

Impact Of Patient Demographics As Moderating Variables In Patient Communication

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ABSTRACT: Healthcare is one of India's biggest and promising sector, both in terms of revenue and employment. Healthcare comprises of not only hospitals but comprises of many verticals including, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services and increasing expenditure by public as well private players. The pace the industry in India is growing its attracting a big amount Foreign Direct Investment (FDI) worth US\$ 6.72 billion between April 2000 and March 2020 (Department for Promotion of Industry and Internal Trade (DPIIT)). Every investment needs its timely returns therefor it is pertinent to understand the population it is catering too, Customer satisfaction plays an important role it's not only the leading indicator to measure customer loyalty, identify unhappy customers and reasons for the same it is also a key point of differentiation that helps you to attract new customers in competitive business environments Therefore understanding demographics plays a very crucial role in planning and catering to its customers. The article basis on the research is looking into the possibility of demographic profile of patients and patient satisfaction.

Keywords: Patient Demographics, Moderating Variables, Patient Communication, Healthcare

I. INTRODUCTION

Demography is defined as the branch of social sciences concerned with the study of human populations. It captures the population details and the constant change through births, deaths, and migration. It also considers the relationship of the population at large with social and economic change. The statistical data relating to the population and particular groups within it generally define the demographics of the place". The demographic details are divided into multiple categories. The common variables are age, sex, income level, race, employment, location, , and educational level.

It is very important to measure and understanding the demographics as they allows to identify and categorize on the need basis and differentiate on the basis of requirements and also buying power with being dependant of other variable factors like income group , education levels. Healthcare is ever advancing and experimenting. As we are progressing it is becoming more becoming customer centric. Patient demographics form the core of the data for any medical organization. They allow for the identification of a patient and his categorization into various categories and utilize for the purpose of statistical analysis. With the advanced changes and competition

Health-care organizations are seriously considering their patients' changing needs while addressing the future plans. The demographic factors will have direct impact the way healthcare will be designed and functions. The Demographic details also details plays a very crucial role in understanding the patient experience and in helping the hospital better serve patients and the community. These details are generally captured at the time of admission. Collecting race and ethnicity data can helps to improve the quality of care for all patients as it Identifies and address differences in care perspective in specific populations. Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals.

II. OBJECTIVE OF THE STUDY

- To explore the impact of demographics of the patients as the moderating variables in patient communication

III. METHODOLOGY

To perform the correlational study (done in the previous paper) for each demographic groups (age groups: 3, gender: 2, interaction: 6) to find if there is any evidence of significant differences in the result.

This shall empower us to find out if there is any specific vulnerable demographic group which requires more attention during the communication process.

Expected Outcome: Identification of any vulnerable group which deserves more attention during communication process

IV. RESULT AND FINDINGS

The objective of this study was to analyse the roles of demographic variables gender and age as moderating variables in patient communication and patient satisfaction. In this section, we shall present all the findings those were unveiled in due course and shall endeavour to figure out the roles of demographic variables gender and age as moderating variables in patient communication and patient satisfaction.

Variables for this Study along with their Taxonomy:

- PC_AW = Patient Communication Score by the Respondents at the Patient Awareness Level
- PC_PC = Patient Communication Score by the Respondents at the Patient Care and Treatment Level
- PC_PD = Patient Communication Score by the Respondents at the Patient Discharge Level
- PC_PR = Patient Communication Score by the Respondents at the Patient Rights Level
- PS_AW = Patient Satisfaction Score by the Respondents at the Patient Awareness Level
- PS_PC = Patient Satisfaction Score by the Respondents at the Patient Care and Treatment Level
- PS_PD = Patient Satisfaction Score by the Respondents at the Patient Discharge Level
- PS_PR = Patient Satisfaction Score by the Respondents at the Patient Rights Level
- PC_TOTAL = Overall Patient Communication Score
- PS_TOTAL = Overall Patient Satisfaction Score

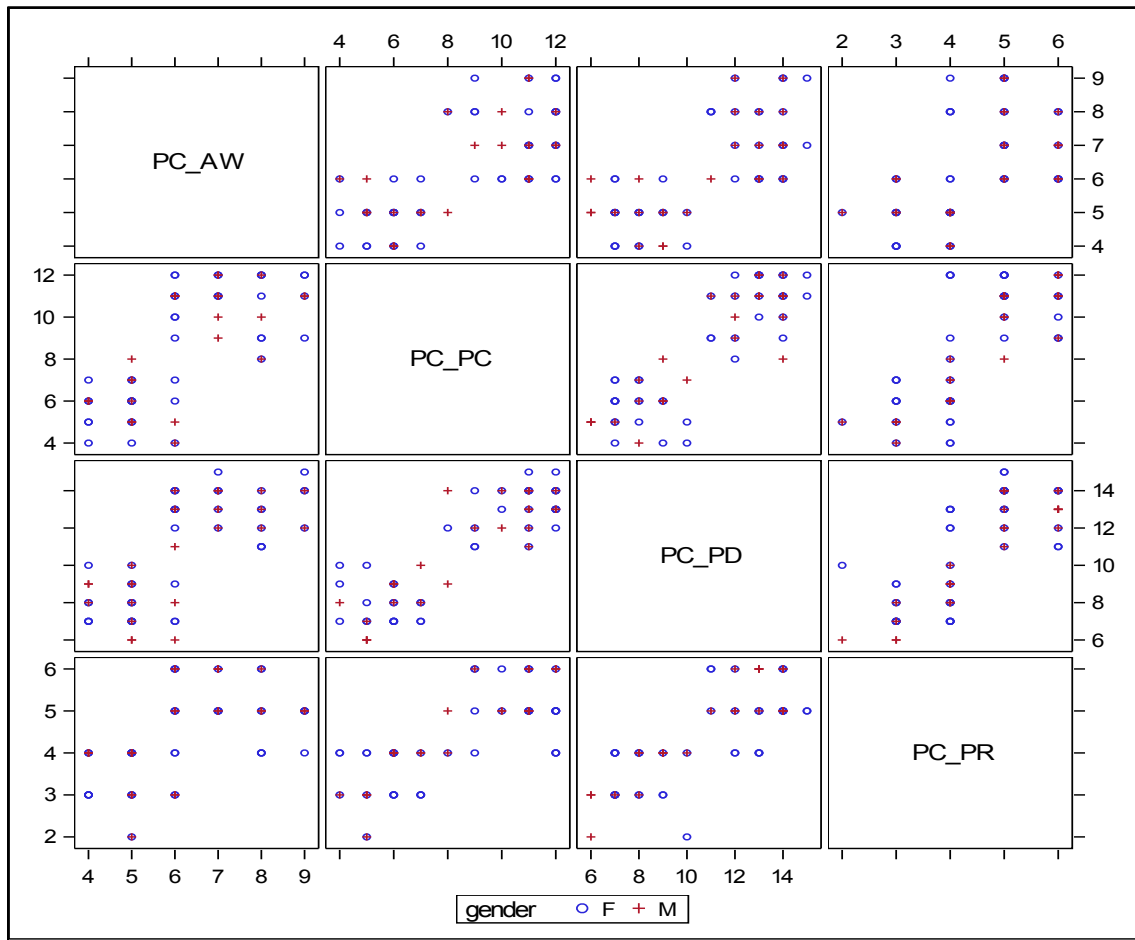


Figure 1: Role of Gender as Moderating Variable in Linear Association between the Patient Communication Scores at Different Levels

The scatter diagram doesn't provide us with very conclusive pictorial evidence towards the role of gender as moderating variable in influencing the linear association among the factors pertinent to patient communication. For most of the scatter diagrams, it is difficult to spot the differences between the Men and Women counterparts except for linear association between PC_PR (Patient Communication pertinent to Patient Rights) with both PC_PC (Patient Communication pertinent to Patient Care) and PC_PD (Patient Communication pertinent to Patient Discharge). In both the cases the scatterplot for male respondents gives an evidence for stronger linear association between the variables than for the female counterparts. However, since the scatterplot doesn't provide us with very conclusive evidence towards the role of gender as moderating variable, we shall take a look at the Correlation Matrix for the quantitative results.

		PC_AW	PC_PC	PC_PD	PC_PR
PC_AW	MALE	N/A	0.68	0.7	0.58
	FEMALE		0.74	0.73	0.55
PC_PC	MALE	0.68	N/A	0.89	0.9
	FEMALE	0.74		0.87	0.69
PC_PD	MALE	0.7	0.89	N/A	0.9
	FEMALE	0.73	0.87		0.7
PC_PR	MALE	0.58	0.9	0.9	N/A
	FEMALE	0.55	0.69	0.7	

Table 1: Correlation Matrix for Patient Communication at Different Phases

The correlation matrix above confirms the evidences produced by the scatterplots in Fig.1. From the correlation matrix, it is evident that gender has no role as moderating variable for most of the inter-correlation between different phases of patient communication. However, the correlation between PC_PR (Patient Communication pertinent to Patient Rights) with both PC_PC (Patient Communication pertinent to Patient Care) and PC_PD (Patient Communication pertinent to Patient Discharge) scatterplot for male respondents gives an evidence for stronger linear association between the variables than for the female counterparts (0.9:0.69, 0.9:0.7 respectively). Hence it can be inferred that gender has some moderating effect on the spill-over of patient communication at care and discharge level onto the rights level.

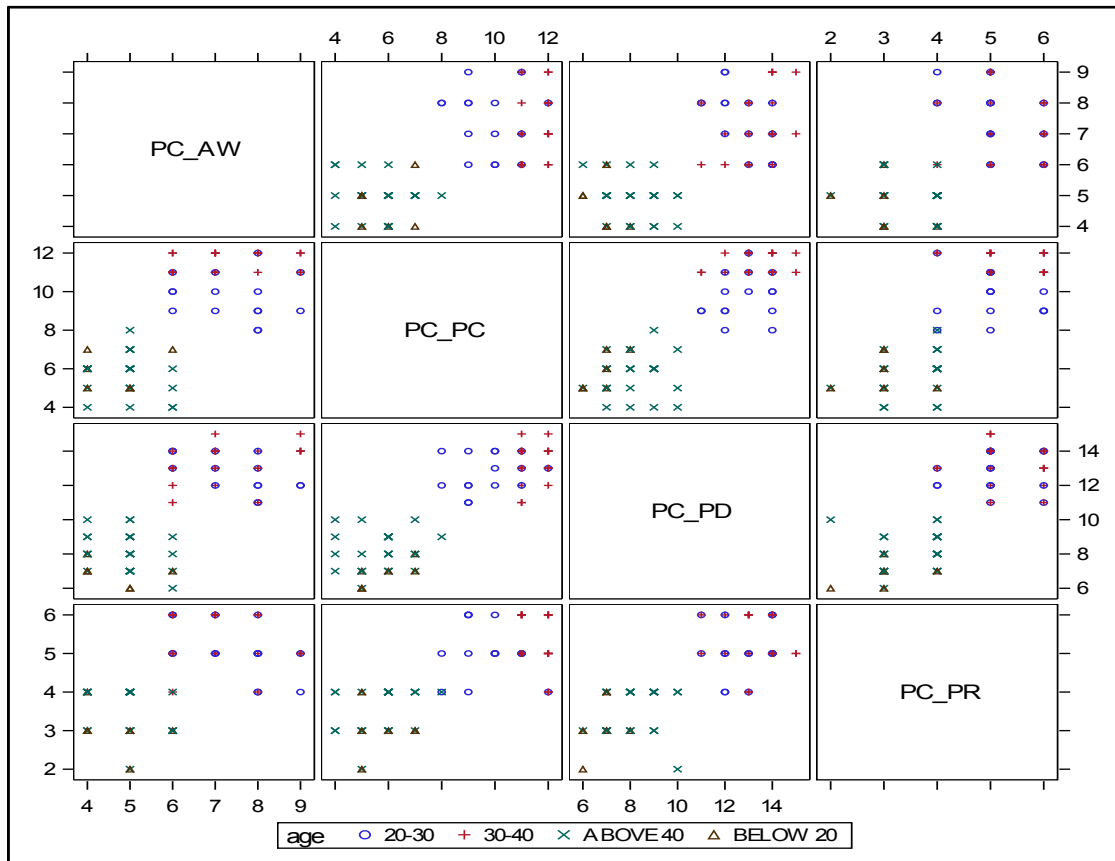


Figure 2: Role of Age as Moderating Variable in Linear Association between the Patient Communication Scores at Different Levels

The scatter diagram doesn't provide us with a very conclusive pictorial evidence towards the role of age as moderating variable in influencing the linear association among the patient communication at different levels. For most of the scatter diagrams, it is difficult to spot the differences between the counterparts from different age groups except for linear association between PC_PD (Patient Communication pertinent to Patient Discharge) with both PC_AW (Patient Communication pertinent to Patient Awareness) and PC_PC (Patient Communication pertinent to Patient Care and Treatment). In the first case (PC_PD and PC_AW) the scatterplot for respondents between 30-40 years of age gives an evidence for stronger positive linear association and the respondents between 20-30 years of age exhibited strong negative correlation while the rest of the age groups (<20 years of age and >40 years) exhibited moderately negative linear association. However, for the second case (PC_PD and PC_PC) the scatterplot for respondents below 20 years of age gives an evidence for strong positive linear association while the rest of the age groups exhibited weak positive linear association. However, since the scatterplot doesn't provide us with a very conclusive evidence towards the role of age as moderating variable, we shall take a look at the Correlation Matrix for the quantitative results

		PC_AW	PC_PC	PC_PD	PC_PR
PC_AW	<20	N/A	0.17	-0.43	-0.39
	20-30		-0.13	-0.63	-0.51
	30-40		0.21	0.38	-0.17
	>40		-0.16	-0.27	-0.2
PC_PC	<20	0.17	N/A	0.76	0.01
	20-30	-0.13		0.22	-0.15
	30-40	0.21		0.14	-0.19
	>40	-0.16		0.08	0.33
PC_PD	<20	-0.43	0.76	N/A	0.42
	20-30	-0.63	0.22		0.12
	30-40	0.38	0.14		-0.14
	>40	-0.27	0.08		0.11
PC_PR	<20	-0.39	0.1	0.42	N/A
	20-30	-0.51	-0.15	0.12	
	30-40	-0.17	-0.19	-0.14	
	>40	-0.2	0.33	0.11	

Table 2: Correlation Matrix for Patient Communication at Different Phases by Age Groups

The correlation matrix above provides us with the quantitative evidences against the qualitative evidences produced by the scatterplots in Fig.2. From the correlation matrix, it is evident that age has no role as moderating variable for most of the inter-correlation between different phases of patient communication. However, for PC_PD and PC_AW, the correlation coefficient measured through Pearson's 'r' for respondents between 30-40 years of age gives an evidence for moderate positive linear association (0.38) and the respondents between 20-30 years of age exhibited strong negative correlation (-0.63) while the rest of the age groups (<20 years of age and >40 years) exhibited moderately negative linear association (-0.43 and -0.27 respectively). However, for the second case (PC_PD and PC_PC) the correlation coefficient measured through Pearson's 'r' for respondents below 20 years of age gives an evidence for strong positive linear association (0.76) while the rest of the age groups exhibited weak positive linear association. Hence it can be inferred that age has some moderating effect on the spill-over of patient communication at patient awareness and care/treatment level onto the discharge level. However, once aspect needs to be understood at this point and it is the fact that since correlation is only an evidence of linear evidence and doesn't prove causation, hence miles deep inference shouldn't be inferred.

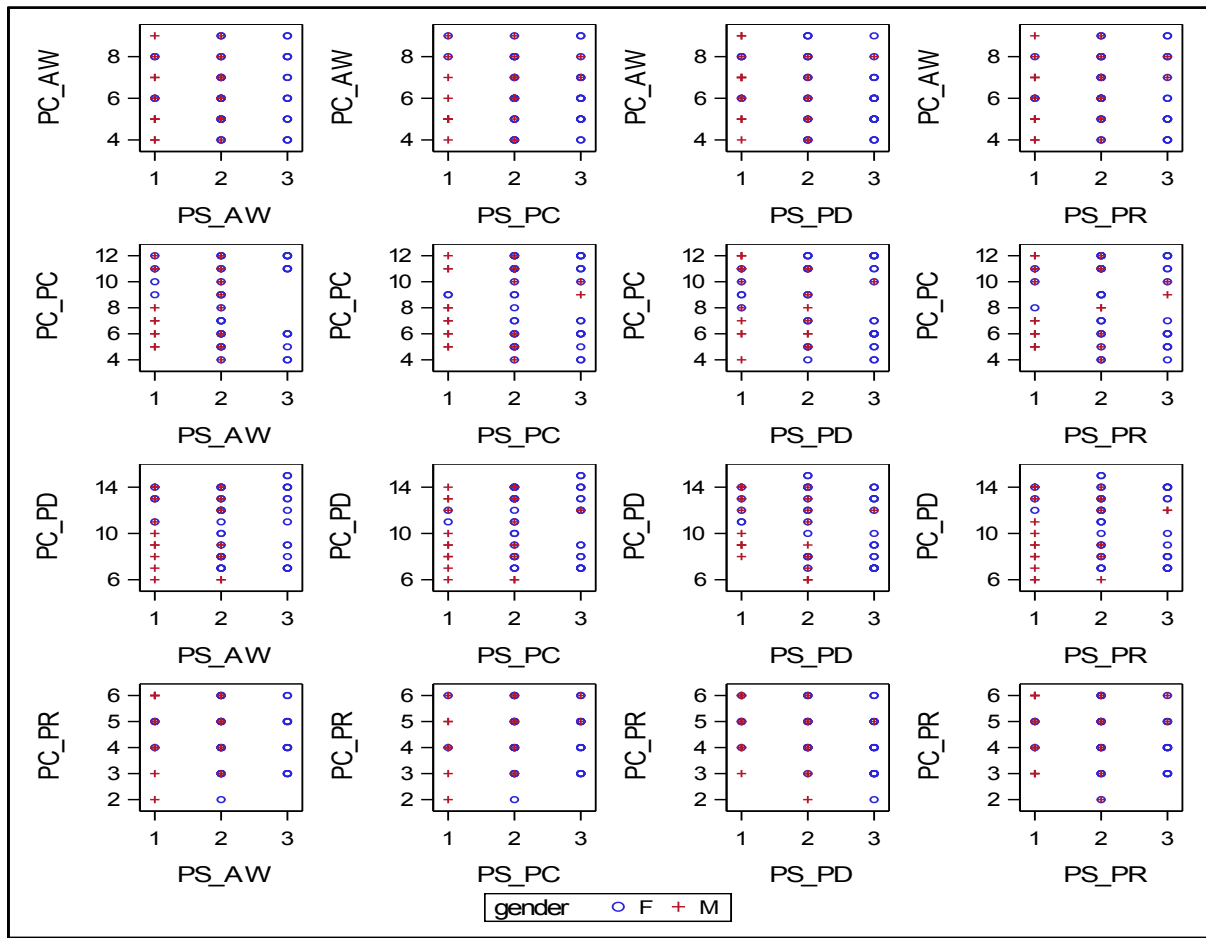


Figure 3: Role of Gender as Moderating Variable in Linear Association between the Patient Communication Scores and Patient Satisfaction at Different Levels

The scatter diagram doesn't provide us with very conclusive pictorial evidence towards the role of gender as moderating variable in influencing the linear association among the patient communication at different levels with patient satisfaction at different levels of patient communications. For most of the scatter diagrams, it is difficult to spot any differences between the counterparts from different gender groups. However, since the scatterplot doesn't provide us with a very conclusive evidence towards the role of gender as moderating variable, we shall take a look at the Correlation Matrix for the quantitative results.

		PS_AW	PS_PC	PS_PD	PS_PR
PC_AW	MALE	0.178	0.287	-0.119	0.274
	FEMALE	-0.038	-0.202	-0.347	-0.203
PC_CARE	MALE	0.006	0.229	-0.264	0.061
	FEMALE	-0.041	-0.037	-0.240	-0.169
PC_PD	MALE	-0.050	0.261	-0.324	0.103
	FEMALE	-0.065	-0.110	-0.349	-0.215
PC_PR	MALE	-0.019	0.287	-0.247	0.119
	FEMALE	-0.063	-0.050	-0.408	-0.203

Table 3: Inter-Correlation between Patient Communications at Different Levels with Patient Satisfaction at Different Levels

The correlation matrix above provides us with the quantitative evidences against the qualitative evidences produced by the scatterplots in Fig.3. From the correlation matrix, it is evident that gender has no role as moderating variable pertinent to the correlation between patient communications at different verticals with patient satisfaction at different verticals of patient communication. However, one aspect needs to be understood at this point and it is the fact that since correlation is only an evidence of linear evidence and doesn't prove causation, hence miles deep inference shouldn't be inferred.

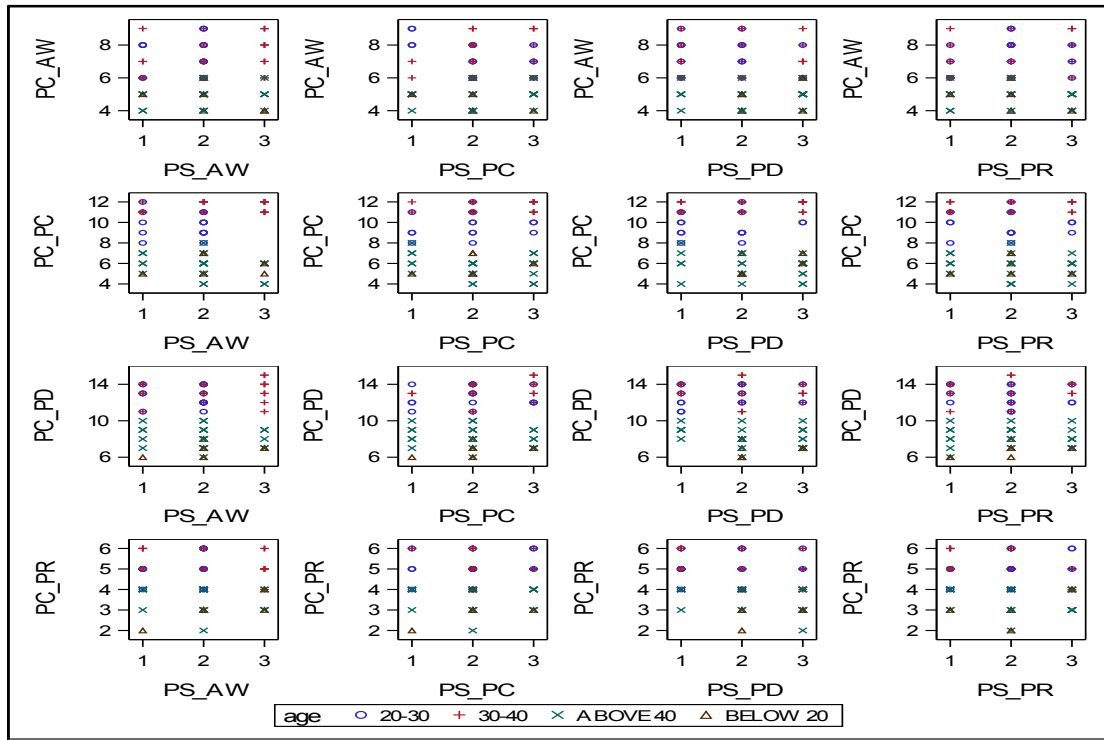


Figure 4: Role of Age as Moderating Variable in Linear Association between the Patient Communication Scores and Patient Satisfaction at Different Levels

The scatter diagram doesn't provide us with very conclusive pictorial evidence towards the role of age as moderating variable in influencing the linear association among the patient communication at different levels with patient satisfaction at different levels of patient communication. For most of the scatter diagrams, it is difficult to spot the differences between the counterparts from different age groups except some sporadic evidences for a certain scatter plots across different age groups. However, since the scatterplot doesn't provide us with very conclusive evidence towards the role of age as moderating variable, we shall take a look at the Correlation Matrix for the quantitative results.

		PS_AW	PS_PC	PS_PD	PS_PR
PC_AW	<20	-0.542	-0.387	0.316	-0.387
	20-30	0.139	-0.538	-0.093	0.135
	30-40	0.275	0.182	0.013	0.285
	>40	0.202	0.187	0.046	-0.147
PC_CARE	<20	0.045	0.322	0.525	0.247
	20-30	-0.168	0.151	0.057	-0.023
	30-40	0.280	0.162	0.223	0.287
	>40	-0.304	-0.259	-0.200	-0.118
PC_PD	<20	0.412	0.420	0.172	0.420
	20-30	-0.177	0.160	0.239	-0.209
	30-40	0.109	0.150	-0.161	0.128
	>40	-0.175	-0.313	-0.339	-0.108
PC_PR	<20	0.840	0.500	0.158	0.527
	20-30	0.277	0.298	0.187	0.442
	30-40	-0.432	-0.327	-0.538	-0.531
	>40	-0.221	-0.154	-0.354	-0.186

Table 4: Inter-Correlation between Patient Communications at Different Levels with Patient Satisfaction at Different Levels by Age Groups

The correlation matrix above provides us with the quantitative evidences against the qualitative evidences produced by the scatterplots in Fig.3. From the correlation matrix, we can obtain sporadic evidences of the role of age as moderating variable for influencing the linear association between patient communication scores at different phases of patient communication with patient satisfaction at different phases of patient communication. E.g. respondents below 20 years of age exhibited moderately negative correlation between patient communication score at the awareness level with patient satisfaction at patient rights level while the respondents between 20 – 30 years of age exhibited a strong negative linear association (-0.538) between patient communication at awareness level with patient satisfaction at patient care and discharge level. Also, the patients below 20 years of age exhibited a strong positive correlation (0.525 between patient communication at patient care and treatment phase with patient satisfaction at patient discharge phase. There is another instance where it is found that the patients below 20 years of age exhibited moderately positive linear association between patient communication at the level of patient discharge with patient satisfaction at patient awareness, patient care and treatment and patient rights (around 0.4 in each of the cases), while other age groups didn't exhibit that particular pattern. However, the most striking findings being unveiled at the patient communication at patient rights level when it is found that for the patients below 20 years of age, the patient communication score at patient rights level shares high correlation with patient satisfaction at patient awareness level (0.84) and moderately strong positive correlation with patient satisfaction at patient care and treatment level along with patient satisfaction at patient rights phase (around 0.5 in each case). While for the age groups below 20 years exhibited all positive correlation pertinent to patient communication at rights level, there being instances of negative linear association for the same analysis. E.g. the patients between 30 – 40 years of age exhibited moderately strong negatively correlation between patient communication at patient rights phase with patient satisfaction at patient discharge (-0.538) and patient satisfaction at patient rights level (-0.531) respectively. Though, we got bipolar contrarian results for different age groups pointing some moderating effect of age in influencing the correlation between patient communication scores at different levels with patient satisfaction at different phases of patient communication, however, correlation is only an evidence of linear association and doesn't prove causation, hence miles deep inference shouldn't be inferred.

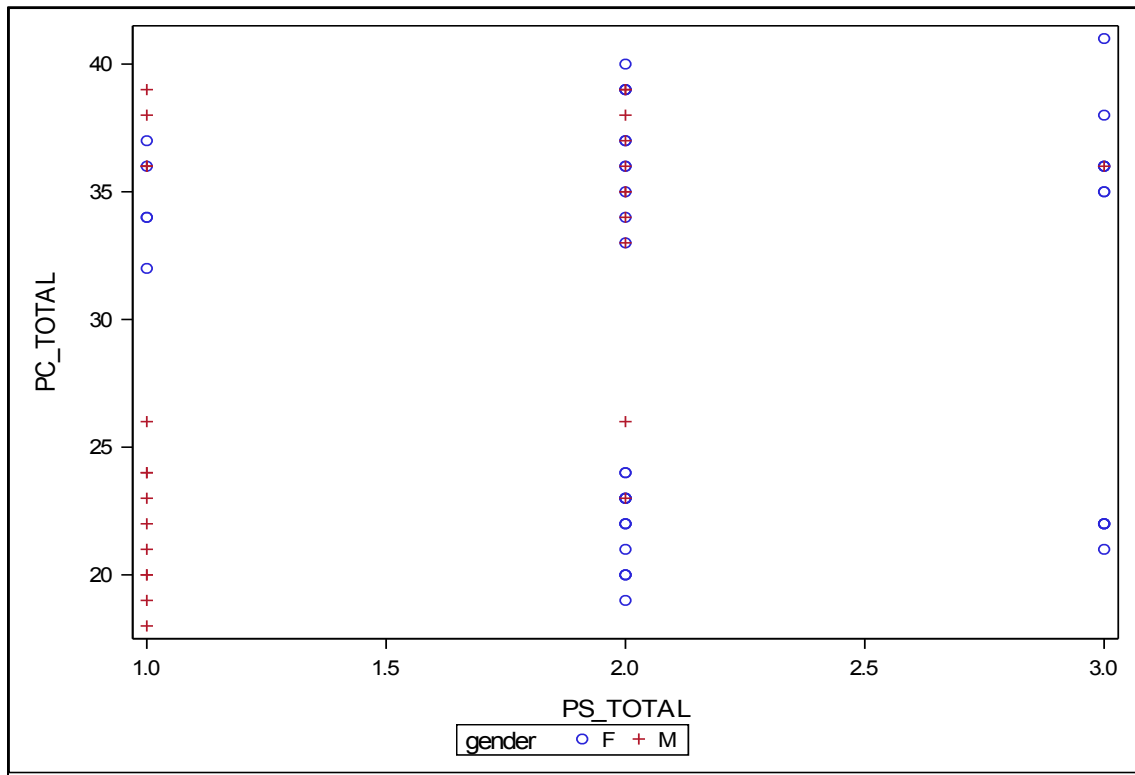


Figure 5: Role of Gender as Moderating Variable in Linear Association between overall Patient Communication and overall Patient Satisfaction

The scatter plot doesn't provide with a specific pattern for the strength of linear association between patient communication and patient satisfaction for the female respondents. However, a moderately strong positive linear association between patient communication and patient satisfaction is suggested from the scatter plot for the male counterparts. Next, we shall take a look at the correlation coefficients between patient communication and patient satisfaction for both men and women patients to get the quantitative results.

		PS_TOTAL
PC_TOTAL	MALE	0.48736
	FEMALE	-0.07994

Table 5: Inter-Correlation between Patient Communications with Patient Satisfaction at Different Levels by Gender

The correlation matrix establishes the findings from the scatter plot as it is found that that the linear association between patient communication and patient satisfaction for the male respondents is moderately strong (0.48) while no linear association could be established for the female counterparts.

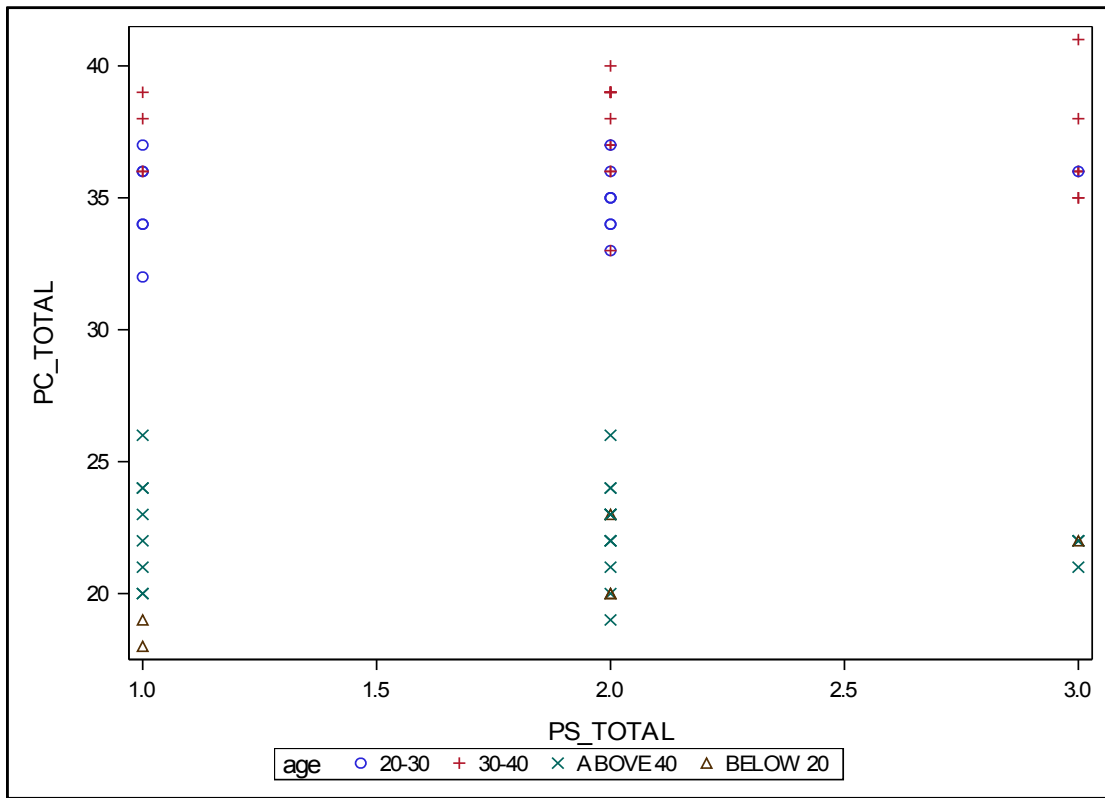


Figure 6: Role of Age as Moderating Variable in Linear Association between overall Patient Communication and overall Patient Satisfaction

The scatter plot doesn't provide with a specific pattern for the strength of linear association between patient communication and patient satisfaction for any age groups except for the respondents below 20 years of age. A moderately strong positive linear association between patient communication and patient satisfaction is suggested from the scatter plot for the respondents below 20 years of age. Next, we shall take a look at the correlation coefficients between patient communication and patient satisfaction for patients from all the age groups to get the quantitative results.

		PS_TOTAL
PC_TOTAL	<20	0.76104
	20-30	0.13417
	30-40	-0.1336
	>40	-0.12298

Table 6: Inter-Correlation between Patient Communications with Patient Satisfaction at Different Levels by Age Groups

The correlation matrix establishes the findings from the scatter plot as it is found that that the linear association between patient communication and patient satisfaction for respondents below 20 years of age is very strong (0.76) while no linear association could be established for the counterparts from other age groups.

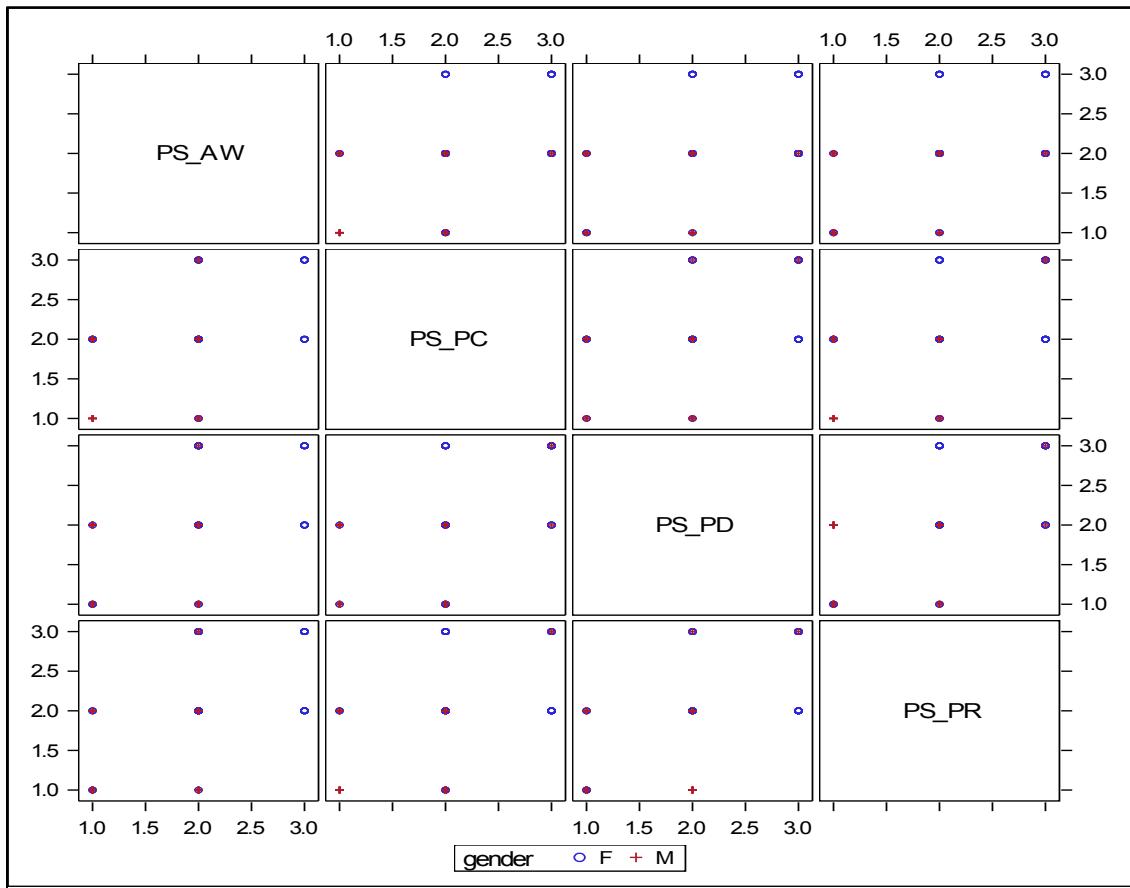


Figure 7: Role of Gender as Moderating Variable in Linear Association between the Patient satisfactions at Different Levels

The scatter plot doesn't provide with a specific pattern for the strength of linear association between patient satisfaction scores at different levels for either men or women except for patient rights and hence, we shall take a look at the correlation coefficients between patient satisfaction scores at different levels for patients from both men and women to get the quantitative evidences.

		PS_AW	PS_PC	PS_PD	PS_PR
PS_AW	MALE	N/A	0.2	-0.03	0.26
	FEMALE	N/A	0.34	0.34	0.38
PS_PC	MALE	0.2	N/A	0.18	0.32
	FEMALE	0.34	N/A	0.42	0.09
PS_PD	MALE	-0.03	0.18	N/A	0.33
	FEMALE	0.34	0.42	N/A	0.47
PS_PR	MALE	0.26	0.32	0.33	N/A
	FEMALE	0.38	0.09	0.47	N/A

Table 7: Correlation Matrix for Patient Satisfaction at Different Phases by Gender

The correlation matrix establishes the findings from the scatter plot as no linear association between patient satisfaction scores at different levels could be established for either men or women except for patient rights.

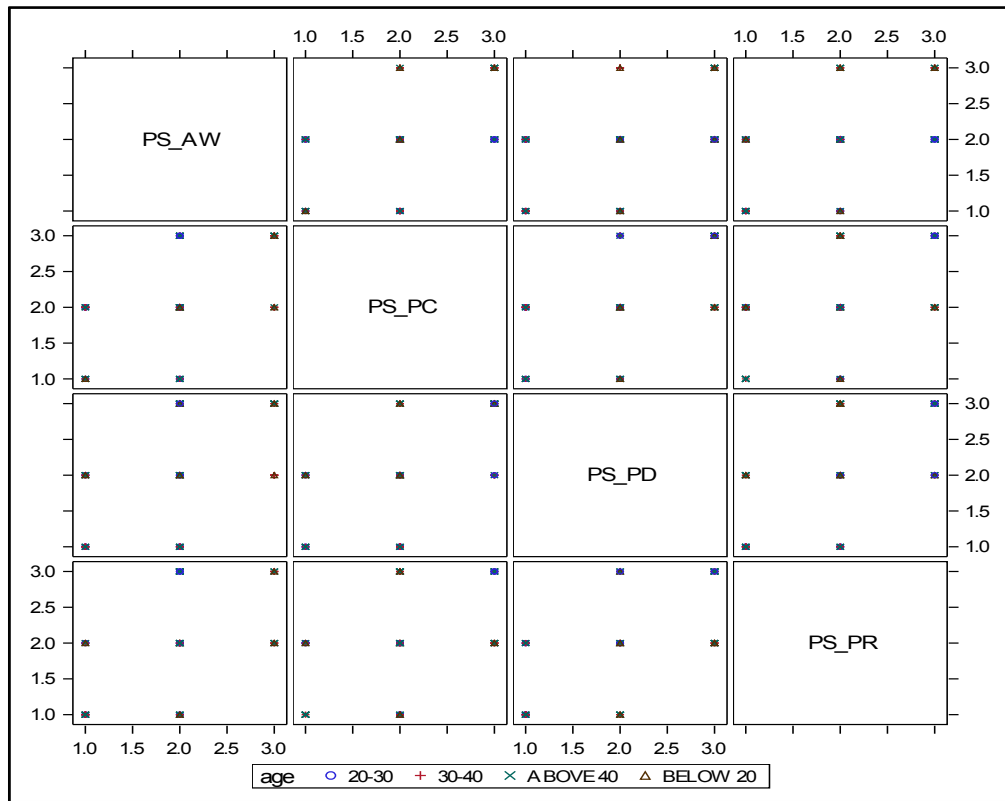


Figure 8: Role of Age as Moderating Variable in Linear Association between the Patient satisfactions at Different Levels

The scatter plot doesn't provide with an overall specific pattern for the strength of linear association between patient satisfaction scores at different levels for different age groups except a few sporadic evidences of linear association and hence, we shall take a look at the correlation coefficients between patient satisfaction scores at different levels for patients for all the age groups to get the quantitative evidences for role of age as moderating variable influencing the linear association between patient satisfaction scores at different levels for patient communication.

		PS_AW	PS_PC	PS_PD	PS_PR
PS_AW	<20	N/A	0.84	0.34	0.42
	20-30		0.14	0.27	0.35
	30-40		0.47	0.42	0.74
	>40		0.58	0.57	0.48
PS_PC	<20	0.84	N/A	0.61	0.02
	20-30	0.14		0.51	0.42
	30-40	0.47		0.37	0.31
	>40	0.58		0.69	0.57
PS_PD	<20	0.34	0.61	N/A	0.17
	20-30	0.27	0.51		0.79
	30-40	0.42	0.37		0.59
	>40	0.57	0.69		0.61
PS_PR	<20	0.42	0.02	0.17	N/A
	20-30	0.35	0.42	0.79	
	30-40	0.74	0.31	0.59	
	>40	0.48	0.57	0.61	

Table 8: Correlation Matrix for Patient Satisfaction at Different Phases by Age Groups

From the correlation matrix depicting the strength of linear association among patient satisfaction scores at different levels of patient communication for different age groups, it is found that the linear association between the patient satisfaction at the patient awareness level and patient satisfaction at the patient care and treatment level is the strongest for the respondents below 20 years of age (0.84) while linear association between the patient satisfaction at the patient awareness level and patient satisfaction at the patient rights level is the strongest for the respondents between 30 – 40 years of age (0.74). Another striking finding is that linear association between patient satisfaction at the patient care and treatment level and the patient rights level is the weakest for the respondents below 20 years of age (0.02) while there exists moderate range of correlation for the rest of the age groups (0.31-0.57). Last but not the least, the strength of linear association between patient satisfaction at patient discharge level and the patient rights level is the very strong for the respondents between 20 – 30 years of age while there exists weak to moderate range of correlation for the rest of the age groups (0.17 – 0.61). The correlation matrix depicting the strength of linear association among patient satisfaction scores at different levels of patient communication for different age groups doesn't provide a conclusive evidence of a specific age group influencing the linear association between patient satisfaction at different levels and hence, is a quantitative evidence reaffirming the sporadic evidences obtained from the scatter plot.

		PS_TOTAL
PS_AW	MALE	0.03
	FEMALE	0.37
PS_PC	MALE	0.24
	FEMALE	0.27
PS_PD	MALE	-0.08
	FEMALE	0.35
PS_PR	MALE	0.38
	FEMALE	0.36

Table 9: Correlation Matrix between Patient Satisfaction at Different Phases with Overall Patient Satisfaction by Gender

The correlation matrix in Table 9 depicts the strength of linear association between patient satisfaction at different levels with overall patient satisfaction for men and women. From the correlation it can be seen that there exists weak to moderate correlation between overall patient satisfaction (PS_TOTAL) with both patient satisfaction at patient care and treatment level (PS_PC) and patient satisfaction at patient rights (PS_PR) for both men and women. However, for linear association between overall patient satisfaction (PS_TOTAL) with patient satisfaction at patient awareness level (PS_AW) and patient satisfaction at patient discharge level (PS_PD) is very weak for men (0.03 and -0.08 respectively) while there exists a moderate degree of correlation for women (0.37 and 0.35) respectively. However, as mentioned in earlier sections, correlation depicts only linear association and hence causal relationships should not be inferred from correlation matrix.

		PS_TOTAL
PS_AW	<20	0.41
	20-30	0.32
	30-40	0.45
	>40	0.47
PS_PC	<20	0.42
	20-30	0.11
	30-40	0.66
	>40	0.43
PS_PD	<20	0.17
	20-30	0.05
	30-40	0.57
	>40	0.55
PS_PR	<20	0.42
	20-30	0.27
	30-40	0.44
	>40	0.84

Table 10: Correlation Matrix between Patient Satisfaction at Different Phases with Overall Patient Satisfaction by Age groups

The correlation matrix in Table 10 depicts the strength of linear association between patient satisfactions at different levels with overall patient satisfaction for different age groups. From the correlation matrix, it can be seen that the linear association between overall patient satisfaction and patient satisfaction at the acre and treatment level is the strongest for the respondents between 30 – 40 years of age (0.66), while the correlation between overall patient satisfaction and patient satisfaction at the patient rights level is the strongest for the respondents above 40 years of age (0.84). Another important finding from the correlation matrix is the fact that correlation between overall patient satisfaction and the patient satisfaction at different levels is the weakest for the respondents between 20 – 30 years of age. However, as mentioned in earlier sections, correlation depicts only linear association and hence causal relationships should not be inferred from correlation matrix.

So far, we have conducted quite a few scatter plots and correlation matrix to understand the role age and gender as moderating variables influencing different facets of patient communication scores and how patient communication influences the patient satisfaction for different demographic groups in the study. However, what we have obtained is only some sporadic evidences for the influence of demographic variables as moderating variables. Moreover, since correlation can't be accepted as an evidence of causation hence some quantitative evidence is required that can establish the causal relationships involving patient communication, patient satisfaction and the moderating role of the demographic variables in this study. Hence, we perform multiple linear regressions involving all the patient communication patient satisfaction scores at different levels along with the gender and age groups as independent variables and overall patient satisfaction as dependent variable. The idea is to obtain the most significant independent variables influencing the patient satisfaction along with one baseline model for the control group and interpreting how the demographic groups influence the relationships at each level. The results are provided in Table 11.

D/v	PS_TOTAL		
Parameter	Estimate	Pr > t	*** (Sig .05)
Intercept	0.318	0.741	
PC_AW	-0.085	0.298	
PC_PC	-0.004	0.955	
PC_PD	0.045	0.505	
PC_PR	0.108	0.378	
PS_AW	0.083	0.537	
PS_PC	0.107	0.406	
PS_PD	0.042	0.759	
PS_PR	0.320	0.016	***
age 20-30	-0.289	0.660	
age 30-40	0.018	0.981	
age >40	-0.097	0.732	
gender F	0.263	0.183	
R-sq	0.460		
F Value	4.030		
Pr > F	0.0002		

Table 11: Multiple Linear Regressions

The results from multiple regression analysis in Table 11 suggest that the overall model is significant (Pr > F is 0.0002, which is less than the level of significance set at 0.05 for this study). However, the individual parameter estimates for the coefficients suggest that only patient satisfaction at patient rights (PS_PR) is significant (p value 0.016, less than the level of significance set at 0.05 for this study) and no other variables has come out to be significant. Hence, another multiple regression analysis is conducted with only patient satisfaction at patient rights (PS_PR) as the independent variable and the results are furnished in Table 12.

D/v	PS_TOTAL		
Parameter	Estimate	Pr > t	*** (Sig .05)
Intercept	0.318	0.741	
PS_PR	0.320	0.016	***
R-sq	0.294		
F Value	27.930		
Pr > F	<.0001		

Table 12: Multiple Regression Analysis with PS_PR as the Independent Variable

The results from multiple regression analysis in Table 11 suggest that the patient satisfaction at patient rights (PS_PR) as the independent variable can explain around 30% of variation in the overall patient satisfaction (R-sq is 0.294), which is quite satisfactory as the only single predictor in the analysis. Also, no conclusive evidence could be obtained that could establish the role of demographic groups under study as moderating variables influencing the relationships.

V. CONCLUSION

The objective of the study was to analyse the role of gender and age groups of the patients as moderating variables influencing the relationship between patient communication and patient satisfaction. Though some sporadic evidences came up in support of role of gender and age groups of the patients as moderating variables influencing the relationship between patient communication and patient satisfaction through the scatter plots and correlation matrix, however the final multiple regression analysis furnished the evidence of patient satisfaction at the patient rights level as the only predictor towards overall patient satisfaction. The result is in sync with one of the previous analysis performed by Prakash B. (2010), where the researcher stated “Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centred delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals”.

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