

Patient Care And Ability To Pay

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Abstract

In most developing countries, the healthcare expenses come out the pocket of the individual. Due to this, and with the rising costs of healthcare, the patient's ability to pay has become a critical issue in the developing countries. Various research has shown that increasing health care costs affect the patient's ability to pay along with the fact that when patients are required to pay higher amounts for healthcare, they are less likely to go for the medical treatment. Healthcare costs are increasing at an annual rate of 7% due to increasing use of technology, along with a rise in the number of people that are medically insured. These increasing costs of healthcare are affecting various parties in the healthcare financial area. Many medical professionals claim that, with increasing use of technology comes progress in medicine. These sophisticated use of technology in Medicare is often expensive and beyond the reach of an average citizen. Such high out of pocket costs keep a patient from getting basic healthcare. The research aims at finding how the increasing costs of healthcare affect the patient's ability to pay, and how the ability to pay for a treatment is related to their willingness to pay. The research also aims at focusing the relation of technology and the change in healthcare costs due to increasing use of technology, which in turn affects an average citizen's ability to pay for patient care. Healthcare providers need to consider how increasing out of pocket costs can affect the utilization of patient treatment, how denial of medical help can influence overall health of a person, and the role healthcare organizations should play in reduction financial pressures over a patient while accessing medical treatments.

Keywords: *ability to pay, willingness to pay, Healthcare costs, rising healthcare costs, utilization of healthcare.*

1 Introduction:

Healthcare Financing is a sensitive issue that is being discussed around the world today. Health care fees was introduced in order to add funds into the healthcare system to keep the system running smoothly. Due to inadequate health insurance and lack of a social-safety the scheme was introduced to ensure that a majority of the people were able to avail the healthcare facilities. But with increase in the time, the healthcare costs have also increased exponentially. Various concerned parties in the health care financial arena have been affected to different extents by the in question rising health care spending. People are facing increasing and greater out of pocket costs which may affect their access to healthcare and ability-to-pay for good quality medical services. Equitability, affordability and quality are important features of healthcare services that must be preserved. If patients do not take advantage of the appropriate health care resources, their overall wellbeing will suffer. According to a study carried out by 'Morning Consult and the American College of Emergency Physicians (ACEP)' [1], one out of four patients who skip on medical care during emergency would see their health conditions worsen over time. The objective of the paper is to highlight the various factors that affect both increasing healthcare costs and simultaneously a patient's willingness and ability to pay.[2] It is imperative for healthcare and medical treatment providers to understand how increasing out of pocket costs can impact patient's access and willingness to access the

treatment and how if a patient denies themselves of availing healthcare services, it can have a harmful impact on their overall health. [3] Along with that, the paper also will also focus on what various healthcare organizations can do and should do to prevent people facing the problem of ability to pay. Table I shows the division of healthcare costs over the various specialties. [4]

Table 1. HealthCare Spending Costs [4]

Hospital-care	32.7%
Administration by the Government	1.3%
Various Personal health care costs	15.1%
Prescription drugs	9.5%
The net cost of health insurance	6.6%
Clinical services	4.3%
Investment spending	4.8%
Home healthcare	2.8%
Physician services	15.6%
Nursing care facilities	4.8%
Government public health activities	2.5%

2 Factors That Affect Healthcare Costs

The reasons behind healthcare spending growth are complex and involve several interacting factors. It is imperative to identify what factors affect healthcare costs, to in turn find out why healthcare costs are rising which reduces an average patient's ability or willingness to pay.

A. Technology

Medical technology is a major factor that influences rising healthcare costs. Medical technology has emerging technologies on the market, including robotic surgery, telemedicine, electronic medical records, cloud data and a number of new medications. [5] India is moving rapidly towards inculcating technology into healthcare. The government of India is pushing towards bringing in AI (Artificial Intelligence) for patient records and data to delve better treatment.[6] For certain cases, though, these emerging innovations raise health-care costs, they can also help reduce health-care costs. Developing new vaccines can be expensive up front, but they can help avoid the spread of viruses and disease in the long run and thereby the cost of treatment. India's new "Make in India" initiative is encouraging the manufacturing of medical devices within the country to decrease importing duties and therefore reducing the medical costs for the products being used for healthcare services. [7] New technologies could also provide improved disease detection that would result in better care afterwards. It's hard to say if technological innovations are beneficial for the economy. Medical technology is raising costs for existing treatments but, at the same time, it is reducing expected costs. Medical technology is critical for the long-term sustainability of health care, even though today it means paying more up front.

B. Out-Of-Pocket Costs

A report from The Hindu: Business Line (March 2019) calculates the services prices of healthcare costs in India. According to the report, “What patients shell out from their pockets is close to double of what the Centre and State governments spend on public healthcare in India.[8] According to the latest National Health Accounts (NHA), patients bear a big chunk of health expenses as high as 61% of the total health expenditure by themselves.” The report also states that, “the total expenses incurred on healthcare stood at ₹5,28,484 crores in FY16, while household Out-Of-Pocket Expenditure on health totalled ₹3,20,211 crores (60.6 per cent of the total healthcare expenditure).[8] On the other hand, the government’s health expenditure stood at ₹1,61,863 crore (30.6 per cent of the total health expenditure).”

Patients end up paying medications, doctor's fees, bed costs, laboratory tests, drugs and goods like vitamin supplements and medications they require at public and private hospitals and pharmacies out of their pockets due to various healthcare schemes put up by the hospitals the patients are availing services at. [8]

C. Ageing Population

Life expectancy growth has had an apparent but incremental effect on health-care demand. While the utilization of treatment primarily depends on a person's health status and not specifically on their age cohorts, older people have utilization health services more often and more intensively than the younger population. With a large proportion of end-of-life costs, longer life spans, in combination with a rise in unhealthy lifestyles, have also led to increased disease prevalence. [9] Greater incidence of chronic diseases is likely to increase spending by both an increase in treatment frequency and after-care costs. There are about 80 million adults in India that are aged 65 years and above. With increasing medical and healthcare costs, it is possible that people tend to pay less for an elderly’s healthcare costs, especially when it comes to buying insurance for the family.[10] The insurance buying rate for ages 5-30 is more in comparison to those above the age of 65 and above. The elderly prefers not to pay for high risk or high paying medical procedures due to age concerns.

D. Market power

Costlier hospitals tended to have more power in the market, such as higher market share, broad involvement in the health care system, rural status, and less competition. But various research indicates that with increased market power comes competition, less innovation in healthcare products, less transparency in health care, and methods of hospital cost control that could minimize price disparity and rising costs.[11] Competition in Healthcare industry can decrease healthcare costs and also vice-versa. In non-metro cities, various hospitals and doctors have monopoly over the services they provide and thus can alter healthcare costs accordingly. ‘David Sandman, PhD, President and CEO of New York State Health Foundation’, said in a press release that, “Transparency is the future. Policymakers and other stakeholders can use transparency to address market dysfunctions that may be compromising a consumer’s health and wallets and help make health care more affordable.” [11]

E. Health Insurance Coverage

A patient calls the doctor to inquire for the price of a specific test or procedure and is told the price is undisclosed. Or an insurance recipient calls on their insurance provider to ask for a service's usual fee to assess how much of it will be covered, and is told, "it depends." [4] The transparency in healthcare costs is extremely low, which various healthcare insurance providers have identified as a gap and have tried to improve the state of healthcare price transparency. [12] Despite these measures, health insurance coverage is associated with many drawbacks. Even though an average Indian relies on health insurance to

cover most of the medical bills during an emergency, it does put a huge burden of instalments over a payee along with the risk of losing hard earned premium in case the insurance expires unused. [13]

F. Prevalent and Chronic Diseases

India today is facing a rapid healthcare crisis. Along with diseases like dengue and swine flu and today, COVID-19, there are ailments that can affect the lifestyle of an individual like diabetes and thyroid related diseases. It is estimated that by 2050, India will have about 250 million people suffer with such life altering diseases. [14] Today, heart attack and diabetes is one of the major reasons of high morbidity rate in India. With increasing number of people available treatments for these diseases, the costs of the treatment of the same is incremental. These diseases cause, higher visits to the doctor, more tests, more medications, more procedures and more hospital admissions. [15] The burden of these costs is massive and most of these costs come out from the pocket of the average consumer.

G. Medical Service Utilisation

Higher pricing for healthcare services have risen by 4.7% by 2018. High utilisation of healthcare services in various form also influences the increase of healthcare costs. These services may include, medical claims, pharmacy or home-healthcare. [16] When demand for a certain product or service increases, so does its prices. Which is similarly replicated with healthcare prices. The more people need to avail a treatment for a sickness caused by chronic diseases or a pandemic, the costs for the same increase exponentially. By 2019, though healthcare spending remained constant in India, the healthcare costs kept rising.[17] The burden of these high prices has been falling over the consumers and affecting their willingness and ability to pay. [2] But these increasing costs are not evenly distributed among all forms of healthcare, while some healthcare service costs are increasing, there are other services that are losing both its prices and its market.

H. Income

The affordability to pay for healthcare is a key concern of developing nations like India. People with lower income with employer coverage spend a great deal of their income on out-of-pocket medical expenditures. [18] These people, with lower income usually cannot afford to pay for health insurance and thus are greatly burdened when a healthcare emergency strikes. With healthcare costs expected to rise and changes to be taken place in private and public insurance plans may have a depreciating impact on an average individual's ability to pay.[19] In 2017, in America, about 15.5% of non-elderly individuals have skipped or delayed on getting medical help to not pay medical bills. In India, nearly 46.4% of the population is still medically un-insured.

India is known for its affordable healthcare facilities. People from all over the world fly to India for treatment purposes because of its affordability. But even though it seems affordable to the rest of the world, it is not affordable by majority of the population of India itself.[20] The average Indian is not educated enough to understand online appointments and mHealth which leads to lower ability to afford healthcare services in India.

I. Less Medical Facilities

The demand in the healthcare sector is extremely high in India, but with only 370 medical colleges, there isn't enough supply of medical professionals like doctors and nurses. It can also be noted that most of the medical institutions are private in nature, which means that in these private institutes available medical training is as expensive as availing medical training. [21] The government's funding is 1.5% of the Indian GDP towards the healthcare sector which is why India has an acute shortage of medical practitioners. [22]

J. Irregular Bills and Malpractices

Indian government hospitals are not too reliable for either quality services or healthcare costs. Private hospitals use the lack of quality in government hospitals to their advantage. They have the monopoly over quality services and thus provide basic medical services at high rates. Private hospitals make a patient take on extra services and make them pay on hand for these to increase their own profit margins. Rampant billing and excessive hospitalisation cause major discomfort to the patient having exorbitant expenses. [23]

3 Literature Review:

A. Paper Submitted By: Anil Gumber, Anita Narayanan and Biplab Dhak. [24]

The paper focus on the trends of the population of India when it comes to seeking of healthcare and the key determinants of available health insurance premiums by people both above and below poverty line. The paper examines the surveys of the year 1984 to the year 2014 in four rounds : 1986-87, 1995-96, 2004 and 2014. With variance across the states of India, they also examined how people have moved from government healthcare providers to the private sector and have increased their preference for private healthcare service providers over the years in question. In the results of the paper, they have also analysed that over the years, the utilisation of the healthcare facilities has also declined for both the genders. This is due to reasons like inaccessibility of care or simply that the disease is terminal enough to spend money over. They have also found that the difference between the healthcare costs of the public and private domain have reduces significantly as the overall costs of healthcare are still on the rise. Public health insurance providers such as “Jan Arogya Bima Policy” and “Rastriya Swasthya Bima Yojana” have launched low-cost insurance policies since middle of the year 2000 in order to meet the health care needs of the poor section of society, mainly those who are below the poverty line. The paper also analyses that those who have paid higher monthly insurance premiums are more economically weak. They also noted that after the introduction of Rastriya Swasthya Bima Yojna over the years, various households reduced on buying insurance premiums. It is almost negligible as more and more households moved towards the government policy. It was also noted that households, may it be above poverty line or below poverty line, that have health insurance have more reported higher hospitalisation expenses rather than those households that lack insurance coverage which may indicate moral hazards and insurance collusions. The study also shows that the insurance did not provide much relief to those individuals/households that are below the poverty line, especially those who reside in the rural part of India.

B. Paper Submitted By: Thomas Bodenheimer [25]

The United States of America is said to have the most complex and the most expensive form of healthcare services in the world, and these costs have been incremental over the years, growing more than the overall rate of inflation. It has been stated that these rising costs are not much of a threat or pose any serious problem, but majority of the researchers in the healthcare department disagree with that statement. They argue that rising costs of healthcare bring out a negative impact on those seeking healthcare, a negative impact on the US government’s budgetary issues, and that with rising health care costs, people would eventually stop seeking healthcare services to prevent spending more out of their pocket. The paper by Thomas Bodenheimer discusses the issue of rising healthcare costs in a three-part paper addressing questions like,

- Is rising healthcare costs a serious threat?
- Are there any external factors affecting the rising cost of healthcare?

- Does absence of a free market explain why healthcare costs are rising? [13]

There are various results that Thomas Bodenheimer stumbled on during his research on the rising healthcare costs in the US, and other than that he too found out various other healthcare perspectives that affect the economy. A study on health policy also helped narrow down the reasons for increasing costs. He identified that external factors like ageing population do affect the rising costs of healthcare and that after the spread of health insurance policies in 1950, the burden of healthcare costs over individuals reduced. But these are just a myriad of factors that affect the rise of healthcare costs in an intermittent manner. The main external factor that affects rise of medical costs is technology and technological innovation which he covers in the second part of the paper.

C. Submitted By: Thomas Bodenheimer [26]

The second part of the paper by Thomas Bodenheimer highlights the more important and largely impacting external factor that affects the high and rising costs of healthcare. Technological Innovation has been said to improve the healthcare systems of the future, but these innovations are costly to bring about into the world and are costly on the pocket of the consumers of the healthcare and medical practices. And along with poor cost containment, technological innovation becomes the biggest factor due to which healthcare costs are on a major rise in the US. Technology is improving various medical techniques such as coronary bypass graft, MRI scanning, CT scanning, angiography, intensive care units for neonatal and premature babies, and oncology radiation treatments. But with improvements comes higher expenditure on these service innovations. The introduction and innovation of technology in US is very uncontrolled. There are other countries that use these technologies in a managed way but do not increase the costs of healthcare to such an extent as America does. These nations have focused on innovations but have not lacked on putting limits to the usage of these innovations. They have put caps on spending limits and budgets to reduce the excess cost, something that US healthcare department should focus on implementing. The paper concludes with the idea that maybe US should focus less on innovations and more on curbing the costs of the innovations from both cost perspective and customer perspective.

D. Submitted By: Margeret E. Kruk, Emily Goldman and Sandro Galea [27]

Many families spend large amount of money on medical treatments all around the world. This money comes out from the pockets of the families. In the paper, the authors measured the level of borrowing or selling assets in 40 low-income and middle-income countries that delve into the healthcare expenditures and analyzed the various factors (external or internal) that may affect the healthcare costs. The people in question amounted to approximately 3.66 billion which is 58% of the total human population residing on earth. They found out that about of these 26% sold household items or borrowed money from external sources to pay for the high healthcare treatment costs. This was mainly in low-income countries that lacked basic amenities and the added benefit that health insurance brings. They deciphered that in developing counties, the health system is unable to curb the high costs of healthcare treatments. Current healthcare financing situations in low-income and middle-income countries is not adequate and can lead to many households facing an economic peril. Various studies have confirmed that high amounts of loans and borrowings lead to financial and psychological shocks and affect the overall health of the dependent individual of a household. There were various limitations to the study too, like the idea of selling and borrowing to pay for medical treatments cannot be quantifiable, where some borrowing an selling might have been in small transactions, others may extract a higher toll. With low value of borrowing and selling, the economic stress on the family is also low and vice versa. The study also did not inculcate those who did not avail any medical or healthcare facility in time of peril because they simply couldn't afford it. Such homes suffer from dual loss; ill health and depleted financials to avail medical help leading to inevitable fatalities. This study also noted that out of pocket payments can be reduced significantly by introduction of pre-payment schemes for low-income households. These pre-payment facilities can reduce

at the moment payment during an emergency. Two financial models i) tax-based health finance and ii) Insurance are becoming an increasingly popular mode of payment for health care facilities in developing countries.

E. Submitted By: Catherine Molyneux, Beryl Hutchison, Jane Chuma, Lucy Gilson [28]

There is an increasing concern that healthcare policies are causing a disruption between the health and the finances in low-income households. Along with that, the paper holds a discussion on the topic that which health and non-health concerned policy is can protect those below the poverty line. There are various policies that could be implemented to help the poor like building on social resources that can be easily implemented in specific situations. In the paper, the try to find the relationship between community-based organizations(social resource) and ability to pay of low-income based families. They conducted 24 personal interviews and 18 group discussions and 294 cross sectional surveys in rural area and 576 cross sectional surveys in urban areas. In the paper they argue that the organisations built for the households should be correctly identified and defined for different types and forms of incomes of the families in question to help them and serve them in a better manner.

F. Submission by: Steve Russell [29]

In most countries, people pay a majority of their medical expenses on their own. Due to which their willingness to pay for any healthcare expense is becoming an overwhelming problem in most developing countries. While for people who can afford to pay but hinder themselves due to various reasons of their own, they are burdened with the problem of willingness to pay but those who cannot afford to pay for medical services they desperately need due to lack of adequate finance suffer from the problem of ability to pay. These people have to give up basic household items, jewellery, education and other important items in order to pay for healthcare. In many cases they also go under the debt of banks and moneylenders to avail healthcare facilities. Today, many researchers have understood willingness to pay as synonymous to ability to pay. The paper by Steve Russell disbands the assumption and goes on to prove how different in fact the two are. The underlying theme of the paper is to also focus on what the country and the government is doing in order to eradicate the problems of those who are in need of medical help but are unable to pay for it, and those who cannot afford insurance premiums to avoid paying the medical bills up-front. Dilemmas like ‘what can be done?’, ‘differentiating between household expenditure and medical expenditure’, and ‘priorities required to understand ability to pay’ have been raised in the paper but have not been resolved completely.

To summarize, rising healthcare costs are not only a problem for India, but the entire world. An average human requires medical aid at least once in their lifetime, more specifically during their old age. During these times, there are a number of reasons due to which people are unable to pay for their own or their family member’s healthcare treatment. Various programs like “Jan Bima Yojna”, have tried to solve the problem of paying immediately to avail medical aid, but it has also added the burden of paying in instalments for the insurance and the wastage of money. Various researches have tried and found the cause of rising healthcare costs but are unable to provide a clear answer to the problem. They have also helped in establishing a clear connect between rising healthcare costs and decreasing ability to pay which is the object of the paper.

4 Healthcare Utilisation:

Healthcare service utilization is an important topic to discuss, to find out the decrease in ability to pay due to high and rising healthcare costs. Utilization of healthcare services is directly proportional to ability to pay. [30] The more the costs of healthcare services rise, the less people are likely to utilize these

resources. Surgical Admission Utilization had a steady and rapid decline in 2018 by 7% as the average price for surgical admission rose by 8%. Medical Utilization decreased by 11% in 2018 as medical admission price increased by 17%. The relation is explained in Table II

A regression analysis was run on the data mentioned above to find out the relation between change in price (the dependent variable) and utilization of healthcare services (the independent variable). The result of the regression is mentioned in Table 3.

Table 2.

Service	Change in Price (FY2018)	Change in Utilization (FY2018)
Surgery	18%	-7%
Medical	17%	-11%
Labor	10%	6%
Mental	23%	9%
Outpatient	24%	-14%
ER	24%	10%
Observation	20%	-6%
Ambulance	20%	0%

Table 3. Regression Analysis

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.106331
R Square	0.011306
Adjusted R Square	-0.15536
Standard Error	21.74684
Observations	7

ANOVA

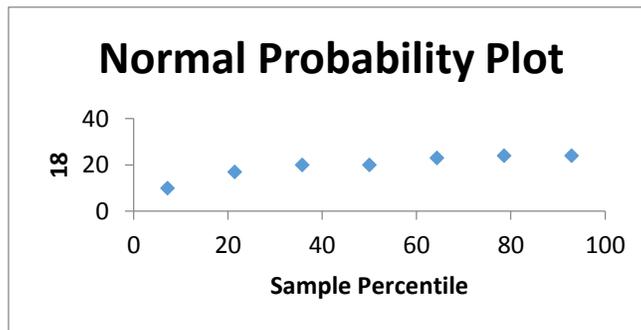
	df	SS	MS
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Regression	1	32.44912	32.44912
Residual	6	2837.551	472.9251
Total	7	2870	

RESIDUAL OUTPUT

Observation	Predicted	Residuals	Standard Residuals
1	2.624561	14.37544	0.714
2	-1.43158	11.43158	0.567784
3	-2.14737	25.14737	1.249021
4	3.340351	20.65965	1.026125
5	-2.38596	26.38596	1.31054
6	1.431579	18.56842	0.922257
7	0	20	0.993361

Chart 1.



5 Methodology:

1) Study Setting and Design

The research paper is a study conducted through secondary research and two electronic questionnaires floated among 103 willing participants.

2) Questionnaire

The questionnaires were an electronic survey form made through the medium of Google forms. The

framework of the first part of the study was whether a particular factor influence the decrease in ability to pay while the second questionnaire was conducted through a Likert 5.0-point rating scale to find out to which extent does the factor affect both rising cost of healthcare and ability to pay for the same. It consisted of 12 questions which helped to understand the basic understanding of the respondents towards the study. The questionnaire was divided into two parts. The first part was to understand the various factors that influence rising health-care costs while the latter was focused on the factors that influenced an individual's ability to pay for healthcare.

3) Data Collection

The study consisted of 103 participants of various age groups varying from below 20 years to above 40 years of age. The age was kept in mind considering people who pay for their own healthcare facilities or support their families with healthcare financing or will be paying for the same in future. Out of the 103 participants, the participants below the age of 20 were 0(zero) and therefore the age group was not considered. Table IV shows the age group demographics concerned for the study. Talking about the secondary data, the major contributors were journals, previously published research papers, annual reports, blogs and some major websites which made the data collected more credible in nature.

6 Hypotheses Formulation:

H1: Medical Technology influences rising healthcare costs.

H2: Ageing Population influences high healthcare costs.

H3: Famous hospitals have relatively high healthcare costs.

H4: High utilization of healthcare services influences the increase of healthcare costs.

H5: Presence of less medical facilities increase healthcare costs.

H6: Prevalent and Chronic Diseases influence high health care costs (Diseases like Diabetes, Thyroid, High BP).

H7: Health Insurance increases an individual's ability to pay.

H8: Greater out-of-pocket costs influence decrease in ability to pay for healthcare.

H9: Income of an individual influences their ability to pay for healthcare.

H10: Irregular billing and malpractice decrease a person's ability to pay for healthcare.

H11: Increasing healthcare costs influence an individual's ability to pay for healthcare.

7 Results:

Table 4.

Factors	Yes	No
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Technology	88 (85.4%)	15 (14.6%)
Market Power	87 (84.4%)	16 (15.5%)
Less Medical Facilities	81 (78.6%)	22 (21.3%)
Income	100 (97.0%)	3 (2.9%)
Health Insurance Coverage	94 (91.2%)	9 (8.7%)
Out of pocket costs	90 (87.37%)	13(12.6%)
Ageing Population	78 (75.7%)	25 (24.27%)
Medical Service Utilization	69 (66.9%)	34 (33.00%)
Prevalent Chronic Diseases	77 (74.75%)	26 (25.24%)
Irregular Billing and Malpractices	85 (82.52%)	18 (43.68%)

Table 5. Results of the study

Hypotheses No.	Total	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
H1	103	23%	58%	12%	7%	0%
H2	103	43%	40%	14%	4%	0%
H3	103	44%	50%	3%	3%	0%
H4	103	39%	45%	13%	3%	1%
H5	103	49%	46%	5%	1%	0%
H6	103	35%	53%	10%	1%	1%
H7	103	50%	44%	5%	1%	0%

In Table V it has been shown that, out of 103 participants in the survey, 85.4% of them have chosen to answer that yes, more technology brings in rise of healthcare costs, which leads to lower ability and willingness to pay for medical treatments. The survey uncovered that people prefer quality services over brand name. Out of 103 respondents, 87 say that they would prefer a hospital which has good quality services even if it does not have a big brand name, instead of a big brand hospital offering basic quality services. But, when asked if having greater market power/brand name affects their likeliness to choose a hospital for a medical service, 84.4% respondents said yes. Which is a contradictory statement. 78.6% of the respondents agree that presence of less medical facilities can hinder an individual's ability to pay for healthcare. 97% agreed that for people with low income, it is difficult to pay for increasingly rising healthcare costs. Good hospitals do not consider people with no access to expensive healthcare and have done nothing to create any form of help for these people. along with the risk of losing hard earned premium in case the insurance expires unused. Health Insurance helps people to pay for emergent healthcare costs to a certain extent, which is agreed upon by the respondents of the survey conducted.

91.2% of the respondents believe that health insurance has a significant impact over an individual's ability to pay. After which, to avail healthcare or medical treatments and health insurance depends on the individual itself. 87.4% of the respondents agree that more out of pocket costs means more people are less likely to avail medical services. Out of pocket costs are an added burden for an individual, especially for people that come from low-income households. 75.7% said that, high healthcare costs of an ageing population are likely to decrease the willingness of an individual to pay for their medical bills. But not only does it affect the willingness to pay but also ability to pay. Most low-income families cannot afford medical treatments of chronic diseases for the elderly at their home due to lack of financial resources. 66.9% of the individuals agreed that high medical service utilization- will result in high costs of healthcare which affects an individual's ability to pay. 74.75% of the respondents agree that prevalent chronic diseases do affect an individual's ability to pay, and 85.52% of respondents said that irregular billing and malpractices can cause hindrance when it comes to an individual's ability to pay for healthcare services.

Hypothesis 1: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "Medical Technology influences rising healthcare costs". Through Table VI we can see that 58.3% of the respondents agree and 23.3% strongly agree that with rising medical technology comes greater costs but there are some that remain neutral to the statement while 6.8% are in disagreement.

Hypothesis 2: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "Ageing Population Influences high healthcare costs". Through Table VI it can be seen that, 42.7% strongly agree and 39.8% agree that with old age comes greater medical expenditure which influences rising costs of healthcare services. There are 13.6% respondents that remain neutral to the statement and only 3.9% that disagree.

Hypothesis 3: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "Famous hospitals have relatively higher healthcare costs". Through Table VI, there seems to be no large discrepancy among the respondents regarding the statement as 50.5% agree and 43.7% strongly agree. While, only 2.9% respondents each are either neutral or disagree to the statement.

Hypothesis 4: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "High Utilization of healthcare services influences the increase of healthcare costs". Through Table VI, it is evident that even though 38.8%, strongly agree and 44.7% agree with the statement presented above, there are still other in a significant number that believe otherwise or are neutral towards it.

Hypothesis 5: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "Presence of less medical facilities increases healthcare costs". Through Table VI, it can be noticed that majority of the respondents, (45.6% that agree and 48.5% that strongly agree) are in agreement that less of amount of medical facilities in an area lead to increase in healthcare costs due to less competition.

Hypothesis 6: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that "prevalent and chronic diseases (like diabetes, thyroid, high BP) influence high healthcare costs". Through Table VI we can see that 53.4% agree and 35% strongly agree that prevalent diseases are recurring in patients and the number of patients also increase which increases the healthcare costs for such patients.

Hypothesis 7: Through the Likert scale rating method, an analysis was conducted to find out how strongly

the respondents believe that “Health insurance increases an individual’s ability to pay”. Through Table VI, it is deciphered that, 50.5% of the respondents strongly agree and 43.7% of the respondents agree with the statement and believe that health insurance does minimize the burden over an individual while paying for expensive medical treatments during an emergency or lack of money.

Hypothesis 8: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that “Greater out-of-pocket costs influence decrease in ability to pay for healthcare.” Through Table VI, we can see that 55.3% agree and 37.9% strongly agree with the statement. While there are 4.9% respondents who are neutral about the statement and 1.9% disagree.

Hypothesis 9: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that “Income of an individual influences decrease in ability to pay for healthcare.” The results are completely for the statement as seen in Table VI, 63.1% strongly agree and 34% agree while only 2.9% are neutral towards it. There are no respondents that disagree with the statement.

Hypothesis 10: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that “Irregular billing and malpractice decreases an individual’s ability to pay for healthcare.” The Table VI shows that 38.8% of the individual’s strongly agree and 52.4% agree with the statement. Only 6.8% are neutral and 1.9% disagree with the statement.

Hypothesis 11: Through the Likert scale rating method, an analysis was conducted to find out how strongly the respondents believe that “Increasing healthcare costs influence an individual’s ability to pay for healthcare.” Through Table VI An equal number of respondents (46.6%) agree and strongly agree to the statement.

8 Discussion:

Through this paper, it has been easy to identify the various factors that influence high and rising cost of healthcare and if or not they in turn affect and decline an average individual’s ability to pay (mentioned in the table above) and to which extent. Overall, it has been understood that with increasing costs, it has become difficult to avail medical treatments and people miss out on these treatments due to financial inadequacy. Missing out on much-needed healthcare can lead to various problems and even death. Healthcare governors and system officials should focus on creating standardization in healthcare so that even if healthcare costs are increasing due to technology or other different forms of innovation, the average man is not missing out on their basic needs. There should be a limit to which a hospital or healthcare provider can increase the cost of medical treatments in different sectors. There should also be a limit on the power a hospital holds in the market. Patients should not be encouraged to choose a hospital based on a brand name but based on the quality of the services provided by the medical professionals in the hospital. There should also be healthcare reforms for those with low-income households and those below the poverty line, to either help them achieve the care they deserve or bring them up to the mark to avail the healthcare services on their own. Billing malpractices must be looked upon and eradicated along with unfair practices used by hospitals to increase their own profit. Prices for treatment of Chronic diseases should not only become stagnant but also decrease to suit an average individual’s lifestyle in order to decrease the morbidity rate. Hospitals and healthcare institutions should collaborate with senior care institutions to help the elderly get basic healthcare services at an affordable price.

9 Conclusion:

Though the paper has explored various factors that influence rising healthcare costs and ability to pay and has also created a link between the two and shown that healthcare costs are indirectly proportional to ability to pay, the paper that failed to find out ways to prevent this and turn the statement opposite. The future scope of the study can be to identify various ways in which rising healthcare costs do not cause any negative fluctuation with the willingness and ability to pay for healthcare. Future studies can also help in determining the relationship and difference between ability to pay and willingness to pay for availing healthcare services.

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