

## Original Research Article

# Pattern of utilization of health insurance in two districts of South Karnataka

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## ABSTRACT

**Background:** Health insurance is a widely recognized and preferable mechanism to finance the health care expenditure of the individuals. It is an important mechanism in the modern world to save the individuals from the huge health shock but only a small percentage of people even from educated higher income groups are covered under any health insurance policy. This study was undertaken to know the pattern of health insurance utilization in Uttar Kannada and Udupi districts of Karnataka.

**Methods:** A descriptive study was conducted among 550 household of Uttar Kannada and Udupi districts. Household were selected using multistage sampling technique.

**Results:** Of the 550 study participants, 348 (63.27%) were aware and also subscribed for any type of the health insurance and of these only 89 (25.57%) utilized them. 190 (34.55%) had availed Rashtriya Swasthya Bima Yojana, 42 (7.64%) for Yashasvini, 6 (1.09%) for ESI, 12 (2.18%) for Sampoorna Suraksha and 15 (27.27%) had private insurances. Reasons for not availing health insurances other than being unaware were complicated process 85 (42.08%) and provides only partial coverage 49 (24.26%). The main reasons for not using the health insurance were non availability of empaneled hospital 84 (74.34%), disease not being under the scope of scheme 60 (23.17%) and 32 (12.36%) were unaware about the process of availing.

**Conclusions:** Health insurances being are the best way to help people reduce their financial burden has to be made aware and the drawbacks have to be addressed.

**Keywords:** Health insurance, Utilization, Udupi, Uttar Kannada

## INTRODUCTION

Health is multi-dimensional and is 'a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity and the ability to lead a socially and economically productive life' as defined by World Health Organisation (WHO). An understanding of health is the basis of all health care.<sup>1</sup> In many countries health is a fundamental human right.<sup>2</sup> The glaring

contrast in the state of health between the developed and developing countries, between rural and urban areas and between the rich and poor have attracted worldwide criticism as 'social injustice'. The commitment of all countries, under the banner of WHO, is to wipe out the inequalities in distribution of health resources and services, and attain Sustainable Development Goals.<sup>1</sup>

Socio-economic development and health of community cannot be achieved in isolation as they are related with

each other.<sup>3</sup> Despite large improvements in recent years, life expectancy in India still remains below than other countries following a similar pattern of development.<sup>2</sup>

Health outcomes and service provision vary significantly across different states, with only a few providing access to comprehensive basic healthcare services to all.<sup>2</sup> Various studies reveal that in India more than 80 percent of health care financing is mainly in the form of out-of-pocket (OOP) often posing an enormous burden on underprivileged households.<sup>3</sup> The costs are frequently high enough that households are unable to recuperate them from existing resources.<sup>4</sup>

Human life is unpredictable and in case of emergency health situations, health insurance can make it safe and secure from bearing huge financial loss and decreasing economic burden on the family members.<sup>5</sup> Health insurance is a widely recognized and preferable mechanism to finance the health care expenditure of the individuals.<sup>3</sup>

The International Labour Organization defines health insurance as “the reduction or elimination of the uncertain risk of loss for the individual or household by combining a larger number of similarly exposed individuals or households who are included in a common fund that makes good the loss caused to any one member”.<sup>5</sup> Health insurance policy is a contract between an insurance company and an individual and comes in handy in case of severe emergencies.<sup>6</sup> These insurance system works on the basic principle of ‘pooling of risks of unexpected costs of persons falling ill and needing hospitalization by charging premium from a wider population base of the same community’.<sup>7</sup>

This study was undertaken to know the pattern of health insurance utilization in Uttar Kannada and Udupi districts of Karnataka.

## METHODS

A community based descriptive study was conducted from June 2016 to August 2018 among 310 study participants from Uttar Kannada and 240 study participants from Udupi, a total of 550 households. Households were selected randomly and those houses which were locked at the time of visit and those who did not give consent to participate in the study were excluded. Multistage sampling technique used to collect the sample for the study (Figure 1).

The pre-designed and pre-tested proforma was used to collect information on socio-demographic profile and health insurance utilization of the study participants. Data collected were entered in Microsoft Excel and analysis was carried out with the help of Statistical package for social sciences-20.0.1 (SPSS statistics-20.0.1). Data was presented using proportions and percentages.

## RESULTS

The study was conducted in few selected villages in Uttar Kannada and Udupi districts. Of the 550 study participants, 310 were from Uttar Kannada and 240 were from Udupi.

Health insurance was availed by 185 (59.68%) in Uttar Kannada and by 163 (67.92%) in Udupi. Table 1 and 4 shows the district wise distribution of study participants those who subscribed for health insurance and those who used the health insurance respectively.

**Table 1: District wise distribution of study participants those subscribed for health insurance.**

Health insurances availed	Uttar Kannada	Udupi	Total
	N (%)	N (%)	N (%)
<b>Not availed</b>	125 (40.32)	77 (32.08)	202 (36.73)
<b>RBSY</b>	107 (34.52)	83 (34.58)	190 (34.55)
<b>Yashaswini</b>	23 (7.42)	19 (7.92)	42 (7.64)
<b>ESI</b>	2 (0.65)	4 (1.67)	6 (1.09)
<b>Sampoorna suraksha</b>	7 (2.26)	5 (2.08)	12 (2.18)
<b>RBSY, Yashaswini</b>	22 (7.10)	17 (7.08)	39 (7.09)
<b>RBSY, ESI</b>	1 (0.32)	6 (2.5)	7 (1.27)
<b>Yashaswini, ESI</b>	5 (1.61)	3 (1.25)	8 (1.45)
<b>RBSY, Yashaswini, Sampoorna suraksha</b>	6 (1.93)	4 (1.67)	10 (1.82)
<b>Yashaswini, Sampoorna suraksha</b>	1 (0.32)	2 (0.83)	3 (0.54)
<b>RBSY, Sampoorna suraksha</b>	1 (0.32)	12 (5)	13 (2.36)
<b>Private insurances</b>	7 (2.26)	8 (3.33)	15 (27.27)
<b>Yashaswini, Private insurances</b>	3 (0.97)	0	3 (0.54)
<b>Total</b>	310	240	550

Of the 185 study participants from Uttar Kannada who availed health insurance, 162 (87.57%) paid a premium of less than Rs 500, 13 (7.03%) paid Rs 500-999 and 10

(5.40%) of them paid more than Rs 2000. In Udupi 142 (87.11%) paid <Rs 500, 13 (7.98%) paid Rs 500-999 and 8 (4.91%) paid >Rs 2000. Frequency of premium

payment in all the card holders was annually. Whole family was covered in all those who had health insurance. A coverage of Rs 25001-50000 was provided to 119

(64.32%) from Uttar Kannada and 104 (63.8%) from Udupi and 66 (35.68%) from Uttar Kannada and 59 (36.2%) from Udupi were covered for more than 1 lakh.

**Table 2: Reasons for not availing of health insurance.**

Reasons for not availing (n=202)*	Uttar Kannada (n=125)	Udupi (n=77)	Total (n=202)
	N (%)	N (%)	N (%)
Not aware	54 (43.2)	33 (42.86)	87 (43.07)
Process is complicated	51 (40.8)	25 (32.47)	76 (37.62)
Not interested as I can afford the cost of treatment	17 (5.6)	13 (16.88)	30 (14.85)
Most of the health insurance provides partial coverage	30 (24)	19 (24.67)	49 (24.26)
It is not cashless	36 (28.8)	15 (19.48)	51 (25.24)

**Table 3: Distribution of study participants based on the utilization of health insurance.**

Utilization of health insurance	Uttar Kannada	Udupi	Total
	N (%)	N (%)	N (%)
Yes	42 (22.70)	47(28.83)	89 (25.57)
No	143 (77.3)	116 (71.17)	259 (74.43)
Total	185	163	348

**Table 4: Distribution of study participants based on the health insurance utilized.**

Health insurance utilized	Uttar Kannada	Udupi	Total
	N (%)	N (%)	N (%)
RBSY	10 (23.81)	8 (17.02)	18 (20.22)
Yashasvini	15 (35.71)	9 (19.15)	24 (26.97)
ESI	5 (11.90)	6 (12.77)	11 (12.36)
Sampoorna suraksha	3 (7.14)	9 (19.15)	12 (13.48)
RBSY, Yashaswini	1 (2.38)	2 (4.26)	3 (3.37)
RBSY, ESI	-	-	-
Yashaswini, ESI	2 (4.76)	2 (4.26)	4 (4.49)
RBSY, Yashaswini, Sampoorna suraksha	-	-	-
Yashaswini, Sampoorna suraksha	1 (2.38)	1 (2.13)	2 (2.25)
RBSY, Sampoorna suraksha	-	4 ( 8.51)	4 (4.49)
Private insurances	3 (7.14)	6 (12.77)	9 (10.11)
Yashaswini, Private insurances	2 (4.76)	-	2 (2.25)
Total	42	47	89

**Table 5: Reasons for not utilizing the health insurance they availed.**

Reasons for not using HI	Uttar Kannada, (n=143)	Udupi, (n=116)	Total, (N=257)
	N (%)	N (%)	N (%)
Unaware about the process of availing	12 (8.39)	20 (17.24)	32 (12.45)
Lack of required documents	6 (4.19)	0	6 (2.33)
Maintained good health	5 (3.49)	32 (27.58)	37 (14.39)
Non availability of empaneled hospital	43 (30.07)	41 (35.34)	84 (32.68)
Health assurance scheme covered the expenses	13 (9.09)	12 (10.34)	25 (9.73)
Disease was not under the scope of scheme	29 (20.28)	31 (26.72)	60 (23.35)
Financial coverage limit of card was drained	0	2 (1.72)	2 (0.780)

The reason for non-renewal was high premium in both the cases where the card was not valid. Facilities provided by the health insurance is described in Table 7-

9. Most 252 (72.41%) of the health insurances provided inpatient services and travel allowance. Only few 21 (6.03%) provided outpatient and emergency services.

**Table 6: Distribution of study participants based on the validity of the health insurance.**

Validity of the card	Uttar Kannada	Udupi	Total
	N (%)	N (%)	N (%)
Yes	185 (100)	161 (98.77)	346 (99.46)
No	0	2 (1.23)	2 (0.54)
<b>Total</b>	185	163	348

**Table 7: Distribution of study participants based on the facilities provided by the health insurance.**

No. of study participants	Uttar Kannada (n=185)	Udupi (n=163)	Total (n=348)
	N (%)	N (%)	N (%)
<b>Facilities</b>			
In patient services	37 (20)	38 (23.31)	75 (21.55)
In patient services and travel allowance	140 (75.68)	112 (68.71)	252 (72.41)
Out patient service, emergency service, in patient services, travel allowance and daily allowance	8 (4.32)	13 (7.978)	21 (6.03)
<b>IP facilities</b>			
Medical treatment	107 (57.84)	83 (50.92)	190 (54.6)
Medical treatment, surgery, implants, preventive measures, ambulance service, maternity or delivery services	56 (30.27)	58 (35.58)	114 (32.76)
Surgery, implants, preventive measures, ambulance service, maternity or delivery services	22 (11.89)	22 (13.5)	44 (12.64)
<b>Freedom to select health care institution</b>			
Yes	5 (2.70)	8 (4.91)	13 (3.74)
No	180 (97.3)	155 (95.09)	335 (96.26)

**Table 8: Distribution of study participants based on number of times health insurance was used.**

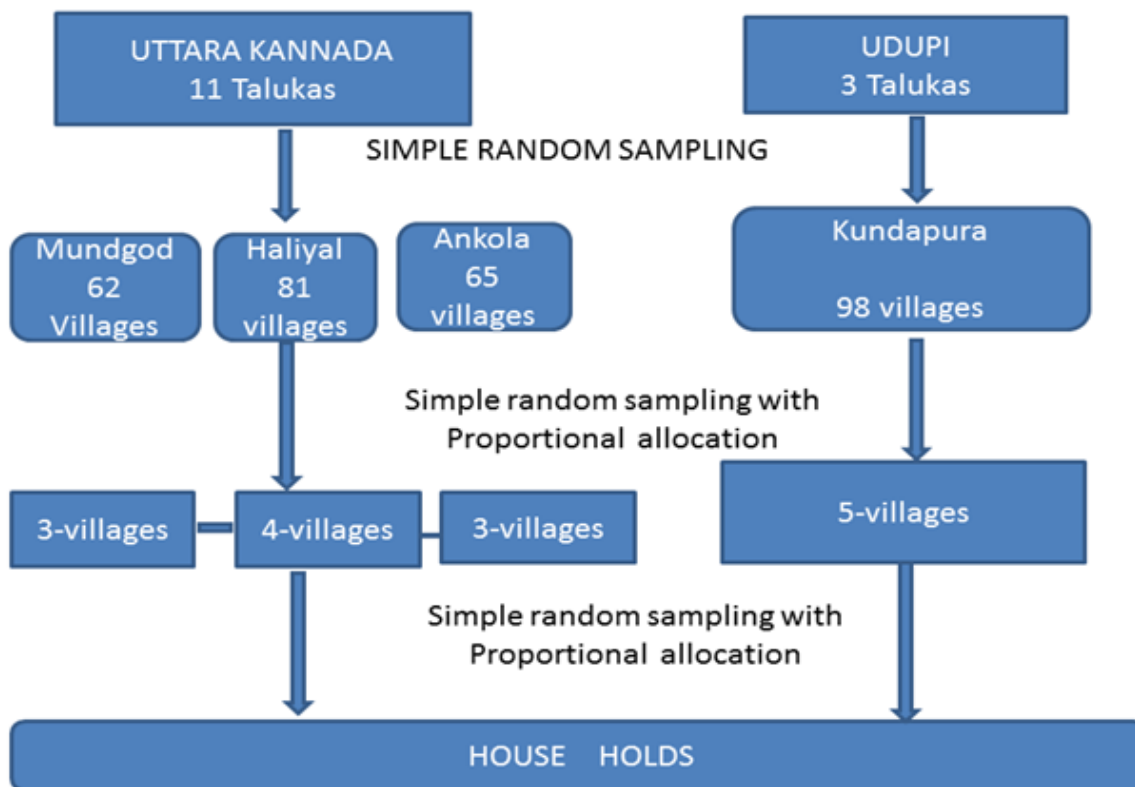
Number of times utilized	Uttar Kannada	Udupi	Total
	N (%)	N (%)	N (%)
1	17 (40.48)	17 (236.17)	34 (38.20)
2	15 (35.71)	14 (29.78)	29 (32.58)
3	4 (9.52)	12 (25.53)	16 (17.98)
4	1 (2.38)	2 (4.26)	3 (3.37)
5	5 (11.91)	2 (4.26)	7 (7.86)
<b>Total</b>	42	47	89

**Table 9: Distribution of study participants based on number of times the health insurance provided cashless benefits and reimbursed.**

Number of study participants	Uttar Kannada (n=42)	Udupi (n=47)	Total (n=89)
	N (%)	N (%)	N (%)
<b>Number of times cashless method</b>			
0	3 (7.14)	3 (6.38)	6 (6.74)
1	19 (42.24)	18 (38.30)	37 (41.57)
2	10 (23.81)	10 (21.28)	20 (22.47)
3	4 (9.52)	12 (25.53)	16 (17.98)
4	1 (2.38)	2 (4.26)	3 (3.37)
5	5 (11.91)	2 (4.26)	7 (7.87)
<b>Number of times reimbursed</b>			
0	37(88.10)	44(93.62)	81 (91.01)
1	2 (4.76)	0	2 (2.25)
2	3 (7.14)	3 (6.38)	6 (6.74)

Among the inpatient services most 190 (54.6%) of the health insurance covered only medical treatment and 114 (32.76%) of them covered both medical and surgical treatment. Only 13 (3.74%) were free to choose the health care institution of their choice.

Most 34 (38.2%) them who had utilized health insurance utilized it only once. Five (11.91%) of them from Uttar Kannada and 2 (4.26%) from Udupi utilized it 5 times. Six of them who utilized never had cashless benefit. It was either partial coverage or reimbursement. It can be seen that the health insurance which provided cashless benefits were utilized more.



**Figure 1: Multistage sampling technique used to collect the sample for the study.**

## DISCUSSION

This study was conducted among 550 households in Uttar Kannada and Udupi districts to know their health insurance utilization pattern.

In the present study health insurance was availed by 185 (59.68%) in Uttar Kannada and by 163 (67.92%) in Udupi. In another similar study done in rural areas of Bangalore in 2015 among 399 study participants, 66.9% had health insurance coverage.<sup>8</sup> A study done in St. John's Medical College, Bangalore in 2007 among 200 households to study the awareness, prevalence and utilization of health insurance services it was seen that 47.5% of the individuals were aware of health insurance, 42.5% had availed for health insurance, of them 32.9% had utilized health insurance.<sup>9</sup>

In the present study, 190 (34.55%) had availed Rashtriya Swasthya Bhima Yojana, 42 (7.64%) for Yashasvini, 6 (1.09%) for ESI, 12 (2.18%) for Sampoorana Suraksha and 15 (27.27%) had private insurances. In a study in rural Bangalore 92.6% of the study participants were

covered by Government health insurance schemes and 7.4% had private health insurance schemes.<sup>2</sup> In a another study conducted by Public Health Foundation of India, it was reported that coverage of health insurance by Vajpayee Arogya Shree scheme was 0.95 million families in Karnataka, Rashtriya Swasthya Bhima Yojana covered 22.7 million families across India, 55 million individuals were covered by Yeshaswini scheme in Karnataka and 14.3 million families were covered by ESI scheme.<sup>10</sup>

## CONCLUSION

Even though more than half the study participants subscribed for health insurance, only quarter of those who subscribed utilized it. Major reason for this was not being aware about health insurances or the process for utilization. This shows the gap in communication between the health personals and the general population. There are few more who even if they were aware did not avail for any health insurance. The reasons being non availability of empaneled hospital, limit of financial coverage, the disease not covered and high premium. These drawbacks in the health insurances that are

available should be addressed as health insurances are the best way to help people reduce their financial burden.

Hence it is very important to educate the community regarding the best health insurance available so that they can take the maximum benefits from it.

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