

A study to assess the Perception, Utilization and Patient Satisfaction regarding community Health Insurance schemes in a selected population

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Abstract:

Background: When people have to pay fee for health care, and the out of pocket payments are so high in relation to their income that it results in financial catastrophe for the individual or the household. Such high expenditure for health care can mean that people have to cut down on necessities such as food and clothing, or are unable to pay or withdraw their children from schools or putting them in to government schools etc. Moreover, the impact of these out-of-pocket payments for health care goes beyond catastrophic spending alone.

Objective : To Study The Perception, Utilisation And Patient Satisfaction Regarding Community Health Insurance Schemes In A Selected Population.

Materials and Methods : The Present cross sectional study was conducted in the City of Tumakuru involving both the government and Private hospitals from November 2015 to October 2017. According to a study conducted in Bangalore, Karnataka, the prevalence of subjects using community health insurance schemes was 23% Sample size was estimated to be 295 Study subjects utilizing health care services in one government and one private hospital under any of the community health insurance schemes were included in the study .

Results : In the study majority of the study 172(58.3%) subjects were aware of yeshasvini community health insurance scheme and the 8 (2.7%) of subjects were of RSBY and 4(1.3%) Vajpayee Arogyasree and 111(37.6%) of the subjects were aware of the Multiple community health insurance schemes. With respect to Overall quality of the services provided under the community health insurance scheme. Among the 113 subjects who utilized private set up, (57.5%) were satisfied. Among those 182 subjects who utilized the government set up, (47.8%) Satisfied. The association between subjects overall satisfaction and place of availing the community health insurance schemes was found to be statistically significant with a P value of 0.002 .

Conclusion: The study suggests that there is enough awareness and in general positive attitude towards health insurance in Tumakuru city with private firms and insurance agents being major catalyst in insurance buying. Overall people feel more relaxed about hospital expenses after taking health insurance. Overall satisfaction with the customer services of the companies is also high.

Keywords: Insurance, Perception, utilization, Government, Health Care

Introduction

Health care has always been a problem area for India, a nation with a large population and a larger percentage of this population living below the poverty line. As medical care advances and treatments increase health care costs also increase. The purpose of health insurance is to protect one and one's family financially in the event of an unexpected serious illness or injury that could be very expensive ¹.

When people have to pay fee for health care, and the out of pocket payments are so high in relation to their income that it results in financial catastrophe for the individual or the household. Such high expenditure for health care can mean that people have to cut down on necessities such as food and clothing, or are unable to pay or withdraw their children from schools or putting them in to government schools etc. Moreover, the impact of these out-of-pocket payments for health care goes beyond catastrophic spending alone. ^{2,3}

Many people may decide not to use health services, because they cannot afford either the direct costs, such as for consultations, medicines and laboratory tests, or the indirect costs, such as for transport and special food. The basic function of health insurance is to provide 'access to health care with financial risk protection'. Community health insurance is "any not-for-profit insurance scheme aimed primarily at the informal sector and formed on the basis of a collective pooling of health risks, and in which the members participate in its management."^{4,5}.

At present as many as 135 million Indians do not have access to health services. In most developing countries regressive out-of-pocket payments represent a majority of total health spending and countries must find multiple ways to encourage the transition towards financing methods which provide adequate financial protection for their people. In India the present scenario the annual expenditure on health in India amounts to about \$7 in rural areas and US\$10 in urban areas per person, the majority of care being provided by the private sector. The high proportion of out-of-pocket expenditures of 80% indicates that even the poor are willing to pay for better health services¹.

India's trust with health insurance program goes back to the late 1940s and early 1950s when the civil servants (Central Government Health Scheme) and formal sector workers (Employees' State Insurance Scheme) were enrolled into a contributory but heavily subsidized health insurance programs.

After over half a century of experience, CGHS (3 million) and ESIS (55.5 million) put together currently cover an estimated 58.5 million beneficiaries, roughly about 5% of India's population. As part of liberalization of the economy since the early 1990s, the government opened up the insurance sector (including health insurance) to private sector participation in the year 1999. This development had thrown open the possibility for higher income groups to access quality care from private tertiary care facilities.

However, India in the last three years (since 2007) has witnessed a plethora of new initiatives, both by the central government and a host of state governments also entering the bandwagon of health insurance.

One of the reasons for initiating such programs can be traced to the commitment that the governments in India have made to scale up public spending in health care. Given the commitment to upscale government expenditure on health (central and state governments put together) from the present 1 percent to 2-3 percent of GDP, the central and state governments were devising designs to spend the additional resources through innovative schemes these include enhanced access and availability of essential health care services, protecting households from financial risk through schemes such as, National Rural Health Mission (NRHM), and Rashtriya Swasthya Bima Yojana (RSBY).

The State specific initiatives include Rajiv Aarogyasri (Andhra Pradesh), Kalaingar's Insurance Scheme for Life Saving Treatment (Tamil Nadu), Vajapayee Aarogyasri & Yeshasvini programs in Karnataka, etc³. Some studies have shown positive impact of community health insurance schemes in reducing out of pocket expenditure, better treatment, when compared to the non members⁶.

However in spite of all these developments in order to attain complete coverage of health insurance the quality is an integral part for complete utilization. Various studies show that health services' utilization is sensitive to the perception of quality by the users.

The quality of healthcare in India in both the private and public health sector is unsatisfactory. The problems include non-availability of staff and medicines as well as the rude behavior of the staff, cumbersome procedure, poor quality of the medicines, etc⁴.

Objectives:

To Study The Perception, Utilisation And Patient Satisfaction Regarding Community Health Insurance Schemes In A Selected Population.

Materials and Methods:

The Present cross sectional study was conducted in the City of Tumakuru involving both the government and Private hospitals from November 2015 to October 2017.

According to a study conducted in Bangalore, Karnataka, the prevalence of subjects using community health insurance schemes was 23%⁵

Sample size was estimated using the following formula

$$n = Z^2 pq / d^2,$$

Where in,

Z value for 95% level of significance = 1.96

p = Prevalence of patients using community health insurance schemes = 23%

q = 100-p which is 77

d = precision of 5%

substituting the above values in the above formula $n = (1.96^2 \times 23 \times 77) / 25 = 272$

To this 10% non response rate is added; $272 + 23.2 = 295$ sample size was obtained.

Hence 295 Study subjects utilizing health care services in one government and one private hospital under any of the community health insurance schemes were included in the study .

INCLUSION CRITERIA:

All selected insured patients who have enrolled and utilized as inpatients in the past one year and utilizing the services under community health insurance schemes were taken up for the study.

EXCLUSION CRITERIA:

Individuals who have not given informed consent and patients who have only private health insurance were excluded

Data Collection:

The district nodal officer of the community health insurance scheme of Tumkur city was approached. Six hospitals were empanelled to provide the community health insurance schemes. Out of the six hospitals, five were private and one was district hospital. Community health insurance schemes delivered in the above six hospitals were screened. In this process, two hospitals were observed to attract maximum number of patients under community health insurance scheme. One was private, (Bapuji Hospital) and one was government District hospital, Tumkur. Data from other hospitals were having improper information.

The Average number of patients receiving community health insurance scheme at above two hospitals, government and private hospital, were found to be in the proportion of 1.6:1, (61.6%) and (38.2%) respectively. This proportion was applied to the sample size of 295 to yield 182 subjects using community health insurance scheme in government hospitals and 113 subjects in private hospital, to be recruited into the study.

A written informed consent in the local language was taken from all patients before participating in the study. Subjects were interviewed with the help of a structured questionnaire to assess their perception, utilisation patterns and patient satisfaction regarding community health insurance schemes.

Data was collected at the time of discharge. The data thus collected was used analyzed for the purpose of this study. Data was entered onto a Microsoft Excel 2007 spread sheet; subsequently it was analyzed using Epi info version 7.2.0.1 and presented in the form of tables, bar diagrams and pie diagrams. Descriptive statistics (mean and proportions), Z test and chi square test were employed. p- Value of <0.05 was considered statistically significant. .

Results:

A total of 295 study subjects were enrolled and analyzed in the present study .

Table 1: Social Profile of the study subjects

| Social Profile | | Frequency | Percentage |
|----------------|--------------------|-----------|------------|
| Age Group | Less than 20 years | 32 | 10.85 |
| | 21 to 30 years | 113 | 38.31 |
| | 31 to 40 years | 29 | 9.83 |
| | 41 to 50 years | 29 | 9.83 |
| | 51 to 60 years | 45 | 15.25 |
| | 61 to 70 years | 44 | 14.92 |
| | More than 70 years | 3 | 1.02 |
| Gender | Male | 89 | 30.20 |
| | Female | 206 | 69.80 |
| Education | Illiterate | 117 | 39.6 |
| | Primary school | 100 | 33.8 |
| | Middle school | 49 | 16.6 |
| | High school | 29 | 10 |
| SES | Class 1 | 32 | 10.8 |
| | Class 2 | 41 | 13.9 |
| | Class 3 | 86 | 29.2 |
| | Class 4 | 123 | 41.7 |
| | Class 5 | 13 | 4.4 |

In the study majority of 113 (38.8) of the study subjects were in the age group of 21 to 30 years of age, 3(1%) were in the age group more than 70 years. In the study majority of the subjects were females 206(69.83%) while males constituted about 89 (30.2%). Among the study 295 subjects 103(50%) majority of the study subjects were females who belong to the age group of 21 to 30 years whereas in the age group 61 to 70 years of the females were least which was about 17(8.2%) . Among the study population majority of the study subjects were illiterate 117(39.6%) and the least number of subjects belonged to high school 29(10%). In the study majority 123(41.7%) of the subjects belonged to lower class whereas the least subjects belonged to class V, 13(4.4%) according to modified Kuppaswamy classification.

Table 2 : Distribution of the subjects according to Awareness of the community health insurance schemes

| | | Frequency | Percentage |
|-----------------------------------|---------------------|-----------|------------|
| Community Health Insurance Scheme | Yeshasvini | 172 | 58.3 |
| | RSBY | 8 | 2.7 |
| | Vajpayee Arogyasree | 4 | 1.3 |
| | Multiple | 111 | 37.6 |

| | | | |
|---|--------------------------------|-----|-------|
| Source of Information | Coperative Societies/co-Worker | 65 | 22.03 |
| | Family, Relatives | 60 | 20.34 |
| | Health Worker | 77 | 26.10 |
| | Newspaper | 22 | 7.46 |
| | Magazines | 17 | 5.76 |
| | Media | 5 | 1.69 |
| | Multiple | 49 | 16.61 |
| Perception regarding community health insurance schemes | Excellent | 39 | 13.2 |
| | Average | 66 | 22.4 |
| | Below Average | 102 | 34.6 |
| | Poor | 88 | 29.8 |

In the study majority of the study 172(58.3%) subjects were aware of yeshasvini community health insurance scheme and the 8 (2.7%) of subjects were of RSBY and 4(1.3%) Vajpayee Arogyasree and 111(37.6%) of the subjects were aware of the Multiple community health insurance schemes. Among the study subjects majority 77(26.1%)of the subjects got aware of the community health insurance scheme from health worker. Among the subjects majority 102(34.6%) had below average perception whereas 39(13.2%) of the study subjects had excellent awareness regarding community health insurance schemes

Table 3 : Distribution of the subjects according to Utilization of the community health insurance schemes

| | | Frequency | Percentage |
|--|----------------------|-----------|------------|
| Utilization Of Community Health Insurance Schemes | OBG | 131 | 44.4 |
| | Ophthalmology | 122 | 41.4 |
| | Surgery | 27 | 9.2 |
| | ENT | 15 | 5.1 |
| Time taken for diagnosis after illness onset under community health insurance. (Excluding Pregnancy) | Less than 1month | 20 | 12.1 |
| | 1 month to 3 months | 83 | 50.6 |
| | 4 month to 7 month | 32 | 19.5 |
| | 8 month to 10 month | 14 | 8.5 |
| | More than 10 Months | 15 | 9.1 |
| Outcome of illness | Cured | 117 | 71.3 |
| | Not Cured | 47 | 28.6 |
| Utilisation of Services | Ward Admission | 188 | 63.7 |
| | Lab Investigations | 44 | 14.9 |
| | Diagnostic Procedure | 9 | 3.1 |
| | Medicines | 54 | 18.3 |

Among the subjects majority 131 (44.4%) utilized the community health insurance scheme for Obstetrics and gynecology whereas least 27 (9.2%) number of subjects utilized for surgery. In the study 83 (50.6%) of the study subjects took 1 month to 3 month for diagnosis of the illness whereas least 15(9.1%) number of subjects took more than 10 months . Among the subjects 117 (71.3%) of the study subjects, their illness had been cured under the community health insurance scheme and 47 (28.6%) of the study subjects has not been cured.

Among the 295 subjects 59% utilized the community health insurance scheme due to financial constraints whereas the rest of the study subjects had not replied for the actual reason for availing the community health insurance scheme.

In the study 188(63.7%) of the subjects utilized services such as ward admission and the rest 9(3.1%) of the study subjects utilized services for diagnostic procedure

Table 4: Financial and Time utilization under community health insurance schemes for hospitalization and Investigations

| | | Frequency | Percentage |
|-------------------|-----------------|-----------|------------|
| Amount sanctioned | 1000 to 3000 | 17 | 5.7 |
| | 3001 to 6000 | 63 | 21.3 |
| | 6001 to 9000 | 23 | 7.7 |
| | 9001 to 12000 | 45 | 15.2 |
| | 12001 to 15000 | 138 | 46.7 |
| | More Than 15001 | 9 | 3 |

| | | | |
|--|----------------------|-----|------|
| Out of pocket expenditure | Spent | 102 | 34.6 |
| | Not Spent | 193 | 65.4 |
| Average time taken to meet the doctor | Up to 15 minutes | 26 | 8.8 |
| | 16 to 30 minutes | 56 | 18.9 |
| | 31 to 45 min | 110 | 37.2 |
| | More than 45 minutes | 103 | 35 |
| Perception Regarding Diagnostic facilities | Excellent | 62 | 21.0 |
| | Moderate | 71 | 24.1 |
| | Adequate | 106 | 35.9 |
| | Poor | 56 | 19.0 |

The mean cost of availing the community health insurance scheme was 10772.54 and the standard deviation was 4493.55. Among the 295 subjects, 138 (46.7%) of the users had been sanctioned between 10000 to 15000 rupees for availing the community health insuranceschemes. Among 295 study subjects who utilized the community health insurance scheme,110 (37.2%) of the subjects took 31 to 45 minute to meet the doctor. Among subjects who had utilized the community health insurance scheme 106(35.9%) felt the diagnostic facility of the hospital as adequate and 71 (24.1%) of the subjects felt the diagnostic facility of the hospital as Moderate.

Table 5: Subjects Satisfaction with the Services under the community health insurance schemes.

| | | Not satisfied n(%) | Satisfied n(%) | |
|---|------------------|--------------------|----------------|--------------------------------------|
| Medicine provided and Place of availing | Government setup | 22(12) | 160(87.9) | Chi Square: 4.045 P value: 0.44 |
| | Private setup | 5(4.4) | 108(95.5) | |
| Nursing care provided | Government setup | 34(18.6) | 148(81.3) | Chi Square: 11.13 P value: 0.0008 |
| | Private setup | 5(4.4) | 108(95.5) | |
| Registration procedure | Government setup | 89(48.9) | 93(51.1) | Chi Square: 4.0058 P value: 0.04 |
| | Private setup | 41(36.2) | 72(63.7) | |
| Overall satisfaction | Government setup | 28 | 154 | Chi Square: 8.92 P value: 0.002 |
| | Private setup | 4 | 109 | |

With respect to medicine provided, among the 113 subjects who utilized private set up, 108(95.5%) were Satisfied. Among those 182 subjects who utilized the government set up, 160(87.9%) were satisfied. With respect to nursing care provided, among the 113subjects who utilized, government set up 148(81.3%) were Satisfied. Among those 182 subjects who utilized the private set up, 108(95.5%) were just satisfied. The association between subjects satisfaction with the nursing care provided and place of availing the community insurance scheme was found to be significant.

Among the subjects who visited private and government facility the cumbersome procedure was more among those who visited the government facility which was around 93 (51.1%) and lengthy procedure was found less among those who visited private facility (63.7%). The association of perception of registration procedure of community health insurance scheme and place of availing the service was found to be significant with a P value of 0.04.

With respect to Overall quality of the services provided under the community health insurance scheme. Among the 113 subjects who utilized private set up, (57.5%) were satisfied. Among those 182 subjects who utilized the government set up, (47.8%) Satisfied. The association between subjects overall satisfaction and place of availing the community health insurance schemes was found to be statistically significant with a P value of 0.002.

Discussion :

This study has been effort in the area of health insurance to assess the individual’s awareness level and to know the determinants of awareness, utilisation patterns and satisfaction. Community health insurance helps in reducing health care cost.

In a study done in Tamil Nadu on ESI community health insurance scheme by Mr. G. Shivakumar et al,⁷ subjects belonging to age between 26 to 35 years constituted about 36.83% and 33.5% of the study population belongs to 36 to 45 yrs of age. When compared to our study majority of the individuals belonged to 21 to 30 years the findings were not similar and age group 31 to 40 years of age the study constituted only (9.8%).

In the study conducted by PrateekRathi et al⁸ on evaluation of RashtriyaSwasthyaBimaYojana in Amaravati, majority of the beneficiaries that is 23.1% were in the age group less than 30 years, 26.4% were in the age group 30 to 40 years and 23.6% in 40 to 50 years of age group

In our study there were more number females (69%) than males when compared to study conducted by Ms. M.M. Bindu et al showed similar findings showed females constituted (53%) of the study population⁹.

In a study conducted by Reshmi et al the subjects belonged to lower (36.8%) and Middle Socioeconomic group (54.1%)¹⁰ The results when compared showed more beneficiaries belonging to lower and middle socioeconomic status seek the community health insurance schemes. In our study there was poor utilisation of community health insurance scheme among the 4.4% poor or class V socioeconomic groups this may be attributed to the poor awareness regarding the health insurance.

In our study the 39.6% of subjects were illiterate, likewise study conducted in Karnataka showed illiterate beneficiaries were 25.83% using the community health insurance scheme¹¹. Study conducted in Jamnagar majority of the subjects 29.5% has education up to primary school and illiterates were 22%¹². Similar studies done in Maharashtra have shown consistent findings with that of our study which showed majority of the subjects were illiterates 42.6%¹³.

Our study showed there was an average 34.6% awareness regarding the community health insurance schemes, likewise studies done in Karnataka showed there was average awareness regarding the insurance schemes (45.83%)¹¹. In this study awareness of the community health insurance schemes (yeshasvini, RashtriyaSwasthyaBimaYojana and Vajpayee Arogyasree) were (58.3%) and awareness regarding either of the three were found to be (37.6%) when compared to a study conducted by HarshadTakur the awareness was found to be 34%¹³.

In Bangalore Indhumati et al reported the source of information of the community health insurance scheme was mainly from friends and family (76%) whereas media (4.3%) played less role in providing information⁵. When compared to a study done in Mangalore, Karnataka the source of information regarding the community health insurance schemes mainly came from family and friends (34.8%) media was (10.3%), newspaper (32.35%)¹⁰. In the study done in North India Jamanagar majority of the source of exposure came from family, Friends whereas media contributed 25.7% and newspaper contributed 25.5%¹².

In our study 55.9% of the subjects felt that there was no complexities or procedure for availing the community health Insurance scheme. when compared to studies conducted in Belgaum showed that people has favorable attitude towards community health insurance scheme as cumbersome procedure or lengthy procedure was less 85%¹¹.

In a report published in the World Bank on community health insurance schemes in India the findings showed majority of the subjects utilized the community health insurance scheme mainly for specialties such as Obstetrics and gynecology (20%) followed by ophthalmology 10%. The finding in the report was not similar with that of our study¹⁴. utilization of services under other specialties such as oncology, cardiology were not found in our study. It may be because of the inadequate specialties in the study setup. Study done by PavithraHampannavar has shown about 28% of the usage was in Ophthalmology whereas 13% of usage was in OBG¹¹.

In the study majority of the subjects were satisfied with the services provided under the community health insurance schemes. Satisfaction were measured based on variables like nursing care, services provided by the doctors, medical care, complexity of the procedure for availing the community health insurance schemes. When compared to international studies it was found that people were more satisfied (88%) with the nursing care and Medicines (60%) towards community health insurance schemes¹⁵.

In our study with respect to the diagnostic facility of the hospital 35.9% of the individuals felt adequate. The results were compared with a study done by Devadasan et al about 84% of the subjects were satisfied. In our study with regard to the medical care received, 36.3% of the subjects were satisfied and In study conducted by Devadasan et al 95% showed satisfied and also 52.5% of the study subjects were satisfied with overall services provided under community health insurance scheme. In the above study about 82% were satisfied with overall services provided under the community health insurance scheme¹⁶.

In our study 65.4% did not pay any informal fees to avail the community health insurance when compared a study done in Tamil nadu 72% of the study subjects did not pay any informal fees to avail the community health insurance scheme¹⁶

With respect to the nursing care provided, subjects were satisfied with care received at private hospital and found to be significant (P value.0008) when compared to other studies results were consistent¹⁶.

In the study 71.3% of the study subjects, their illness had been cured under the community health insurance scheme and 28.6% of the study subjects has not been cured. When compared to a study conducted by Sappnadesai among the insured subjects about 44.4 subjects felt their illness has been cured¹⁷. Other studies has shown about 93% of the insured subjects has been cured⁷.

Conclusion:

The study suggests that there is enough awareness and in general positive attitude towards health insurance in Tumakuru city with private firms and insurance agents being major catalyst in insurance buying. Overall people feel more relaxed about hospital expenses after taking health insurance. Overall satisfaction with the customer services of the companies is also high.

References:

1. Desai Bhavesh , Desai Ravi, AlgotarGaurang, Desai Kanan T, Bansal RK (June) 'Health Care Has Always Been A Problem Area For India, A Nation With A Large Population And A Larger Percentage Of This Population Living Below The Poverty Line', Journal Of The College Of Community Physicians Of Sri Lanka. 2013;18 (1): 32-35 .
2. Bhageerathy.Reshmi, N.Sreekumaran Nair, Sabu.K.M, DrB.Unnikrishnan 'Awareness, Attitude And Their Awareness, Attitude And Their Awareness, Attitude And Their Correlates Towards Health Insurance Correlates Towards Health Insurance Correlates Towards Health Insurance In An Urban South Indian Population', Management In Health.2012; XVI(1):32-35 .
3. K. Srinath Reddy, Sakthivel Selvaraj, Krishna D. Rao, MaulikChokshi, Preeti Kumar Vandana Arora, SachinBhokare, IsheetGanguly.A Critical Assessment Of The Existing Health Insurance Models In India, New Delhi: Public Health Foundation Of India.2011.
4. N. Devadasan, Bart Criel, Wim Van Damme, Pierre Lefevre, S. Manoharan & Patrick Van Der Stuyft 'Community Health Insurance Schemes & Patient Satisfaction - Evidence From India', Indian J Med Res .2011;133:40-49.
5. Indumathi K, Hajira Saba I, Arun Gopi, Mangala Subramanian 'Awareness Of Health Insurance In A Rural Population Of Bangalore, India', International Journal Of Medical Science And Public Health 2016; 5(10):2162-2167.
6. Werner Soors, Narayanan Devadasan, VaratharajanDurairaj And Bart Criel Community Health Insurance And Universal Coverage: Multiple Paths, Many Rivers To Cross. World Health Report 48 .2010;122.
7. Mr. G. Shivakumar, Dr. R. Ganapathi .patients' perception on service quality of esi hospitals in coimbatore district, tamilnadu', International Journal Of Multidisciplinary Research Review.2015; 1(3):97-103.
8. PrateekRathi. Evaluation of RashtriyaSwasthyaBimaYojana (RSBY): A Case Study of Amravati District, Bangalore: Indian Institute of Management.2011.
9. Ms. M.M. Bindu, Ms. Asha Kilaru, Mr. ShantveerPatil, Mr. Deepak Kumar Dey (2015) Utilization Patterns In Health Insurance Schemes For Women And Children A Study Of Yeshasvini And Vajpayee Aarogyashri Schemes In Karnataka, Bangalore: Centre For Budget And Policy Studies.February.2015.
10. B. Reshmi, Awareness Of Health Insurance In A South Indian Population – A Community-Based Study, Health And Population Perspectives And Issues 2007;30 (3): 177-188.
- 11.Pavitra C. HampannavarAnd L. Manjunat.Perception And Usefulness Of Yashaswini Health Scheme In Karnataka', Karnataka J. Agric. Sci.2014;27(2):184-189.
- 12.Maheshkumar L Choudhary, Kalpesh I Goswami, Sudha B Khambhati, Viral R Shah, Naresh R Makwana, Sudha B Yadav, 'Awareness Of Health Insurance And Its Related Issues In Rural Areas Of Jamnagar District', National Journal Of Community Medicine 2013; 4(2):267-272.
- 13.Thakur H, Study of Awareness, Enrollment, and Utilization of RashtriyaSwasthyaBimaYojana (National Health Insurance Scheme) in Maharashtra, India. Front. Public Health 2016;3:282.
- 14.Government-Sponsored Health Insurance In India Are You Covered? . In Terms Of India's Share In Global Health Expenditure., Washington DC: International Bank For Reconstruction And Development / The World Bank.2012.
- 15.Nguyen ThiNhuQuynh* And NeeraDhar 'A Study Of Satisfaction Among Poor Patients Holding Health Insurance Card With Health Care Services At Two District Public Hospitals In Vietnam', Health And Population - Perspectives And Issues, 2014; 37(1&2): 50-56.
16. N. Devadasan, Bart Criel, Wim Van Damme, Pierre Lefevre, S. Manoharan, Patrick Van DerStuyft (2011) 'Community Health Insurance Schemes & Patient Satisfaction - Evidence From India', Indian J Med Res .2011; 133(1): 40-49.
17. . Sapna Desai, Tara Sinha, Ajay Mahal, Simon Cousens . Understanding CBHI hospitalisation patterns: a comparison of insured and uninsured women in Gujarat, India. Health services research 2014; 14(320):1-10.