Availability & Efficacy of Healthcare in Smaller Indian Cities

Subho Chattopadhyay, Indranil Bose & Payal Gulati

There is a conspicuous gap between the healthcare services available in the big cities and those in the smaller cities in India. The perceivably superior healthcare institutions are located in the bigger cities. The paper examines the concerns and perceptions of the people regarding the availability and efficacy of healthcare services in smaller cities juxtaposed to those available in the bigger cities. The data was collected from respondents from across five different cities of India using a structured questionnaire. Questions were asked to gauge the perception of the residents of smaller cities about the quality of diagnosis (of simple and complex ailments), medical testing services and imaging facilities in the smaller cities as opposed to those in the bigger cities.

Subho Chattopadhyay **(**E-mail:subhochatterjee123@rediffmail.com) is Associate Professor and Head of the Department, Invertis Institute of Management Studies, Invertis University, Bareilly, India. ***Indranil Bose*** (E-mail: sentindranil72@gmail.com) is Dean, School of Business, University of Bolton, Ras Al Khaimah, UAE. ***Payal Gulati*** **(**E-mail:pygulati@gmail.com) is an Independent Researcher

Introduction

Over the last few decades the quality and availability of healthcare in India have improved owing to the introduction of modern medical facilities, advanced medical technologies, increase in the number of hospitals and doctors in the country. However, a conspicuous gap remains between the healthcare processes, delivery and quality offered by the government medical sector viz-a-viz the private sector. 70 percent of the urban households and 63 percent of the rural households avail medical facilities from the private medical sector (Sharma, 2018). About 58 percent of hospitals and 81 percent of doctors in the country are from the private sector (Thayyil et al., 2013). Similarly, there is a significant gap between the medical facilities available in the big cities as compared to those in the smaller cities. Most of the super speciality hospitals and those hospitals and healthcare institutions/ facilities that are considered to be superior and more trustworthy as compared to the others are located in the bigger cities. To offer quality

healthcare to the Indian population a major chunk of which resides in the smaller cities, towns and villages it is important to understand the perception of the residents of these places about the availability and efficacy of the treatment and healthcare facilities available in their cities and towns.

Objectives

Merely around 12% of the Indian population (which comprises 43% of urban population) resides in the 53 urban agglomerates in the country with the remaining 88% living in small cities, towns and villages (Census India, 2011), it is important to understand the perception of the people about the medical and treatment facilities available at their disposal. The choice of hospitals and treatment preferred by the people of these small cities also depend on the services delivered to them and their perception about these services. To improve the medical infrastructure and quality of treatment facilities in India, the country needs to think and work beyond the metro cities. For building a truly robust medical infrastructure and facility, it is very important to understand the perception of the people from small towns and cities regarding the availability and efficacy of treatment in their cities. The present study was conducted with this broad idea.

To improve the medical infrastructure and quality of treatment facilities in India, the country needs to think and work beyond the metro cities.

The objective of the study is to understand the perceived quality of medical services and treatment facilities available in the smaller cities viz-a-viz those available in the metro cities. The specific objectives are:

- To get an insight into the preferred destination of treatment of the residents of smaller cities.
- To understand the safety perception of the respondents regarding their treatment by the medical practitioners in their cities viz-a-viz the practitioners in the metro cities.
- To study the perception of the people regarding the quality of diagnosis in their cities compared to that in the metro cities.
- To study the perception of the people regarding the quality of medical testing and imaging facilities in their cities compared to those in the metro cities.
- To gauge the willingness of the people to opt for being treated in the established hospital chains, under different situations, if they get an access to these chains in their own cities.

Review of Literature

Most of the studies in India about the ability and efficacy of the healthcare establishments can be found to be focused on the large cities and related components of the research. For the purposes of the present study, a few of such researches which have been considered

significant by the researchers have been mentioned. A very significant study has been conducted by Bajpai (2014) on the challenges and deficiencies of healthcare facilities in India and the same has identified the deficiencies like lack of infrastructure; smaller number of facilities, doctors, paramedical staffs in large cities and the smaller towns of India. However, this study has mainly concentrated on the public sector hospitals in the process of research. Researchers like Raina and Bhatt (2018), Sengupta and Trivedi (2014), Shah (2010), De Costa and Diwan (2007), Mudur (2003), Singh and Narayan (2003) and others have significantly contributed through their researches. None of these works have addressed the fundamental research issue the present research has attempted to address. Raina and Bhatt (2018) in their research have mainly focused on the policy challenges and priorities for the healthcare expansion through private sector's involvement in India, but the focus on the people perception to these has been found to be absent in the study. Sengupta and Trivedi (2014) have also focused on the growing private sector participation in the healthcare facilities expansion in semi-urban and rural India. However, their focus has remained on critical comparison of quality deliveries between the available private and public sector healthcare facilities in six large populated provinces of India. Shah (2010), in his study has attempted to focus on the customer perception about the critical patient care facilities available in the private sector hospitals and healthcare facilities in Madhya Pradesh and Uttarkhand only. The study by Mudur (2003) and by Singh and Narayan (2003) have also focused on the specific regions of India in understanding overall perspectives of patient perception about the facilities available either in public or private sectors. None of the above researches has attempted to understand the patients' preferences to choose the health clinics or facilities from the private sector which are either located in their smaller towns or nearby large cities. Therefore, the present research can be justified from the perspectives of being a significant attempt towards assessing the whole issue of patients' migration from smaller to larger urban locations in the context of available facilities. The present study has also been conducted from a larger geographical perspective and therefore can be claimed to be distinctively significant research effort.

Methodology

To gauge the trust and perception of people about the availability and efficacy of treatment in smaller cities, responses were collected from residents living in smaller cities in India. The data was collected from hundred respondents from across five different Indian cities. The sampling technique used was non- probability sampling. The sampling unit was the household from the selected cities. Data was collected from the respondents using a structured questionnaire having non-disguised, close ended questions. Responses were sought from the respondents, using a set of close ended questions, about their generally chosen destination for the treatment of simple ailments and that for the treatment of seri-

ous health issues. Questions were asked to gauge the perception of the residents of smaller cities about the quality of diagnosis (of simple and complex ailments), medical testing services and imaging facilities in the small cities as opposed to those in the bigger cities. A five-point Likert scale was used to measure the trust of the people on the doctors and medical practitioners in the small cities and those from the metro cities for the treatment of simple and complex ailments. A set of questions were designed using a four - point scale to understand the willingness of the respondents to avail the treatment facilities from reputed chains of hospitals, at different price points, if such hospitals came up in their cities.

For the analysis and comparison of the respondents' perceptions about the efficacy of treatment and the quality of diagnosis of diseases in their own cities and in the metro cities, paired sample t-test was used. One sample t-test was used to evaluate the perceived comparative quality of testing services and imaging facilities in the smaller cities. The degree of willingness of the respondents to avail the treatment facilities from hospitals belonging to reputed/organized chains (if such chains set shop in their cities) was gauged using the measures of central tendencies. Paired sample t-test was employed to understand if the willingness of the respondents to avail the services of the reputed/organized hospital chains, would significantly vary with the level of seriousness of their ailment. Paired sample t-test was again used to understand if the willingness of the respondents, to avail the services of the reputed/organized hospital chains, would significantly vary at different price points.

Table 1 Statistics

		Treatment of Minor Ailments from where	Treatment of Complicated Ailments from where	Preferred to be treated if resources are not a constraint
N	Valid	100	100	99
	Missing	0	0	1
Mode		4	2	2

Table 2 Treatment of Minor Ailments from Where

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Govt Hospital in my city	4	4.0	4.0	4.0
	Private Hospital in my city	26	26.0	26.0	30.0
	A renounced private practitioner in my city	22	22.0	22.0	52.0
	Neighborhood doctor	43	43.0	43.0	95.0
	Local Pharmacist	3	3.0	3.0	98.0
	Doctor/Hospital in a neighboring city	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

Preferred Destinatioin

When the respondents were asked where they go for the treatment of minor ailments, an overwhelming 43% of them said that they go to the neighborhood doctors for the treatment of such ailments (Table 2).

However, for complex ailments, a major percentage (38%) of the same set of respondents got themselves treated at a private hospital in their own cities (Table 3).

Table 3 Treatment of Complicated Ailments from Where

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Govt Hospital in my city	5	5.0	5.0	5.0
	Private Hospital in my city	38	38.0	38.0	43.0
	A renouned private practitioner in my city	27	27.0	27.0	70.0
	Neighbourhood doctor	3	3.0	3.0	73.0
	Doctor/Hospital in a neighbouring city	1	1.0	1.0	74.0
	Doctor/Hospital in a metro city	26	26.0	26.0	100.0
	Total	100	100.0	100.0	

The respondents were asked if there were no constraints of monetary resources and non-monetary resources like time, transportation, stay facilities and contact where they would prefer to be treated. Some of them (28%) said that they preferred to be treated in a private hospital in their cities while 23% of the respondents preferred being treated in a metro city in a hospital belonging to a healthcare chain. The least preferred places for availing healthcare services were the government hospitals in the smaller cities.

Table 4 Preference for Treatment If Resources Are Not a Constraint

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Govt Hospital in my city	10	10.0	10.1	10.1
	Private Hospital in my city	28	28.0	28.3	38.4
	Govt. hospital in a metro city	14	14.0	14.1	52.5
	Hospital that is a part of healthcare chain in metros	23	23.0	23.2	75.8
	Private practitioner associated with a hospital chain	13	13.0	13.1	88.9
	Private practitioner not associated with a hospital chain	4	4.0	4.0	92.9
	Stand alone hospitals in metros	7	7.0	7.1	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

Safety Perception: Simple Ailments

Being enquired about the perceived safety if treated by the doctors in smaller cities and by those in metro cities, it was found that 84% of the respondents felt safe in the hands of the doctors from their cities (63% reported feeling reasonably safe and 21% felt extremely safe). Almost equal 82% of those respondents felt safe in the hands of doctors from metro cities (54% felt reasonably safe while 24% reported feeling extremely safe) (Table 5 & Table 6).

The mean of the responses for safety perception with the small city doctors was 3.98 while that for the metro city doctors was 3.97 (Table 7).

Table 5 How Safe is a City Doctor for Simple Ailments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsafe	2	2.0	2.0	2.0
	Somewhat Unsafe	3	3.0	3.0	5.0
	Unsure	11	11.0	11.0	16.0
	Reasonably Safe	63	63.0	63.0	79.0
	Extremely Safe	21	21.0	21.0	100.0
	Total	100	100.0	100.0	

Table 6 How Safe is a Metro Doctor for Simple Ailments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsafe	2	2.0	2.0	2.0
	Somewhat Unsafe	6	6.0	6.1	8.1
	Unsure	11	11.0	11.1	19.2
	Reasonably Safe	54	54.0	54.5	73.7
	Extremely Safe	26	26.0	26.3	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

Table 7 Paired Samples Statistics: Safety Perception

		Mean	N
Pair 1	How safe is a city doctor for simple ailments	3.98	99
	How safe is a metro doctor for simple ailments	3.97	99

A paired sample t-test conducted to compare the mean of the responses obtained about the safety perception with small town doctors viz-a-viz that with the metro city doctors for the treatment of minor ailments, exhibited a p value of 0.931

There was no significant difference in the respondents' perceived safely in the hands of the doctors from the smaller cities and those from the metros while being treated for simple ailments.

(much higher than 0.05) which revealed that there was no significant difference in the respondents' perceived safely in the hands of the doctors from the smaller cities and those from the metros while being treated for simple ailments (Table 8).

Table 8 Paired Samples Test : Safety Perception for Treatment of Simple Ailments

		T	Df	Sig. (2-tailed)
Pair 1	How safe is a city doctor for simple ailments - How safe is a metro doctor for simple ailments	.086	98	.931

Safety Perception: Complex Ailments

When it came to the perception of the residents of smaller cities about the degree of safety while being treated for complex ailments by the doctors in smaller cities viz-a-viz the doctors in metro cities, it was found that merely 45% of the respondents felt safe (34% felt reasonably safe while 11% felt extremely safe) being treated in their own cities in contrast to 72% of the respondents who felt more safe in the hands of the doctors from metro cities for the treatment of such ailments (44% felt reasonably safe while 28% felt extremely safe) (Table 9 & Table 10).

Table 9 How Safe Is a City Doctor for Complicated Ailments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsafe	6	6.0	6.1	6.1
	Somewhat Unsafe	15	15.0	15.2	21.2
	Unsure	33	33.0	33.3	54.5
	Reasonably Safe	34	34.0	34.3	88.9
	Extremely Safe	11	11.0	11.1	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

Table 10 How Safe Is a Metro Doctor for Complicated Ailments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsafe	3	3.0	3.1	3.1
	Somewhat Unsafe	5	5.0	5.1	8.2
	Unsure	18	18.0	18.4	26.5
	Reasonably Safe	44	44.0	44.9	71.4
	Extremely Safe	28	28.0	28.6	100.0
	Total	98	98.0	100.0	
Missing	System	2	2.0		
Total		100	100.0		

The mean of the responses for safety perception while being treated for complex ailments by the small city doctors was 3.30 while that for the metro city doctors was 3.91 (Table 11).

Table 11 Paired Samples Statistics: Perception for Complicated Ailments

		Mean	N
Pair 1	How safe is a city doctor for complicated ailments	3.30	98
	How safe is a metro doctor for complicated ailments	3.91	98

A paired sample t-test was conducted to compare the mean of perceived safety while being treated for complex ailments by the small town doctors viz-a-viz by the metro city doctors. The p value obtained was 0.000. Thus, there was a significant difference in the respondents' perception about their safety while being treated for complex ailments by the doctors from the smaller cities as compared to that while being treated by the doctors from the metros (Table 12). Thus, as far as the treatment of complex ailment was concerned, the respondents reposed a significantly higher faith in the doctors from the metro cities.

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Table 12 Paired Samples Test: Complicated Ailments

		T	Df	Sig. (2-tailed)
Pair 1	How safe is a city doctor for complicated ailments - How safe with a metro doctor for complicated ailments	-4.535	97	.000

Quality of Diagnosis: Simple Ailments

When asked about the quality of diagnosis for simple health problems in smaller cities, 69% of the respondents were of the opinion that it was either reasonably good or very good (Table 13) whereas a whopping 94% of them reposed faith in the quality of diagnosis in the metro cities. 50% of the respondents mentioned that the diagnosis was reasonably good in the metros and 44% of them mentioned that it was very good in the metro cities. A meagre 4% of the respondents were of the opinion that diagnosis in the metro cities was not up to the mark (Table 14).

Table 13 How Good is Diagnosis of Simple Ailments in Your City

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pathetic	4	4.0	4.0 4.0
	Not up to the Mark	27	27.0	27.0 31.0
	Reasonably Good	48	48.0	48.0 79.0
	Very Good	21	21.0	21.0 100.0
	Total	100	100.0	100.0

Table 14 How Good Is Diagnosis of Simple Ailments in a Metro City

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not up to the Mark	4	4.0	4.1 4.1
	Reasonably Good	50	50.0	51.0 55.1
	Very Good	44	44.0	44.9 100.0
	Total	98	98.0	100.0
Missing	System	2	2.0	
Total	100	100.0		

To compare the perception of the people regarding the quality and reliability of diagnostics for simple ailments in the small cities as compared to that in the metro cities, a paired sample t-test was conducted. As the p value obtained in this t-test was 0.000, it indicated that there was a significant difference in the perception of people regarding the quality of diagnosis in the smaller cities and that in the metro cities (Table 14).

Table 14 Paired Samples Test: Quality of Diagnosis for Simple Ailments

		t	df	Sig. (2-tailed)
Pair 1	How good is diagnosis of simple ailments in your city - How good is diagnosis of simple ailments in a metro city	-6.809	97	.000

As indicated by the mean of responses obtained from the respondents about their perception of the quality of diagnosis in the two different categories of cities, the respondents believe that even diagnosis for simple ailments is worse in the small cities as compared to that in the metro cities (Table 15).

Respondents believe that even diagnosis for simple ailments is worse in the small cities as compared to that in the metro cities.

Table 15 Paired Samples Statistics: Quality of Diagnosis for Simple Ailments

		Mean	N
Pair 1	How good is diagnosis of simple ailments in your city	2.86	98
	How good is diagnosis of simple ailments in a metro city	3.41	98

Quality of Diagnosis: Complex Ailments

An enquiry into the respondents' perception of the quality of diagnosis for complex ailments revealed that majority of the respondents (58%) found the quality of diagnosis in smaller cities to be either pathetic or not up to the mark (Table 16). On the contrary an overwhelming percentage (92%) of the same respondents believed that the quality of diagnosis for complex ailments is either reasonably good or very good in the metro cities (Table 17).

Table 16 How Good is Diagnosis of Complex Ailments in Your City

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pathetic	8	8.0	8.1	8.1
	Not up to the Mark	50	50.0	50.5	58.6
	Reasonably Good	35	35.0	35.4	93.9
	Very Good	6	6.0	6.1	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total	100	100.0			
Total	100	100			

Table 17 How Good Is Diagnosis of Complex Ailments in a Metro City

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pathetic	1	1.0	1.0	1.0
	Not up to the Mark	3	3.0	3.1	4.2
	Reasonably Good	49	49.0	51.0	55.2
	Very Good	43	43.0	44.8	100.0
	Total	96	96.0	100.0	
Missing	System	4	4.0		
Total	100	100.0			

A paired sample t-test was conducted to compare the perception of the people regarding the quality and reliability of diagnostics for complex ailments in the small cities as compared to that in the metro cities. The p value thus obtained was 0.000, which indicated that there was a significant difference in the perception of people regarding the quality of diagnosis in the smaller cities and that in the metro cities (Table 18).

There was a significant difference in the perception of people regarding the quality of diagnosis in the smaller cities and that in the metro cities.

Table 18 Paired Samples Test: Diagnosis of Complex Ailments

		t	df	Sig. (2-tailed)
Pair 1	How good is diagnosis of complex ailments in your city - How good is diagnosis of complex ailments in a metro city	-11.705	94	.000

The mean of their perception indicates that the perceived quality of diagnosis for complex ailments and diseases was much superior in Metro cities as compared to that in smaller cities (Table 19).

Table 19 Paired Samples Statistics: Diagnosis of Complex Ailments

		Mean	N
Pair 1	How good is diagnosis of complex ailments in your city	2.37	95
	How good is diagnosis of complex ailments in a metro city	3.39	95

Testing Services & Imaging Facilities

The respondents were asked how they compare the testing services and imaging facilities in their cities with those in the metro cities. Their responses were recorded on a '4 point' scale with '1' being 'Very poor' and '4' being 'Comparable to metros'. The mean of the scores obtained were 2.65 and 2.45 respectively (Table 20). This indicates that the testing services and imaging facilities in the smaller cities were generally perceived to be inferior to those in the bigger cities, by the residents of the smaller cities.

Testing services and imaging facilities in the smaller cities were generally perceived to be inferior to those in the bigger cities.

Table 20 One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Testing Services in your city in comparison to those in bigger cities	98	2.65	.801	.081
Imaging facilities in your city in comparison to hose in bigger cities	97	2.45	.778	.079

One-Sample t test was conducted to understand if the quality of testing services and imaging facilities in the smaller cities were perceived to be significantly different than those in the metro cities. The test value was taken as '4'. The p values obtained for both 'testing services' as well as 'imaging facilities' were 0.000 (Table 21). Thus, there was a significant difference in the perceived quality of testing services in the smaller cities as compared to that in the metro cities. Similarly, there was a significant difference in the perceived quality of imaging facilities in the smaller cities as compared to that in the metros. From the tests conducted, it can be concluded that both testing services and imaging facilities in the smaller cities were perceived to be significantly inferior to those in the metro cities.

Table 21 One-Sample Test; Testing & Imaging Facilities

	Test Value = 4		
	t	df	Sig. (2-tailed)
Testing Services in your city in comparison to those in bigger cities	-16.651	97	.000
Imaging facilities in your city in comparison to those in bigger cities	-19.587	96	.000

Availing Services from Reputed Hospital Chains

The respondents were asked how willing they would be to avail the services from reputed hospital chains if such chains are operated in their cities at a price comparable to that they charge in the metro cities. Responses were obtained for their willingness to get treated in such chains for both simple ailments as well as complex ailments. The responses were recorded on a '4 point' scale with '1' being 'Somewhat unlikely' and '4' being 'Very likely'. The mean of the responses obtained for 'likelihood for obtaining their services in case of simple ailments' was 3.12 and the mean of the responses obtained for 'likelihood for obtaining their services in case of complex ailments' was 3.20 (Table 22). Thus for both simple health problems as well as for complex ailments, there is a strong likelihood of the patients opting for treatment in hospitals belonging to reputed chains if such hospitals operate in their cities.

Table 22 Paired Samples Statistics: Availing metro Chain Hospital Services

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	If reputed metro chain in city at same price (preference for simple ailment)	3.12	99	.836	.084
	If reputed metro chain in city at same price (preference for complex ailment)	3.20	99	.845	.085

When a Paired Sample t-test was conducted to gauge if there is a substantial difference in the willingness depending on the complication of the health problem for which the patient wants to get treated, the p value obtained was 0.426 (Table 23). Thus, the t-test indicated that there was no significant difference in their willingness of availing treatment (for simple ailments and for complex ailments) at a reputed chain in their cities at prices comparable to that in metro cities.

Table 23 Paired Samples Test : Availing Metro Chain Hospital Services

		T	df	Sig. (2-tailed)
Pair 1	If reputed metro chain in city at same price (preference for simple ailment) - If reputed metro chain in city at same price (preference for complex ailment)	-.799	98	.426

Availing Services If Prices Are Varied

The respondents were asked how willing they would be to avail the services from reputed hospital chains if such chains operated in their cities and provided services at a price lower than the price they charge in the metro cities but slightly higher than that prevailing in their cities. Responses were obtained for their willingness to get treated in such chains for both simple ailments as well as complex ailments. The responses were recorded on a '4 point' scale with '1' being 'Somewhat

unlikely' and '4' being 'Very likely'. The mean of the responses obtained for 'likelihood for obtaining their services in case of simple ailments' was 3.43 and the mean of the responses obtained for 'likelihood for obtaining their services in case of complex ailments' was 3.49 (Table 24). Thus, for both simple health problems as well as for complex ailments, there is a strong likelihood of the patients opting for treatment in hospitals belonging to metro chains if such hospitals operate in their cities.

For both simple health problems as well as for complex ailments, there is a strong likelihood of the patients opting for treatment in hospitals belonging to metro chains if such hospitals operate in their cities.

Table 24 Paired Samples Statistics: Availing Services at Varied Prices

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	If reputed metro chain in city at lower price (preference for simple ailment)	3.43	98	.746	.075
	If reputed metro chain in city at lower price (preference for complex ailment)	3.49	98	.803	.081

When a Paired Sample t-test was conducted to gauge if there is a substantial difference in this willingness depending on the complication of the health problem for which the patient wants to get treated, the p value obtained was 0.426 (Table 25). Thus, the t-test indicated that there was no significant difference in their willingness of availing treatment (for simple ailments and for complex ailments) at a reputed chain in their cities at prices lower than that in metro cities.

Table 25 Paired Samples Test :Availing Services at Varied Prices

		t	df	Sig. (2-tailed)
Pair 1	If reputed metro chain in city at lower price (preference for simple ailment) - If reputed metro chain in city at lower price (preference for complex ailment)	-.773	97	.441

Treatment of Simple Ailments at Reputed Hospital Chains

An encouraging percentage of respondents is inclined towards getting treated for simple ailments at reputed hospital chains if such hospitals were present in their cities. A higher inclination was recorded when the services were offered at a price comparable to that in the metro cities and also when these services were offered at a lower price point (Table 26 & Table 27).

However, a closer look at these tables reveals that while 55.1% of the respondents were very likely to avail these services at a price lower than that in the metros, a much lower percentage (38.4%) of these respondents would be willing to avail medical services for simple ailments at these re-

Table 26 If Reputed Metro Chain in city at Same Price (Preference for Simple Ailment)

		Frequency	Percent	Valid Percent
Valid	Somewhat unlikely	3	3.0	3.0
	Undecided	20	20.0	20.2
	Somewhat likely	38	38.0	38.4
	Very likely	38	38.0	38.4
	Total	99	99.0	100.0
Missing	System	1	1.0	
Total	100	100.0		

Table 27 If Reputed Metro Chain in City at Lower Price (Preference for Simple Ailment)

		Frequency	Percent	Valid Percent
Valid	Somewhat unlikely	3	3.0	3.1
	Undecided	6	6.0	6.1
	Somewhat likely	35	35.0	35.7
	Very likely	54	54.0	55.1
	Total	98	98.0	100.0
Missing	System	2	2.0	
Total	100	100.0		

puted hospital chains if the price points were similar to those in the metro cities. A look at the mean of the responses obtained for 'likelihood for getting treated for simple ailments at reputed hospital chains' also indicate that the likelihood increases if the prices charged by the hospital chains are lower than what they charge in the metros (Table 28).

Likelihood increases if the prices charged by the hospital chains are lower than what they charge in the metros.

Table 28 Paired Samples Statistics: Preference if Prices Are Lower-Simple Ailment

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	If reputed metro chain in city at same price (preference for simple ailment)	3.12	97	.845	.086
	If reputed metro chain in city at lower price (preference for simple ailment)	3.44	97	.736	.075

A paired sample t-test was conducted to understand if there was a significant difference in the willingness or inclination of the respondents to get treated for simple health issues at these hospital chains at the different price points mentioned above. The p value of 0.000 was obtained (Table 29) which indicates that there is a significant difference in the likelihood of availing medical services for simple health issues at reputed hospital chains (if they operate in the smaller cities) when the price points are different.

Table 29 Paired Samples Test : Preference If Prices Are Lower- Simple Ailment

		t	df	Sig. (2-tailed)
Pair 1	If reputed metro chain in city at same price (preference for simple ailment) - If reputed metro chain in city at lower price (preference for simple ailment)	-3.710	96	.000

Treatment for Complex Ailments at Reputed Hospitals

Like in the case of simple ailments, the respondents were found to have a marked willingness for getting treated for complex or serious ailments at reputed hospital chains if such hospitals were present in their cities. Here also, a high inclination towards getting treated at reputed hospital chains was evident when the services were offered at a price comparable to that in the metro cities and also when these services were offered at a lower price (Table 30 & Table 31).

Table 30 If Reputed Metro Chain in City at Same Price (Preference for Complex Ailment)

		Frequency	Percent	Valid Percent
Valid	Somewhat unlikely	3	3.0	3.0
	Undecided	18	18.0	18.2
	Somewhat likely	34	34.0	34.3
	Very likely	44	44.0	44.4
	Total	99	99.0	100.0
Missing	System	1	1.0	
Total	100	100.0		

Table 31 If Reputed Metro Chain in City at Lower Price (Preference for Complex Ailment)

		Frequency	Percent	Valid Percent
Valid	Somewhat unlikely	3	3.0	3.1
	Undecided	10	10.0	10.2
	Somewhat likely	21	21.0	21.4
	Very likely	64	64.0	65.3
	Total	98	98.0	100.0
Missing	System	2	2.0	
Total	100	100.0		

However, this willingness or inclination for obtaining healthcare services from reputed chain of hospitals was evidently higher when the services were offered at a price lower than that in the metros. This can be deciphered by looking at tables 30 and 31. These tables show that while 65.3% of the respondents were very likely to avail these services at a price lower than that in the metros, a relatively lower percentage (44.4%) of these respondents would be willing to avail medical services for complex ailments at these reputed hospital chains if the price points were similar to those in the metro cities.

Thus, the mean of the responses obtained for 'likelihood for getting treated for complex ailments at reputed hospital chains' also increases if the prices charged by the hospital chains are lower than what they charge in the metros (Table 32).

Table 32 Paired Samples Statistics :Complex Ailments

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	If reputed metro chain in city at same price (preference for complex ailment)	3.21	97	.853	.087
	If reputed metro chain in city at lower price (preference for complex ailment)	3.51	97	.792	.080

A paired sample t-test was conducted to understand if there was a significant difference in the willingness or inclination of the respondents to get treated for complex health issues at these hospital chains at different price points. The p value obtained was 0.000 (Table 33). This leads to the deduction that there is a significant difference in the likelihood of availing medical services for complex health issues at reputed hospital chains (if they operate in the smaller cities) when the price points are different.

Table 33 Paired Samples Test: (Preference for Complex Ailments)

		t	Df	Sig. (2-tailed)
Pair 1	If reputed metro chain in city at same price (preference for complex ailment) - If reputed metro chain in city at lower price (preference for complex ailment)	-4.434	96	.000

Findings

It was found that for simple health issues and for regular nature of medical treatment and consultations, most of the residents of small cities prefer to go to their neighborhood medical practitioners while for complex medical issues, they prefer to be treated in the private hospitals in their own cities. The government hospitals were found to be the least preferred destinations for medical treatment.

The government hospitals were found to be the least preferred destinations for medical treatment.

The study found that there was no significant difference in the respondents' perceived safely in the hands of the doctors from the smaller cities and those from the metros while being treated for simple ailments. However, for the treatment of complex ailments, the respondents reposed a significantly higher faith in the doctors from the metro cities and perceived them to be more competent than the doctors from the smaller cities.

An important revelation from the study was about the lack of trust of the people on the diagnosis made by the practitioners in the smaller cities. Not only was the perceived quality of diagnosis for complex ailments and diseases found to

be much superior in metro cities, the people believe that even the diagnosis for simple ailments is worse in the small cities as compared to that in the metro cities. The study further indicated that even the testing services and the imaging facilities in the smaller cities were perceived to be significantly inferior to those in the metro cities.

The study clearly indicates that for both simple health problems as well as for complex ailments, there is a strong likelihood of the patients opting for treatment in hospitals belonging to reputed chains, if such hospitals operate in their cities. This likelihood of availing healthcare services from reputed chains of hospitals was found to further increase if the prices charged by the hospital chains are lower than what they charge in the metros.

Implications

Perception about anything is not merely a function of our psychology and cognition but is also a potent indicator of the characteristics, qualities and functions of the object in question. Going by this argument it can be safely inferred that the findings about the perception of the people regarding the relatively poor level of healthcare facilities and services in the smaller cities is an indication of an inferior or lesser developed healthcare system and infrastructure in these cities. The lack of trust on the healthcare facilities available in the smaller cities and the conspicuous avoidance of the government hospitals by the citizens emanating from their blatant distrust on the quality of government healthcare facilities/services despite a liberal and colossal investment by the government in the healthcare sector raise some serious and pertinent questions that need to be pondered upon and addressed at the earliest. The issues that call for immediate attention are:

- Despite the successful launch of the 'Ayushman Bharat Scheme' and despite a liberal budgetary allocation for the scheme for the last two years (including the budgetary allocation of Rs. 69,000 crores for the year 2020-21 (IBEF, 2020), why does the healthcare infrastructure in small cities and towns still remain in a dismal shape?
- Despite increase in the number of doctors from 8,27,006 in 2010 to 11,54,686 in 2018 (IBEF, 2020) why is there a dearth of good number of specialists for treating complicated ailments in smaller cities? Is it because the lure of money and fame draws most of these specialists to the bigger cities and even to foreign lands? The issue needs to be explored and answers need to be found.
- Despite many new medical colleges coming up in recent years and despite several new All India Institutes of Medical Science' being established and despite the medical students from the length and breadth of the country receiving similar quality of medical education and training from these institutes/medical colleges, why are the medical practitioners practicing in the smaller cities still perceived to be lesser competent

than their counterparts in the bigger cities? Is it because of the inability of the small city practitioners to upgrade themselves on a continuous basis or because of the lack of learning exposure in the small cities? This calls for further exploration and another research.

- Can an innovative, socially uplifting yet profitable model of healthcare system be developed for the non-metro cities, towns and villages?
- Can the organized healthcare sector come up with innovative healthcare service delivery models to cater to the price sensitive segments and citizens at the 'bottom of the pyramid'?

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