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Original Research Article

A study on health care utilization pattern and expenditure on health among people of Kumta Taluk, Uttar Kannada District, Karnataka state

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ABSTRACT

Introduction: Health care utilization is the measure of the population's use of the health care services. Health care utilization is used to assess how efficiently a health care system is providing healthcare services. **Aim:** With this context a study was carried out to evaluate health care utilization and health expenditure among people of Kumta taluk and to analyze health care utilization and health expenditure by household's socio economic status, geographical location and other key variables.

Materials and Methods: Multistage sampling was used to select 160 households. A pre-tested questionnaire was used to interview household heads.

Findings: The study covered a population of 569 persons out of 160 households of Kumta taluk. Overall males fell sick more than females. Fever was highest (31.6%) reported sickness. 51.9% people utilized private facility due to good care provided and 39.5% used government facility as it is easy to access. The maximum expenditure on treatment of morbidities was Rs.16500 with the mean expenditure of Rs.1006.3. There was no association between age group, sex and type of health facility utilized. There was no difference in the type of health facility used by middle class and upper class. Data on hospitalization revealed that, majority of the people used private facility. The total minimum expenditure on hospitalization was Rs.4000 and maximum Rs.200000 with the mean expenditure of Rs.34900. Regarding immunization, 75% used PHC for immunization and 25% used private health facility. The maximum amount spent on immunization was Rs.3000 with the mean expenditure of Rs.333.33.

Conclusion: Fever was highest reported sickness among all age groups irrespective of sex. Private facility was utilized by majority as the care was good and Government facility was used as it was easy to access. Utilization of the health care facility showed no relationship with their age, sex, socio economic status. Majority preferred private facility for hospitalization.

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1. Introduction

“Health care utilization is the measure of the population's use of the health care services available to them. This includes the utilization of hospital resources, personal care, home resources, and physician resources.” Health care utilization and health status are tools to assess how efficiently a health care system is providing healthcare services. Health care utilization surveys are effective tools in assessing the health care needs.

Studies on expenditure on health provide valuable information on the health expenses and help in budgetary control.¹ The catastrophic health expenditures and out of pocket payments in India has increased in the past two decades and such expenditures has been greater in poor and among the households of older people and those headed by females.² Indian health financing has been conventionally through out of pocket expenses and with 25% of population classified as poor, out of pocket expenditures may lead to unaffordability to health care.

Public health-care infrastructure in rural areas has been developed as a three-tier system based on the population

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norms.³ Shortages of public health resources, funds and personnel force the poor to seek the treatment from private facilities with huge costs and this is attributed as one of the major reason for the families been pushed to poverty.

The pattern of health care utilization among people has an impact on health status of each individual. Knowledge of patterns of illness, health-care utilization, expenditures on health care, and effects of health-care expenditure on households is required for health-care financing reforms which help in providing improved health care services. Hence this study was carried out in Kumta Taluk of Uttar Kannada district of Karnataka with 35,023 households, 1, 54,280 population and Kumta town with 36719 population. Health care services in Kumta are provided by both public and private sector.

The aim was to evaluate health care utilization and health expenditure among people of Kumta taluk and to analyze health care utilization and health expenditure by household's socio economic status, geographical location and other key variables.

2. Materials and Methods

A descriptive cross-sectional study was carried out in December 2019 in Kumta taluk of Uttar Kannada District, Karnataka State. Multistage sampling technique was used to select the households. Kumta taluk consist of 110 villages with 6 PHC's. In the first stage out of six PHC's three PHC's (i.e. Santheguli PHC, Katgal PHC, Kagal PHC) were selected by simple random technique. In the second stage two villages from each PHC (Santheguli and Divalli Village, Divgi and Hebbail Village, Bada and Hubbangere Village) were selected by simple random technique and in the third stage 20 households were selected randomly from these selected villages, which made a sample size of 120 households or an approximate population of 600 individuals. In addition 40 households with an approximate population of 200 individuals were taken from urban area of Kumta town. Thus study was carried out on 160 households covering about 800 individuals.

Data was collected from household head through interview using a pretested questionnaire. Information was collected from all the individuals in 160 households. The economic status was collected through asset index. Economic status was calculated by analysing wealth index and were scored as per the methodology adopted in National Family Health Survey 1998-1999.

Morbidity pattern was obtained by asking the illness suffered in the last three months. Information on Healthcare utilization of each individual in the household was collected for as many episodes as it has happened in the past 3 months. Information on place of the treatment for each episode of illness, preferences and reason for the choice of the treatment facility, duration of the treatment, outcome of the treatment and distance to the nearest

facility was collected. Expenditure for each episode of illness for each individual on illnesses, hospitalization, immunization and delivery services were collected. The health expenditure incurred corresponding to each illness suffered included expenditure on OPD, consultation, medicines and specialised treatments, diagnostics costs, travel costs, wages lost during the illness of self and attendants, cost on diet and food and other miscellaneous expenditure.

Data was analysed by using SPSS version 16. Means, percentages, Chi-square test, correlation and regression analysis were the statistical measures used to analyse the data.

Ethical approval was obtained and permission was taken from the District Health Office (DHO), Uttar Kannada District Karnataka State. Verbal informed consent from the respondents was taken.

3. Results

3.1. Socio-demographic findings

The survey covered a population of 569 persons from 160 households of Kumta taluk. Out of 569 samples 53.8% were males and 46.2% females. Age wise 59.2% were in 20-29 years age group and 17% belonged to age group 60 and above, 12.7% in 10-19 years, 5.8% children in 5-9 years age group, 5.3% children were the in 0-4 years age group.

49.2% were Hindus, 24.1% were Muslims and 26.7% were Christians. The majority of the population were married i.e. 54.5% and 39.7% were single, 4.2% were widowed and 1.6% were divorced. Among 569 respondents 37.4% were graduates, 33.2% were having primary education, 23.6% secondary education, 5.1% were children under the age of 4yrs and 0.7% were having no education.

Majority of the population were working i.e. 36.6%, 34.6% were homemakers, 21.3% were students, 2.55 were seeking work, 1.6% of the population did nothing and 1.6% were unemployed.

3.2. Economic status of the respondents

57.3% of households had monthly income of Rs.10- 20 thousand, 33.9% had Rs.20-30 thousand, 7.7% had Rs.30-40 thousand and 1.1% of households had monthly income of Rs.50 thousand and above. As per National Family Health Survey 1998-1999 Wealth Index, 55.7% belonged to middle class, 42.9% to upper class and 1.4% to lower class.

3.3. Findings on the illness suffered in past 3 months

Out of 569 respondents 133 respondents suffered 24 types illness in the past 3 months and 137 episodes were reported. Fever was reported highest i.e. 31.6%, followed by Hypertension 14.3%, Diabetes 8.3%, Arthritis 7.5%, Accidents and injuries 5.3%, Skin allergy 3.8%, Diarrhoea,

Table 1: Distribution of respondents according to the type of illness

Morbidities suffered	N	Percent	Percent of cases
Fever	42	30.7%	31.6%
Cough and cold	1	.7%	.8%
Tuberculosis	3	2.2%	2.3%
Diabetes	11	8.0%	8.3%
Diarrhoea	4	2.9%	3.0%
Intestinal worms	4	2.9%	3.0%
Accidents and injuries	7	5.1%	5.3%
Conjunctivitis	1	.7%	.8%
Carcinoma	2	1.5%	1.5%
Hypertension	19	13.9%	14.3%
Physical checkup	5	3.6%	3.8%
Dental	1	.7%	.8%
Hydrocele	1	.7%	.8%
Skin allergy	5	3.6%	3.8%
Cardiovascular disease	3	2.2%	2.3%
Arthritis	10	7.3%	7.5%
Cataract	4	2.9%	3.0%
Epilepsy	1	.7%	.8%
Tonsillitis	3	2.2%	2.3%
Gastrointestinal disorders	1	.7%	.8%
Schizophrenia	1	.7%	.8%
Asthma	2	1.5%	1.5%
CSOM	2	1.5%	1.5%
Paralysis	3	2.2%	2.3%
Urinary tract infection	1	.7%	.8%
Total	137	100.0%	103.0%

cataract and intestinal worms 3.0% each, tuberculosis, cardiovascular diseases, tonsillitis and paralysis 2.3% each, carcinoma, asthma and CSOM 2% each, cough and cold, conjunctivitis, dental disorders, hydrocele, epilepsy, gastrointestinal disorders, urinary tract infection and schizophrenia 0.8% each. 3.8% of the respondents reported that they visited healthcare facility for physical check-up. (Table 1)

3.3.1. Distribution of type of illness among males and females

Fever (32.2%), Diabetes(15.3%) were reported higher in females as compared to males. Accidents and injuries (6.6%), Hypertension (17.1%) were reported higher in males as compared to females.

3.3.2. Distribution of the type of illness in the different age group

Fever was reported highest among all age groups. Hypertension , diabetes and accidents and injuries were reported in 20-60+ age groups. 40.0% of fever cases were reported in 0-4 years, 55.6% in 10-19years, 37% in the age group 20-59years and 14.3% fever cases were reported in 60+ years. 28.6% of hypertension cases were reported in 60+ age group and 6.8% hypertension cases were reported

in 20-59 years age group. 10.2% of diabetes cases were reported in 60+ years, 8.2% diabetes cases were reported in 20-59years age group. 6.8% of accidents and injuries were reported in 20-59years age group and 2% were reported in 60+ age group. 20% of cases reported diarrhea and cold and cough in 0-4years age group. Tuberculosis was also reported (4.1%) in 20-59years age group.

3.3.3. Findings on health facility utilization for various morbidities

Most of people utilized private facility i.e. 53.4% when compared to government facility i.e. 38.3%. 4.5% of cases utilized traditional medicine, 3.8% bought medicine of own, 2.3% continued old medicine and only 0.8% purchased medicine by pharmacist

3.3.4. Utilization of health facility according to age group, sex, wealth index

All the age groups except 20-59 years have used government and private facility equally. In age group 20-59years private health facility (52.9%) was preferred more than government (35.7%). Similarly in the age group 10-19 years private facility (55.6%) was preferred than government facility (44.4%). There was no association between age group and type of health facility used except the age group 20-59 years.

(Table 2)

The health care facility was used equally irrespective of sex. 31.6% of the males and 21.8% females used private health facility. 16.5% of the males and 21.8% of the females used government health facility.

There was no difference in the type of health facility used by middle class and upper class. 52.9% of the cases from middle class and 47.1% of the cases from upper class used government facility. 52.1% of the cases from middle class and 47.9% of the cases from upper class used private health facility, 66.7% of the cases from middle class and 33.3% of the cases from upper class used traditional medicine. (Table 3)

3.4. Reasons to visit healthcare for the morbidities

Good care was the major reason to visit the health facility. Out of 137 sickness responses, 68.4% utilized health care facility because of good care provided by the health facility and 34.6% utilized the health care as it is at easy access. Government facility was utilized for the reason that it was easy to access and private facility was accessed because good care. Out of 133 respondents, 82.6% utilized the government facility as it is at easy access whereas the 76.9% of the cases utilized private health facility because of good care provided by them.

3.4.1. Distance from residence to health care facility

54.5% of cases reported that the healthcare facility is at the nearest approach. 25% of cases reported that health facility was at a distance between 1-2km. 23.5% of cases reported that the health facility was at a distance between 3 km and above. When the reasons to bypass the nearest facility was tried to understand, 43.1% reported that the reasons to bypass the nearest facility was due to unsatisfied services offered by the health facility and 33.3% reported that doctors were not available on the time of treatment. 12.5% reported that waiting time was too long, 9.7% reported that medicines were not available and 2.8% reported that facility provided was not good and staffs were unfriendly.

3.4.2. Findings on duration of sickness suffered and outcomes of the sickness

The majority of the cases suffered the sickness for 1 week i.e. 59.4% of the cases followed by 33.8% were ongoing treatment. Only 3.0% of the cases were sick for 2week and 3week. (Table 4). Out of 137 cases, 56.8% cases reported that the sickness was cured after receiving treatment from the health care facility, 37.9% cases were on ongoing treatment, 7.6% cases reported that the sickness was uncured and 1.5% cases reported that there was no any progress with the treatment received.

3.4.3. Expenditure on treatment of morbidities

The maximum expenditure among all was for medicine followed by consultation and diagnosis. The total maximum expenditure on treatment by the morbidities was Rs.16500 with the mean expenditure of Rs.1006.3. The maximum expenditure on consultation was Rs.2000 with the mean expenditure of Rs.226.7. The maximum expenditure on diagnosis was Rs.5000 with the mean expenditure of Rs.207.1. The maximum expenditure on medicine was Rs.5500 with the mean expenditure of Rs.316.8. The maximum expenditure on transport was Rs.3000 with the mean expenditure of Rs.150. The maximum expenditure on food supplements Rs.5000 with the mean expenditure of Rs.105.6. The maximum wages lost was Rs.5000 with the mean expenditure of Rs.116.5. The maximum leave utilized was Rs.15 with the mean of Rs.0.43. Therefore it shows that the maximum expenditure among all was for medicine followed by consultation and diagnosis. (Table 5)

Twenty percent of the respondents had not spent any amount (10-20%). 21-40% of the respondents had spent only up to Rs.400. 41-60% of the respondents had spent only Rs.500. 61-70% of the respondents spent Rs.640. 71-80% of the respondents had spent Rs.1300. Ninety percent of cases had spent only up to Rs.2600 and there were only two cases who had spent more than Rs.6300 (Rs.15500 and 16500 who were cases of accidents and carcinoma). (Table 6)

3.5. Findings on Hospitalization in past one year

Out of 19 respondents who were hospitalized in the past one year, 21.1% were hospitalized for cataract surgery, 15.8% were hospitalized for gynecological disorders such as fibroid uterus and 15.8% for cardiovascular disorders followed by 10.5%, accidents and injuries, 10.5% for carcinoma. Hospitalization due to Fever was 5.3%, malaria 5.3%, diarrhea 5.3%, gastrointestinal disorders 5.3% and diabetes were 5.3%. (Table 7)

Type of the facility used and duration of hospitalization and distance of the facility from home

Out of 19 hospitalizations, 94.7% have used private facility and only 1 respondent (5.3%) used government facility. Out of 19 cases 63.2% people were hospitalized for 1 week. 31.6% were hospitalized for 2 weeks and 5.3% were hospitalized for 3 weeks. 68.4% travelled more than 3 km, 26.3% travelled 1-2km, and 5.3% travelled less than half km

3.5.1. Expenditure on hospitalization

The highest maximum expenditure was on surgery, accommodation, medicine and diagnosis. The total expenditure on hospitalization was minimum value of Rs.4000 and maximum value of Rs.200000 with the mean expenditure of Rs.34900.

The maximum amount spent on surgery was Rs.60000 with the mean expenditure of Rs.13900. The maximum

Table 2: Distribution of the respondents according to age groups and type of health facility used

Type of health facility used		Age group					Total
		0-4	5-9	10-19	20-59	60 +	
Government health care	N	2	0	4	25	20	51
	%	40.0%	.0%	44.4%	35.7%	41.7%	
Private Healthcare	N	2	1	5	37	22	67
	%	40.0%	100.0%	55.6%	52.9%	45.8%	
Traditional medicine	N	1	0	0	3	2	6
	%	20.0%	.0%	.0%	4.3%	4.2%	
Purchased medicines as given by pharmacist	N	0	0	0	0	1	1
	%	.0%	.0%	.0%	.0%	2.1%	
Continued/ started old prescription without consultation	N	0	0	0	3	0	3
	%	.0%	.0%	.0%	4.3%	.0%	
Brought medicines of own	N	0	0	0	2	3	5
	%	.0%	.0%	.0%	2.9%	6.2%	
Total		5	1	9	70	48	133

Table 3: Type of health facility used according to wealth index

Type of health facility used by the morbidities		Wealth index		Total
		Middle class	Upper class	
Government health care	N	27	24	51
	%	52.9%	47.1%	
Private	N	37	34	71
	%	52.1%	47.9%	
Traditional medicine	N	4	2	6
	%	66.7%	33.3%	
Purchased medicines as given by pharmacist	N	1	0	1
	%	100.0%	.0%	
Continued/ started old prescription without consultation	N	1	2	3
	%	33.3%	66.7%	
Brought medicines of own	N	3	2	5
	%	60.0%	40.0%	
Total	N	73	64	137

Table 4: Duration of the sicknesses

Duration of sickness	N	Responses	
		Percent	Percent of Cases
1 week	79	57.7%	59.4%
2 week	4	2.9%	3.0%
3 week	4	2.9%	3.0%
4 week	3	2.2%	2.3%
More than 4 weeks	2	1.5%	1.5%
Ongoing	45	32.8%	33.8%
Total	137	100.0%	103.0%

Table 5: Expenditure on treatment of morbidities

Categories	N	Minimum	Maximum	Mean	Std. Deviation	Median
Consultation	133	.00	2000.00	226.7	328.59	200.0
Diagnosis	133	.00	5000.00	207.1	627.27	0.0
Medicine	133	.00	5500.00	316.8	682.63	150.0
Transport	133	.00	3000.00	150.0	457.59	0.0
Food	133	.00	5000.00	105.6	476.08	0.0
supplements						
Wages loss	133	.00	5000.00	116.5	543.16	0.0
Leave utilized	133	.00	15.00	0.43	1.81	0.0
Total cost	133	.00	16500.00	1006.3	2144.72	400.0

Table 6: Percentile values of total expenditure for morbidities

Percentiles	10	20	30	40	50	60	70	80	90
Amount (Rs.)	0	0	400	400	500	500	640	1300	2600

Table 7: Reasons for hospitalization (Past 1 year)

Reasons	Frequency	Percent
Fever	1	5.3
Malaria	1	5.3
Diabetes	1	5.3
Diarrhoea	1	5.3
Accidents and injuries	2	10.5
Carcinoma	2	10.5
Gynaecological disorders	3	15.8
Cardiovascular disorders	3	15.8
Cataract surgery	4	21.1
Gastrointestinal disorders	1	5.3
Total	19	100.0

amount spent on accommodation was Rs.14000 with the mean expenditure of Rs.1733.33. The minimum amount spent on medicine charges was Rs.500 and a maximum of Rs.10000 with the mean expenditure of Rs.3038.46. The minimum amount spent on diagnostic charges was Rs.1000 and a maximum of Rs.10000 with the mean expenditure of Rs.2400.

The amount spent on consultation charges ranged from Rs.200 - Rs.500. The amount spent on transportation was Rs.5000. The minimum amount spent on food was Rs.400 and a maximum of Rs.1000. The maximum amount lost due to leave taken during illness was Rs.2000 with the mean expenditure of Rs.446.67.(Table 8)

3.5.2. T-test

T-test was applied to test the significance between sex and total health expenditure and results are: p value- 0.406 and t value is 0.403. This shows that there was no significant association between sex and expenditure on treatment.

3.6. Findings on immunization and delivery

Among 160 households 11 cases received immunization and 1 delivery case was reported. 81.8% of the cases used PHC

for immunization and 18.2% of the cases used private health facility for immunization.

The distance from home to immunization facility was less than half km for 8 of the respondents i.e. 66.7% followed by 1 km for 1 respondent i.e. 8.3% of the cases followed by 2km for 3 respondents i.e. 25% of the cases.

3.7. Expenditure on immunization

The maximum amount spent on immunization was Rs.3000 with the mean value of Rs.333.33.

4. Discussion

The healthcare utilization and health expenditure are the factors that provide knowledge on people's preferences for treatment of sicknesses and the expenditure incurred for treatment of sicknesses. It also gives an overview of the basic facilities available for the people.

Universal health coverage envisages that "all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship"

Table 8: Expenditure on hospitalization

Item of expenditure	N	Minimum	Maximum	Mean	Std. Deviation
Total expenditure on treatment in total	19	4000	200000	34900	49095.755
Consultation charges	16	200	500	384.38	132.563
medicine charges	13	500	10000	3038.46	2495.509
Diagnostic charges	16	1000	10000	2400.00	2432.009
Surgical charges	15	0	60000	13900	17537.171
Transportation charges	16	0	5000	1000.00	1417.510
Food charges	16	400	10000	1881.25	2450.638
Accomodation charges	12	0	14000	1733.33	3912.528
Leave taken during illness	9	0	2000	446.67	880.661

(WHO 2015). Majority of people are deprived from even basic services knowing or unknowingly. So in this regard the present study was in an attempt to explore more about the utilization pattern of health services and health expenditure among people of Kumta taluk

4.1. Morbidity pattern

Fever (31.6%) was highly reported sickness among all age groups irrespective of sex, followed by chronic diseases such as hypertension (14.3%) which was high in males and diabetes mellitus (8.3%) which was high in females, followed by accidents and injuries (5.3%) which was high in males. Apart from these, other sicknesses did not show any difference between males and females. The least reported sickness was asthma CSOM 2%, cough and cold, conjunctivitis, dental disorders, hydrocele, epilepsy, gastrointestinal disorders, urinary tract infection and schizophrenia 0.8%. Males (74/133) fell sick more than females (59/133). While exploring the sicknesses occurred in age groups, it was found that fever was common among all and highest in 10-19 years of age (55.6%) followed by 0-4 years (40%). Accidents and injuries were highly seen in age group 10-19 years 11.1% followed by age group 20-59 years (6.8%), hypertension was reported high in age group 60 and above (28.6%) and in age group 20-59 years (6.8%), diabetes was reported high in age group 60 and above (10.2%) followed by 20-59 years (8.2%).

The findings of this study were Similar to a study conducted by Rajaratnam J et al. in rural population of Tamil Nadu, revealed that 57.3% did not have any illness. Sex had no bearing on the number of illnesses. 70% children less than 2 years of age, had one or two illnesses.⁴ Another study conducted by Divakar SV et.al. in tribal community in Mysore district, revealed 47.52% of tribal population had suffered once from one or other type of illness and 27.24% had suffered from more than one illness during last 12 months.⁵

Similar finding were observed in the study conducted by Yogita Bavaskar. Out of 377 ailing individuals, 158(42%) were male and 219(58%) were female and there was not a significant difference in presence of morbidities according

to gender. About 43.08% of the study subjects were suffering from or had an episode of fever in previous one month followed by that 31.9% individuals had respiratory infection and GI infection, musculoskeletal disorders and skin disorders were present in 8.4%, 6.2% and 6.5% of individuals respectively. Fever was most common ailment followed by illnesses due to respiratory and gastrointestinal infections.⁶

4.2. Utilization of health care services for morbidities

The present study found that most of people utilized private facility (53.4%) than government facility (38.3%). Private facility was used (76.9%) because of good care provided by them whereas government facility was used (82.6%) because it was easy to access. Similarly a study conducted by Divakar SV et al. in tribal community in Mysore district says that in case of acute ailments, 63% of episodes were treated by private practitioners, while in the data of NSSO, 2014 for 70% of spells of ailment were treated in private hospital.⁵

Exploring the association between the sources of treatment received and sex, the study did not show any relationship with the sex. There was no difference between the genders in utilization of any health facilities. Males and females use the health care facility equally.

The present study found that, 43.1% reported that the reasons to bypass the nearest facility (i.e. government facility) was due to unsatisfied services offered by the health facility and 33.3% reported that doctors were not available at the time of treatment. 12.5% reported that waiting time was too long, 9.7% reported that medicines were not available and 2.8% reported that facility provided was not good and staffs were unfriendly. Similarly a study conducted by Yogita Bavaskar, on Health care utilization and health expenditure in a tribal area of thane district revealed that the reasons for non-utilization of Government health care facility were as follows - 54% of study participants said quality of healthcare is not good in Govt. hospital as compared to private. 35% individuals did not go to Govt. hospital as the timing of OPD in government hospital was not comfortable for them. The other reasons

given were drugs/ facilities not available (26%), doctors not available in hospital (11%), distance far away (7%).⁵ The rural primary health centers are woefully underutilized because as stated by the surveyed population that the Primary health centers are at nearest approach but the doctors are not available at the time treatment is required and sometimes the medicines are not available and the waiting time is too long as the clients have to wait for the doctors arrival. Some even reported that the treatment provided was good but the availability of the healthcare providers were less and they fail to provide their clients with the desired amount of attention and medication.

According to asset index analysis there was no difference in the type health facility used by middle class and upper class.

4.3. Health expenditure for morbidities

The health expenditure by the respondents for the morbidities, it was found that the total maximum expenditure on treatment by the respondents for the morbidities Rs.16500 value with the mean value of Rs.1006.3.

Similarly a study conducted by Singh et al., Health care utilization and expenditure pattern in Punjab in the year 2018 reveals that Mean expenditure for outpatient care was INR 8501 (USD 128.6) per episode.⁷ Another study conducted Jayakrishnan T et al. (2016) reveals that during the 15 days recall period, the combined average percapita treatment expenditure as OOP for OP care per episode was reported to be Rs.574 (Rural - 509, Urban - 639). Even in PHCs people incurred expenditure as OOP (Range Rs.309-386). It was mainly spent on users' fee, outside prescribed drugs and laboratory investigations, which indicate the lack of availability of these services in most of the PHCs.⁸ The present study indicates that the maximum expenditure for morbidities among all was for medicine followed by consultation and diagnosis. Ninety percent of cases had spent only up to Rs.2600 and there were only two cases who had spent more than Rs.6300 (Rs.15500 and 16500 who were cases of accidents and carcinoma). 21-40% of the respondents had spent only up to Rs.400. 41-60% of the respondents had spent only Rs.500. 61-70% of the respondents spent Rs.640. 70-80% of the respondents had spent Rs.1300.

4.4. Hospitalization

Exploring the details on hospitalization, it was found that 21.1% were hospitalized for cataract surgery, 15.8% were hospitalized for gynecological disorders such as fibroid uterus and cardiovascular disorders 15.8% followed by accidents and injuries 10.5%, carcinoma 10.5%. Hospitalization due to Fever 5.3%, malaria 5.3%, diarrhea 5.3%, gastrointestinal disorders 5.3% and diabetes were

5.3%.

Majority have preferred private facility for hospitalization (94.7%) and only 5.3% of the cases have used government facility. 68.4% travelled more than 3 km, 26.3% travelled 1-2km, and 5.3% travelled less than half km. This shows that people did not have easy access to hospitalization facility.

The total expenditure on hospitalization was minimum value of Rs.4000 and maximum value of Rs.200000 with the mean expenditure of Rs.34900. The highest maximum expenditure was on surgery, accommodation, medicine and diagnosis. Similarly a study conducted by Yogita Bavaskar, on Health care utilization and health expenditure in a tribal area of thane district revealed that All hospitalization were in private hospitals and Average percentage of total family income spent on health care Rs.4777/- per year in chronic morbidities and Rs.1925/- per hospitalization.⁵

4.5. Immunization

11 cases received immunization and 1 delivery case was reported. 81.8% of the cases used PHC for immunization and 18.2% of the cases used private health facility for immunization. The distance from home to immunization facility was less than half km (66.7%). The maximum amount spent on immunization was Rs.3000 with the mean value of Rs. 333.33. Among 12 respondents 85.7% of male child and 60% of female child were immunized in PHC. 14.3% of male child and 40% of female child were immunized in private facility.

5. Conclusion

Fever was highest reported sickness among all age groups irrespective of sex, followed by chronic diseases. Private facility was utilized by majority as the care was good and Government facility was used as it was easy to access. Utilization of the health care facility did not show any relationship with their age, sex, socio economic status. Majority preferred private facility for hospitalization. The total expenditure on hospitalization was minimum value of Rs.4000, mean expenditure of Rs.333.33 for immunization and PHC was preferred for immunization.

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7. Conflict of Interest

The authors declare that they have no conflict of interests.

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