

A Relationship among Health Literacy and Patient Satisfaction

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Abstract

The study mainly focuses to evaluate the impact on patient satisfaction due to inadequate health literacy (HL) level. To evaluate the relationship between insufficient HL level and patient satisfaction in the selected individuals is the main purpose of this research. Moreover, we study to detect the common factors on which the HL (health literacy) depends. Quantitative research method was used in this research. As the population frame is wide and infinite and it include all the patients of Pakistan. The sample size was determine by the method describe by Schumacher (2004), i.e. 20 per construct. Therefore, survey was conducted from total 100 patients in four different hospitals of Karachi through convenience sampling method analyzed on SPSS software 15.0. The outcome of Pearson correlation was as high as (R= 0.579) of Communication and as low as (R=0.051) of Education Level. Similarly, the rest of the correlation values are lesser than 0.90 and greater than 0.30 indicating that the constructs are unique and shows that health literacy has significant impact on patient's satisfaction. This will help healthcare provider to understand the need of patients and how to increase their level of satisfaction.

Keywords: Patient's Satisfaction, Health Literacy, Health Information, Level of Education, Disease Knowledge, Communication, Shared Decision Making, Healthcare.

Introduction

Despite the fact that hand hygiene was recognised as important as early as the 1840s by Dr. Patients are the most important consideration of the healthcare industry. Whenever there is an expertise of doctors or hospital measure, it measures with the perspective of their patients; either they are satisfied or not. That is why the healthcare providers always focus on the patients and work on the increment of the satisfaction of their patient. Hence, the accomplishment of the services directly depends on the level of health literacy (HL) among patients. Similarly, the quality of services the patients acquire or the doctors provide has been related to patient satisfaction, and it relies on their compliance with treatment, recommendations, recall of information and health status [1].

The establishment of health care services and hospital performance depend on the patient satisfaction in a way that patients are the consumers of health care and it is important for the physicians to satisfy them [2]. The basic health-related tasks like communication with the physician, ability to translate symptoms, instruction related to prescription, dosage usage, knowledge about the disease, requirement of the diagnostic test, understanding and interpreting test reports, and understanding the significance and risks of the treatment become

a problem for the patients who have adequate HL [3]. The information and knowledge about health make the patient understandable about the disease and also make them able to make healthcare decisions for themselves. This is due to the fact that numerous researchers establish a conclusion that a deficiency of health literacy rate in large parts of the world contributing to unwanted consequences such as an inadequate compliance to medication, unsatisfactory self-management skills and more regular hospitalizations and emergency care consumption [4].

Today, the healthcare is in its transformative stage where the expectation of patients becomes increasingly more from the doctors and nurses as they are considered and treated as consumers. If the patient is uneducated or its literacy level is low it will affect their satisfaction; which will destructively affect the performance of hospital [5]. Health literacy doesn't only impact the patient personally but also show the impact on the whole healthcare system like preventive measures, recommendations that physicians provide and also the utilization of resources by inpatient (IP) through admission and medical expenditures among them [6]. Several studies indicate that most frequent patient is those that have low health literacy [7]. The patient education analysis and the HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) measures discover potential influences on patient satisfaction by patient education [5].

Material and Method

In our research, the data was collected through survey questionnaires so the questionnaire is created by closed ended questions that are based on research objective. Data has been collected from four Health-care sectors (Hospitals) of Karachi. Questionnaire consisted of two main parts aimed at capturing information on different parts related to our variables. The first part related to demographics including (gender, age, and highest educational qualification). The Second section used for health literacy that further divided into health information, disease knowledge, communication and shared-decision making. Data was analyzed through SPSS 15.0 version. The research first shown analysis providing descriptive statistics, including frequencies to study variables. This was followed by testing simple associations between variables by using correlation analysis.

Results

Table: 1. shows the frequency of respondents according to their gender, described in numbers along with percent 47% respondents are males, while remaining 53% respondents are females.

Table: 1. Frequency of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	47	47.0	47.0	47.0
Female	53	53.0	53.0	100
Total	100	100.0	100.0	

The age group of patients also influences patient's health literacy. In order to derive the result related to the particular age group of people, our questionnaire has a question about the age group of individuals, according to the Table: 2, 12% respondents belonging to the age group below 20 years. The highest frequency of respondent who participate are belonging to age group of 21 – 25 years, their frequency is 50%. While 22% are belonging to age 26 – 30, 9% are from 31 to 35, and remaining 7% respondents are of years more than 35 years.

Table: 2. Age of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Below 20	12	12.0	12.0	12.0
21 – 25	50	50.0	50.0	62.0
26 - 30	22	22.0	22.0	84.0
31 - 35	9	9.0	9.0	93.0
35 above	7	7.0	7.0	100.0
Total	100	100.0	100.0	

For measuring about the highest level of education our respondents have, we ask a question what is your highest educational qualification? Moreover, all (100) respondent answer this question. According to the given statistics, only 1% (that means only 1) respondents are educated below matriculation, 5% having matriculation as their highest educational level, 35% respondents are intermediate passed, 43% individuals are graduated and remaining 16% are Masters level educated. The highest degree they get can also relate to their satisfaction (Table: 3).

Table: 3. Educational Qualification of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Below Matriculation	1	1.0	1.0	1.0
Matriculation	5	5.0	5.0	6.0
Intermediate	35	35.0	35.0	41.0
Graduated	43	43.0	43.0	84.0
Masters	16	16.0	16.0	100.0
Total	100	100.0	100.0	

The responses given by the patients to the predefined variables are consistent and reliable. The association and reliability between these variables are good. The highest Reliability is $\alpha=0.811$ that is level of education and the lowest one has $\alpha=0.364$ that is health information. Since the overall value of Cronbach's alpha is higher than 0.70 therefore, it can be safely

assuming that the construct used in this study have good level of internal consistency (Table: 4).

Table: 4, that shows the means and standard deviation of all variables in which Level of education (M=3.680, SD = 0.839), Health Information (M= 20.7695, SD= 0.2.685), Disease Knowledge (M= 22.53, SD= 2.990), Communication (M=25.26, SD=2.500), Shared Decision Making (M= 18.05, SD= 2.750) and Patient's Satisfaction (M=31.07, SD=4.310).

Table: 4. Reliability Analysis

	Cronbach Alpha	Std. Cronbach Alpha	Mean	Std. Deviation
Level of Education	0.811	0.822	3.680	0.839
Health Information	0.364	0.822	20.76	2.685
Disease Knowledge	0.605	0.822	22.53	2.990
Communication	0.681	0.822	25.26	2.500
Shared-Decision Making	0.589	0.822	18.05	2.750
Patient's Satisfaction	0.698	0.822	31.07	4.310

The results of correlation tabulation show that there is a significant positive correlation between Patient's Satisfaction and Disease Knowledge and Communication (i.e. 0.478, 0.579) as well as with Shared Decision Making (i.e. 0.314). While Health Information and Education Level have weak relationship with Patient's Satisfaction i.e. 0.051 and 0.128 respectively (Table: 5).

Table: 5. shows that that the Pearson correlation was as high as (R= 0.579) of Communication and as low as (R=0.051) of Education Level. Similarly, the rest of the correlation values are lesser than 0.90 and greater than 0.30 indicating that the constructs are unique.

Table: 5. Correlation Analysis

Construct	Pearson Correlation (R)	Sig. (1-tailed)	N
Level of Education	0.051	0.307	100
Health Information	0.128	0.102	100
Disease Knowledge	0.478(**)	0.000	100
Communication	0.579(**)	0.000	100

Shared Decision Making	0.314(**)	0.001	100
**. Correlation is significant at the 0.01 level (1-tailed).			
*. Correlation is significant at the 0.05 level (1-tailed).			

Discussion

The objective of the study was to find out the Patient's Satisfaction linked with health literacy, by focusing on the level of education, health information, disease knowledge, communication and shared-decision making.

There are several studies that focus on Patient's satisfaction and the aim of every study is to find out the possible factors on which the satisfaction depends on. The health outcome of patients and the performance of health care institutes are focuses patients satisfaction because it can gives both monitory and non-monitory benefits to them. Positive word of mouth and higher can only be possible when the patients are satisfied [8]. Therefore, it is important to consider all the factors that satisfy the patients.

Educational level and accomplishment have a significant relationship with satisfaction [9]. Several studies show that the patients who have highest level of education has lower level of satisfaction as they know about more about the disease and health knowledge and expect more from doctors. While those who have low literacy rate or low level of education can satisfy more and get higher score in satisfaction [10]. Moreover, the satisfaction of patients is not only related to the health information but also the service provider and the mechanism at which the service is being provided. Both perceived and objective disease knowledge are important while considering patient satisfaction. The combine impact of both have a great importance in patient behavior, their way of understanding, their health-related activities and on patient outcomes [8].

From Correlation Analysis, according to the above statistical data, of 5 factors only communication and disease knowledge has relates to patient's satisfaction. Disease Knowledge and Communication have significant impact on Patient's satisfaction. If we talk about Level of education, Health Information and Shared decision making, then the result shows that they have the positive impact on patient's satisfaction but their relationship is week. According to the result, patients are more satisfied if they have disease knowledge and can communicate well. On the contrary, Patient's satisfaction does not get affected if patients have higher education, health information and decision making power.

Conclusion

From the result obtained from the sample of 100 respondents, health literacy is linked with patient's satisfaction. As the variable communication and disease knowledge have impact on patient's satisfaction but the relationship between variables health information, education level and shared decision knowledge and patient's satisfaction is week.

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