



Research Article

To evaluate the effect of doctors' communication on patients' overall health recovery outcomes.

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Abstract:

Communication is the essential means of transferring information from one location to another. In the realm of healthcare, effective communication holds utmost importance, particularly when it concerns a person's well-being. Health communication involves the interaction between a patient and a healthcare professional. Patients desire to express their thoughts and feelings regarding their health, encompassing both physical and mental aspects. In this context, a doctor's communication skills play a vital role in comprehending the needs and demands of patients, ultimately contributing to their overall health improvement. This research primarily focuses on examining the impact of a doctor's communication and relationship on a patient's overall recovery. The study encompasses 424 patients in public & private hospitals located in Dehradun. To gather data, a questionnaire-based approach has been employed. This research is classified as an explanatory study and adopts a quantitative methodology. The survey results will assist public hospital managers in comprehending the significance of communication and maintaining relationships with patients. Furthermore, these findings will aid in formulating effective strategies to promote factors that contribute to the overall healthcare recovery of patients.

Keywords: Health communication, doctor -patient relationship, patient recovery

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Review of literature:

Benedetti F (2013) talks about communication in his research that how an effective communication between doctors & patients plays a crucial role in influencing patient outcomes by enabling patients to participate in well-informed decision-making, ultimately enhancing their compliance with treatment. By fostering transparent dialogue on a patient's socioeconomic background and lifestyle choices, physicians can gain a deeper insight into the patient's medical background, prescribed medications and concerns related to specific treatments. Van Zanten (2007) also states that effective communication by doctors enables doctor's to gather necessary information, offer

suitable advice to patients, provide therapeutic guidance, and establish compassionate relationships with patients.

In the research done by Duffy,(2004) it has been found that developing a reliable rapport by physicians enables to offer suitable guidance and suggest treatment alternatives that are most suitable for patients. In addition (Street RL Jr 2007) adds that Patients who inquire, articulate their worries, and communicate their preferences are more inclined to establish a productive rapport with their doctor. Hence (Haidet, 2006) to include communication training in the medical education of physicians to ensure they possess the essential skills required for enhancing the overall patient experience.

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Arora ,(2003) additionally has also discovered that effective doctor-patient communication possesses the ability to effectively manage a patient's emotions and facilitate the exchange of medical information. This improved communication allows for a better understanding of the patient's needs, perceptions, and expectations. Patients who maintain a strong rapport with their doctors tend to express higher levels of satisfaction with the care and treatment they receive. Wang .J (2008) also discovered that the bond between a doctor and a patient can be classified as a consumer relationship. Furthermore, the competition among patients is influenced by the consumer-doctor dynamic.

Leisen B (2004) found in his research that an interaction between physician and patient is depicted as a dialogue that goes both ways. This involves the exchange of social and economic factors that result in lasting relationships and mutual reliance. In the study conducted by Kleeburg, (2008) It has been discovered that the level of satisfaction a patient feels towards their doctor is a direct indicator of the doctor's proficiency and effectiveness in delivering healthcare services. Further more Di Matteo MR (1998) noted in research that sometimes patients refrained from expressing their need for explanations and details due to the negative attitude of the physician and the dynamics of the doctor-patient communication.

Kaplan SH, (1989) while conducting his study, noted that effective communication between doctors and patients is a crucial aspect of healthcare delivery. This emphasizes the significant role and authority that doctors hold in the medical field. Hippocrates, the ancient Greek physician, suggested that doctors can positively impact their patients' well-being through the means of encouragement, motivation, and support, all of which can be achieved through effective doctor-patient communication.

Gordon GH (1995) The connection between physicians and their patients has been a topic of interest in various fields such as philosophy, sociology, and literature since the time of Hippocrates. It has been extensively studied and discussed in the modern medical literature, with over 8,000 articles, monographs, chapters, and books dedicated to this subject. Developing a strong understanding of the doctor-patient

encounter and relationship can greatly assist in making informed decisions regarding healthcare plans.

Lipkin M Jr(1995) talks about doctor-patient relationship and how it is fundamental to healthcare, serving as the platform for collecting data, formulating diagnoses and treatment plans, ensuring adherence, and delivering support for healing, patient engagement, and well-being. In addition Skea Z (2004) mentions that a strong doctor-patient relationship has the potential to enhance job satisfaction and foster patients' drive, confidence, and positive perspective towards their well-being, all of which can influence their overall health results. Lazare A (1995) Mentions that there are three primary functions in doctor-patient relationship include collecting data, establishing and sustaining a therapeutic bond, and conveying information.

Kaplan SH (1989) mentions that the quality and comprehensiveness of information obtained and understood are directly influenced by the relationship. This relationship plays a crucial role in ensuring practitioner and patient satisfaction, which in turn contributes to the maintenance of effective practice and prevents practitioner burnout and turnover. Gerteis M (1993) also talks about the doctor-patient relationship can be influenced by various organizational or system factors. These factors include the accessibility and courtesy of administrative and clinical personnel, which can make patients feel valued and respected. Additionally, reasonable waiting times and attention to personal comfort contribute to this perception. In conclusion to this Wang Y (2022) found that the doctor-patient bond is essential for providing medical treatment and plays a extremely important part in the healthcare system.

Research Methodology:

The research tool of the study, has been drafted with reference to related literature. The published scales questions are used which includes 2 dimensions, i.e. doctor's communication and patient recovery. The 5 point likert scale from Strongly disagree/ disagree/strongly disagree/ disagree/not sure/agree/ strongly agree questionnaire for the data collection. The higher the score is, the better the patient's over all recovery.

The demographic information includes gender, age etc are also collected for reference.

Collected data were analyzed by using statistical tools such as Mean, standard deviation, Regression, Correlation and ANOVA to analyze the impact of Communication on Recovery

S. No.	Content	Data
1	Data type	Primary data
2	Samples	Public hospitals & Private Hospital
3	Sample Size	424
4	Research Tool used	Questionnaire (5 point Likert scale)
5	Research Type	Analytical and descriptive research
6	Method of Data Collection	Survey
7	Area of Research	Dehradun
8	Statistical Technique	Mean, Standard deviation, Regression, Correlation.

Objective:

To evaluate the effect of doctors' communication on patients' overall health recovery outcomes.

Hypothesis:

H0: There is no significant effect of doctors' communication skills on patients' recovery outcomes.

H1: There is a significant effect of doctors' communication skills on patients' recovery outcomes.

Analysis and Interpretation:

Questionnaire

	Mean	Std. Deviation	N
Did the doctor listen to you carefully during the consultation?	3.95	.841	424
Did the doctor allow you to talk without interrupting you?	3.85	.772	424
Was it easy to understand what the doctor said?	3.96	.680	424
Did the doctor examine you thoroughly?	3.92	.717	424
Did the doctor encourage you to express yourself / talk?	3.94	.732	424
Do you feel you were given all the necessary information?	3.83	.721	424
Did the doctor explain the advantages and disadvantages of the treatment or care strategy?	3.90	.767	424
Did the doctor involve you in the decision-making?	3.79	.812	424
I started observing relief in my condition after visiting my doctor .	3.87	.830	424
I feel energetic and active after treatment.	3.83	.866	424
I could get back to the daily activities very soon.	3.92	.800	424
I feel fit not just physically but mentally too.	3.95	.824	424
I see myself engaging more in social activities after treatment.	3.81	.849	424
I experienced no additional health problems (laziness, drowsiness, hypersomnia /insomnia, vomiting etc) as a result of my treatment.	3.97	.840	424
I feel satisfied with my treatment by my doctor.	3.97	.806	424
I feel that my doctor was very much competent in treating me.	3.88	.826	424
I feel that I received the best possible care from my doctor.	3.98	.775	424
I am completely satisfied with the treatment I have received from my doctor.	3.91	.803	424

Demographic data:

Table 1 presents the frequency distribution of the demographic variables (gender, age, hospital type, department of hospital) of

research sample (n=424) of patients in private hospital and public hospital Dehradun. The sample size was sufficient to meet the need of the survey.

Table 1

		Number of Participants	%
Department of Hospital	IPD(On the basis of admission)	99	23.3%
	OPD(Day care/consultation)	325	76.7%
Hospital Type	PUBLIC HOSPITAL/GOVERNMENT HOSPITAL	196	46.2%
	PRIVATE HOSPITAL	228	53.8%
Gender	FEMALE	181	42.7%
	MALE	237	55.9%
	OTHERS	6	1.4%
Age	21-30	179	42.2%
	31-40	115	27.1%
	41-50	59	13.9%
	51-60	71	16.7%

Reliability Scale:

Variables	Cronbach's Alpha	No. of Items
Communication	.947	8
Recovery	.959	10

- ❖ Cronbach's Alpha of 0.947 indicates a high level of internal consistency reliability among the 8 items that measure the Communication variable. Cronbach's Alpha of 0.959 indicates a very high level of internal consistency reliability among the 10 items that measure the Recovery variable.

Both variables (Communication and Recovery) have Cronbach's Alpha coefficients well above the commonly accepted threshold of 0.70, indicating excellent internal consistency reliability.

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Descriptive Statistics:

Variable	Mean	Std. Deviation	N
Recovery (Dependent variable)	3.7781	0.74932	424
Communication (Independent variable)	3.7759	0.73396	424

- ❖ The sample size is 424 for both variables
- ❖ Mean: The average score for RECOVERY is 3.7781, and for COMMUNICATION, it is 3.7759.
- ❖ Standard Deviation: The spread of the scores around the mean is 0.74932 for RECOVERY and 0.73396 for COMMUNICATION.

Correlations:

	RECOVERY	COMMUNICATION
Recovery (Dependent variable)	1.000	0.764
Communication (Independent variable)	0.764	1.000

- ❖ The value of correlation ranges from -1 to +1. Where -1 denotes negative correlation and +1 denotes perfect positive correlation.
- ❖ According to above mentioned data there is a strong positive correlation (0.764) between communication and recovery.

ANOVA:

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	138.718	1	138.718	592.569	0.000
Residual	98.788	422	0.234		
Total	237.506	423			

- ❖ P value must be less 0.05
- ❖ F-value: The F-value of 592.569 indicates that the regression model is statistically significant.
- ❖ Significance : The p-value of 0.000 shows the model's significance.

Coefficients:

Model	Unstandardized Coefficients	Standardized Coefficients
	B	Std. Error
CONSTANT	0.832	0.123
COMMUNICATION	0.780	0.032

- ❖ The intercept value is 0.832, indicating the expected value of RECOVERY when COMMUNICATION is zero.
- ❖ The coefficient for COMMUNICATION is 0.780, showing that each unit increase in COMMUNICATION results in a 0.780 unit increase in RECOVERY.

Residuals Statistics:

Statistic	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6122	4.7331	3.7781	0.57266	424
Residual	-1.75288	1.82735	0.00000	0.48326	424
Std. Predicted Value	-3.782	1.668	0.000	1.000	424
Std. Residual	-3.623	3.777	0.000	0.999	424

- ❖ The predicted values for RECOVERY range from 1.6122 to 4.7331, with a mean of 3.7781.
- ❖ The residuals (differences between observed and predicted values) range from -1.75288 to 1.82735, with a mean of 0.

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Total Variance Explained:

Total Variance Explained							
	Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Raw	1	8.787	64.667	64.667	8.787	64.667	64.667
	2	1.217	8.953	73.620	1.217	8.953	73.620
	3	.489	3.597	77.217			
	4	.433	3.183	80.400			
	5	.313	2.304	82.704			
	6	.292	2.152	84.857			
	7	.282	2.075	86.931			
	8	.249	1.836	88.767			
	9	.216	1.591	90.358			
	10	.204	1.500	91.858			
	11	.179	1.315	93.173			
	12	.171	1.257	94.430			
	13	.155	1.139	95.569			
	14	.147	1.085	96.654			
	15	.136	1.004	97.658			
	16	.122	.898	98.556			
	17	.115	.844	99.400			
	18	.082	.600	100.000			
Rescaled	1	8.787	64.667	64.667	11.638	64.656	64.656
	2	1.217	8.953	73.620	1.617	8.985	73.641
	3	.489	3.597	77.217			
	4	.433	3.183	80.400			
	5	.313	2.304	82.704			
	6	.292	2.152	84.857			
	7	.282	2.075	86.931			
	8	.249	1.836	88.767			
	9	.216	1.591	90.358			
	10	.204	1.500	91.858			
	11	.179	1.315	93.173			
	12	.171	1.257	94.430			
	13	.155	1.139	95.569			
	14	.147	1.085	96.654			
	15	.136	1.004	97.658			
	16	.122	.898	98.556			
	17	.115	.844	99.400			
	18	.082	.600	100.000			

Result:

Hypothesis	Regression Weights	Beta Coefficient	R2	F	p-value	Hypothesis Supported
H1	Communication-Recovery	0.780	0.584	592.569	0.000	Yes

Note *p<0.05.

- ❖ There is a strong positive correlation between COMMUNICATION and RECOVERY.
- ❖ The regression model explains 58.4% of the variability in RECOVERY, indicating a good fit.
- ❖ The relationship between COMMUNICATION and RECOVERY is statistically significant.
- ❖ Improving COMMUNICATION is likely to result in better RECOVERY outcomes for patients, as indicated by the significant positive coefficient.
- ❖ The coefficient for COMMUNICATION is 0.780, showing that each unit increase in COMMUNICATION results in a 0.780 unit increase in RECOVERY.
- ❖ F-value: The F-value of 592.569 indicates that the regression model is statistically significant.

Conclusion:

The purpose of this research was to see the impact of doctor's communication on over all recovery of patient. The result shows co relation between all the variables. The results revealed that doctor's communication has a significant positive effect on recovery of the patient. The correlation analysis reveals a statistically significant and meaningful relationship between communication and recovery. This underscores the importance of effective communication in fostering better recovery outcomes across different settings. Further research could delve

into specific aspects of communication (e.g., clarity, empathy, patient-provider interaction styles) to better understand how they influence recovery processes. The theoretical and practical implications of the research can be applied in a variety of ways to improve existing theories and contribute to solutions in the developing better approach in health care delivery . Healthcare providers and practitioners may consider focusing on enhancing communication strategies to potentially improve patient outcomes and recovery. Communication training and interventions could be implemented to ensure clearer

information dissemination, better patient understanding, and increased adherence to treatment plans

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