRHM
Basavana Bagewadi	Expenditure Incurred Physical Achievement	24.86 lakhs 233	- 2475	13,37,3079
Indi	Expenditure Incurred Physical Achievement	21.03 lakhs 201	- 2288	15,26,6210
Muddebhihal	Expenditure Incurred Physical Achievement	18.37 lakhs 186	- 1433	12,41,1908
Sindagi	Expenditure Incurred Physical Achievement	23.39 lakhs 284	- 2179	12,62,4467
Vijayapura	Expenditure Incurred Physical Achievement	30.81 lakhs 283	- 2855	24,09,7976
District	Expenditure Incurred Physical Achievement	118.24 1187	11230	777,73,640

Source: District Health and Family Welfare Department, Vijayapura

Table-5.26: Number of Beneficiary Households under Yashaswini Scheme 2011-12

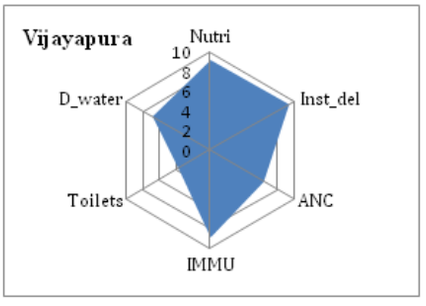
S.No.	Taluk	Beneficiaries
1.	Basavana Bagewadi	498
2.	Indi	626
3.	Muddebhihal	639
4.	Sindagi	575
5.	Vijayapura	580
6.	Total	2918

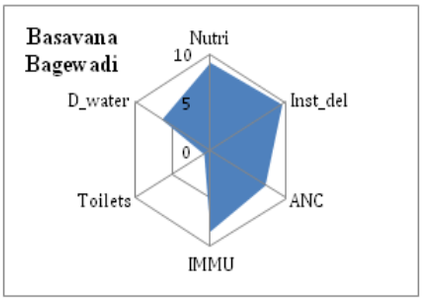
Source: District Health and Family Welfare Department, Vijayapura

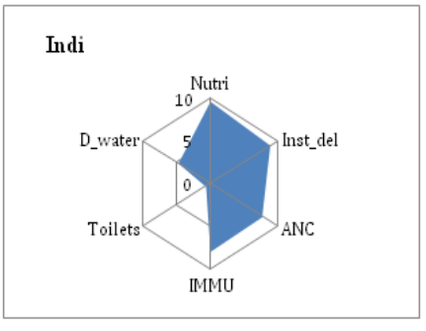
Table- 5.27: Per capita Expenditure in Vijayapura

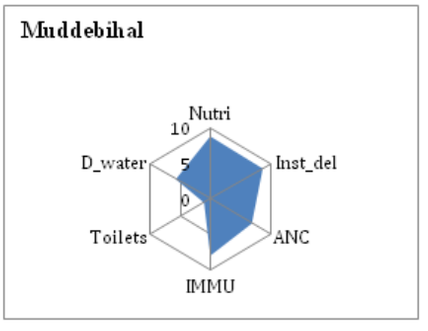
S.No	Taluk	Population	Total expenditure (in lakhs)	Amount in Rs.
1.	Basavana Bagewadi	384721	646.17	185.29
2.	Indi	421169	608.16	144.40
3.	Muddebhihal	290691	570.15	196.14
4.	Sindagi	395675	456.12	155.28
5.	Vijayapura	721075	798.21	110.70
6.	District	2177331	3078.81	141.4

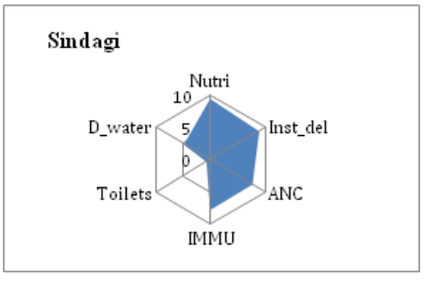
Source: District Health and Family Welfare Department, Vijayapura

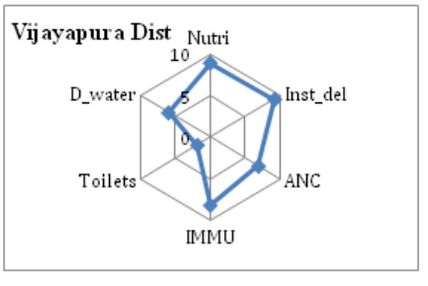












Public health services are of importance for the poor. With this in mind, in 2003 for the benefit of farmers, the central government introduced health insurance scheme. The taluk wise details can be observed from Table-5.26.

Table-5.26 provides Taluk-wise number of beneficiaries of Yashaswini Scheme. For example, in Basavana Bagewadi 498; Vijayapura 580; Indi 626; Muddebhihal 639 and Sindagi 575 households were benefitted. At the district level, 2918 households were benefitted. The government has recognised certain hospitals for this particular purpose and the expenditure incurred is reimbursed.

5.12. Analysis of Percapita Health Expenditure

The per capita expenditure on health, in different taluks of Vijayapura district is analysed with the help of data in Table-5.27. We learn that the per capita health expenditure in Muddebhihal taluk is Rs. 196.14/- which is highest in Vijayapura district. The lowest is found in Vijayapura taluk, Rs.110.70/-. In Vijayapura taluk there are more private hospitals and patients and their families normally prefer private hospitals. Their expenditure on health is not taken into consideration because this happens to be the private expenditure. We also come to know that there is no relation between per capita health expenditure and health index.

5.13. Radar Analysis for Health

The health status of taluks and district can be depicted with the help of radar figures. Radar figures highlight the areas of strength and weaknesses. The

status of sanitation is very poor and people openly defecate posing grave threat to the public health. Expenditure on health may go up. Similarly, it appears that in Vijayapura district malnutrition is rampant. Absorption capacity is low, badly affecting children's health and learning capacity.

5.14. Small Area Study - Under Weight children - A Small Study

Introduction

Children play a prominent role in future nation building. The Government of India came out with ICDS in 1976. Despite best efforts, children are still facing malnutrition. In Karnataka since last one decade or so the IMR is falling but there is an increase in the number of malnourished children, more so in case of female children. The gender discrimination is visible. In this context, a small area study was made with the following objectives:

Table– 1: Number of Children Weighed

Villages	No. of girls weighed	Percent	No. of boys weighed	Percent	Total children	Percent
Telagi	172	47.51	190	52.49	362	14.48
Kakhandki	409	52.30	373	47.70	782	31.29
Hanjagi	297	50.08	296	49.91	593	23.72
Yalagur	181	50.70	176	49.29	357	14.28
Kannolli	201	49.62	204	50.37	405	16.20
Total	1260	50.42	1239	49.58	2499	100

Source: Field Work

Table– 2: Number of Underweight Children

Villages	Boys	Percent	Girls	Percent	Total	Percent
Telagi	32	35.16	59	64.84	91	14.80
Kakhandki	84	43.08	111	56.92	195	31.70
Hanjagi	59	44.70	73	55.30	132	21.46
Yalagur	52	44.44	65	55.56	117	19.02
Kannolli	32	40.00	48	60.00	80	13.00
Total	259	42.11	356	57.89	615	100

Source: Field Work

Table – 3: Caste-wise Malnourished Children

Villages	General		SC/ST		Minorities		Total	Percent
	Number	Percent	Number	Percent	Number	Percent		
Telagi	61	67.03	18	19.78	12	13.18	91	14.80
Kakhandki	133	68.20	47	24.10	15	7.6	195	31.70
Hanjagi	50	37.88	40	30.30	42	31.82	132	21.46
Yalagur	82	70.08	26	22.22	9	7.69	117	19.02
Kannolli	68	85	6	7.5	6	7.5	80	13.00
Total	394	64.07	137	22.28	84	13.65	615	100

Source: Field Work

Table– 4: Number of General Category Malnourished Children

Villages	Boys	Percent	Girls	Percent	Total	Percent
Telagi	18	29.50	43	70.50	61	15.48
Kakhandki	57	42.85	76	57.15	133	33.75
Hanjagi	23	46.00	27	54.00	50	12.69
Yalagur	32	39.02	50	60.98	82	20.81
Kannolli	26	38.24	42	61.76	68	17.25
Total	156	39.59	238	60.41	394	100

Source: Field Work

Table– 5: SC/ST Underweight Children

Villages	Boys	Percent	Girls	Percent	Total	Percent
Telagi	7	38.89	11	61.11	18	13.13
Kakhandki	23	48.94	24	51.06	47	34.30
Hanjagi	17	42.5	23	57.5	40	29.19
Yalagur	16	61.54	10	38.46	26	18.97
Kannolli	4	66.67	2	33.33	6	4.37
Total	67	48.91	70	51.09	137	100

Source: Field Work

Table– 6: Minorities Underweight Children

Villages	Boys	Percent	Girls	Percent	Total	Percent
Telagi	7	58.33	5	41.66	12	14.28
Kakhandki	4	26.66	11	73.33	15	17.85
Hanjagi	19	45.24	23	54.76	42	50.00
Yalagur	4	44.44	5	55.56	9	10.71
Kannolli	2	33.33	4	66.67	6	7.14
Total	36	42.86	48	57.14	84	100

Source: Field Work

Objectives

- To study the health status of children.
- To know the level of malnutrition.
- To enquire about gender bias, if any.
- To study malnutrition caste wise.

Research Methodology

The World Health Organization has suggested new guidelines for measuring the weight of children corresponding to their age. If one year child is below 7 kgs, it is considered to be suffering from severe malnutrition. Similarly, a two years' old child below 8 kgs, a three years' old child below 10 kgs, a four years' old child below 11 kgs and a five years' old child below 12 kgs are all considered to be severely malnourished. Using these parameters, the present research study was conducted by selecting the children, in the age group of 0-5 years, from one gram panchayat from each of five taluks of Vijayapura district. Their height and weight was recorded using the facilities available at the anganwadi centres.

In Khakandaki gram panchayat of Vijayapura taluk there are 13 Anganwadi centres where 1132 children in the age of 0-5 were found. Out of this 782 children's weight was measured. Similarly, in Hanjagi gram panchayat of Indi taluk there are 10 Anganwadi centres with 886 children, out of which 593 children were selected. In Kannolli gram panchayat of Sindagi taluk there are 6 Anganwadi centres where 566 children were found, out of which 405 children were indentified. In Yalgur gram panchayat of Muddebhihal taluk there were 8 Anganwadi centres where out of 549 children 357 children were selected. In Telagi gram panchayat of Basavana Bagewadi taluk there are 10 Anganwadi centres out of which 7 were chosen. In all there were 467 children out of which 362 children were considered for present study.

It is clear from Table-1 that 1260 girls (50.42%) and 1239 boys (49.58%) were

identified for the purpose of present study. The children were grouped breakup as under: Telgi – 362 (14.48%), Khakandaki, 782 (31.29%), Hanjagi, 593 (23.73%), Yalagur, 357 (14.28%), and Kannolli 405 (16.21%).

It is evident from Table-2 that in Telagi gram panchayat 91 children (14.80%), in Khakandaki 195 children (31.70%), in Hanjagi 132 children (21.44%), in Yalgur 117 children (19.02 %) and in Kannolli gram panchayat 80 children (13%) were found underweight. In total 57.89% girls were found underweight. Telagi gram panchayat had highest percentage (64.84%) of underweight girls.

Details of caste-wise number of children can be had from Table-3. It shows that children from general caste were more malnourished compared to SC/ST and minorities. The SC/ST's and minorities have different kinds of food habits which largely depend upon the physical work they do.

It is clear from Table-4 that 39.59% male children and 60.41% female children are malnourished. This is because of the gender discrimination practices of the parents. The notion that the male child is a bread earner and takes care of the parents in old age has made parents to give importance to male child than to female child. Female child will be going out of family after marriage and is a cause of expenditure before and after marriage. It is a common perception in all categories.

It is clear from Table-5 that out of 137, 51.09% girls and 48.91% boys were found underweight. Comparatively, SC&ST girls are healthier than general category girls. As there is a lot of physical work and as mother too goes for work, there is less discrimination made amongst children as female and male. Hence, the condition is much better than the general category children.

It is evident from Table-6 that 84 minorities' children were considered for measurement. We learn that 42.86 boys and 57.14 girls from this community were underweight. Further, 58.33% boys from Telagi GP and 73.33% girls from Khakandakhi GP were found underweight.

Findings

Some broad findings are as follows: From five gram panchayats 2499 children were examined by recording their weight and age. Out of 2499 children 50.42% girls and 49.58% boys were examined. A total of 24.60% of children were found malnourished, out of which 42.11% were boys and 57.89% girls. In general category it was found that 39.59% boys and 60.41% girls were malnourished. Among SC & ST category 51.09% girls and 48.91% boys were malnourished. Compared to general and minority categories, SC/ST boys and girls were in a better position. In the minority community 13.65% children were malnourished. Out of which 57.14% girls and 42.86 boys were malnourished. In Telagi gram panchayat 58.33 % boys and in Kakhandki 73.33 % girls were found malnourished.

Conclusion

The health of children plays a vital role in the progress of the country. It is important to identify the problem of malnutrition among children at the early

stage and take corrective steps. If done in time then the country can have a healthy human resource, which can be utilized to build a strong nation. It is equally necessary that the gender discrimination should be controlled. Awareness should be created that both male and female children are equal and that malnourishment will not only cause individual harm but also affect the whole nation. Parents should also realize that girls are also capable and can stand and work equally along with boys. Further, when a woman is malnourished she cannot bear healthy children. There is danger to both mother and child. Therefore, it is necessary that strategies and plans should be prepared and implemented in such a way that malnourishment is eradicated.

5.15. An Overview - Performance and Inadequacies of Health Care System

In Vijayapura district, sincere efforts are made to improve the availability and accessibility of health care facilities and services through CHCs, PHCs and taluk hospitals in rural and urban areas. In addition to these facilities and services, the government has also launched health care schemes especially for the poorer sections of the society. These are accessed in government as well as in the private hospitals. Such schemes have reduced the economic burden of poor on quality health care. Immunisation programme is quite satisfactory.

The PPP mode has improved the overall healthcare facilities and services in Vijayapura district. The results are clear: sex ratio has improved to 960 from 950 which is less than the state sex ratio (968) but more than national sex ratio (940). Death rate (6.85) is lower than the national and state rates i.e., 7.20 and 7.1 respectively. Similarly, IMR is 34 which is again better than national IMR (47) and state IMR (40). MMR of the district is 135, which is again better that national MMR (212) and state MMR (144). The incidence of AIDS has declined and in respect of leprosy and TB patients, recovery rate is better. On an average 90 percent deliveries are institutional deliveries.

At the same time one can note certain deficiencies such as, rural public hospitals are deficient in the provision of specialties, supportive, ICU, Critical care services etc. Rural patients have no alternative but to rush to the district head quarter. At the district places, facilities are available but there is a grave shortage of trained manpower. The figures in respect of availability of doctors, nurses, beds, ambulances, etc, do not meet the norms. Despite having two medical colleges and a number of hospitals, people are found rushing to Solapur and Miraj for specialist treatment.