

# INFORMATION SHARING AMONG MEDICAL AND NON- MEDICAL EMPLOYEES WORKING IN PRIVATE HOSPITALS AND HEALTH CARE UNITS

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## ABSTRACT:

In this Presentsituation, information sharing in hospitals are significantly supports theirstabs to advancetreatment quality, keep patients, advance people health and decreaseexpenses. Hence, these days many hospitals have made improvement in information sharing among various departments working inside the hospital as well as with other health care partners, patients and public agencies to make certain high class medical services through their investments in Health IT and electronic health records (EHRs). Information sharing helps the staff to enhance their learning ability and also helps the hospitals in retaining the knowledge and their potential workers. Hence this research study was doneby the researchers with an objective to study and analyze the information sharing practices among the employees working in various private hospitals and health care units located in Trichy District, Tamilnadu. The survey was conducted using a structured self -prepared questionnairewith five scale rating and the data was collected from 200 respondents belonging to various private hospitals and health care units. The analysis was done using various statistical tools and the results, findings and implications were discussed in the paper.

**Keywords:** Knowledge sharing behavior, knowledge retention, culture, social learning, etc.

## 1. INTRODUCTION

In the present competitive world the observable fact of Information sharing is vital to an organization's competitiveness and it requires a free flow of information among members to stay competitive. Many organizations believe knowledge as the key resource to identify their competitiveness in their particular industries. In industrialized nations mostlyduring1990s, knowledge management began by considering knowledge as the important assets of organization. In recent times, it has been

adopted as the key management practice or policy inside certain companies (Rigby D.K. 2011). Knowledge management is the process of which an organization gathers, organizes, shares and analyses its knowledge or attaining intellectual and social capital. This will lead to identifying core competencies and increasing levels of organizational outcome unique to the organization. In particular, hospital organizations realize that knowledge management can easily help them to utilize their current competencies or build up new and innovative ideas, services, products, processes, and solutions. However, the recent advancements in medical technology and the growth in market had intensified the competition among the health care organizations both in national and international markets.

Dalkir (2011). In uncertainty and rapid changes in the environment it helps to create innovation. Therefore, innovation is very much needed for the organizations today to ensure their survival and growth in the long run. Tidd J. (2001) Organizations that differentiate their processes, products and services have been shown regularly to outperform their competitors in terms of profitability, market share, and growth. Hence the health care units need to ensure the same by enriching their employees in terms of skills and knowledge. The health care units are in a position to promote the knowledge sharing culture which is possible only through proper information sharing process. Connelly C.E., Kelloway E.K. (2003) Hospital organizations can encourage information sharing culture, not only for improving strategies in business and incorporating knowledge in their business, but also by changes in employee's attitudes and behavior. By implementing any software in organization for arranging more social events thereby they can share their knowledge to other employees.

Hospitals and health care units consist of professional groups such as, nurses, medical specialists, clinical technicians, and administrative staff who have differing roles and responsibilities and their skills in ensuring better performance. Therefore, the different departments need to obtain the latest knowledge and technology to motivate their employees to ensure their efficiency. Moreover, unlike other organizations, hospitals and health care units are the most multifaceted organizations since they have a lot of knowledge, skills and information they face complex in decision-making processes and communication between the networks. This causes hospital units to require the accurate and long-term sharing of technology, information and knowledge. This research study has been done by the researchers with an objective to study and analyze the information sharing practices among the employees working in various private hospitals and health care units located in Trichy District, Tamilnadu.

## **2. LITERATURE REVIEW**

This research has analysed the practices of knowledge sharing among hospital and health care professionals. Hence the literature belonging to other sectors have been considered for initiating the study.

Savolainen (2006) conceived of information use as a following process of knowledge seeking in which the usefulness of an information source is valuable in order to solve a crisis or make sense of a situation. People's use of information is based on their acknowledgement that is absorbed to solve a problem.

The organizational climate and culture that affects the work Practices to a huge extent and we know that e.g. the information culture in an organization that affects people's attitudes in sharing the information and how we considered as information is valued as a resource (Ginman,1988;Järvenpää and Staples, 2000; WidénWulff, 2005; Choo, 2006; Choo,2013)

Michael A. Beitler, Lars W. Mitlacher, (2007). Employees in organization with high self-directed learning readiness (SDLR) scores can help them to support and promote workplace learning as they share information more freely.

Information sharing is about sharing available information, that represent both explicit and implicit information exchanges" (Talja, 2006, p. 114). Information sharing is considered to be a typical phenomenon with various dimensions and differs from one context to another context (Wilson, 2010).

Sonnenwald, (2006). Information sharing has a goal of varying a personnel image of the world and developing a shared working understanding. Major challenges faced in sharing information effectively in authority and control. Barriers to successful information sharing were identified, including identifying differences in the meanings of shared symbols, implications and predicting the emotions used in sharing critical information.

### **3. OBJECTIVES**

This research study has been performed with the following Objectives:

1. To Analyse the process of information sharing among the employees
2. Identify and evaluate various factors that affect information sharing among the employees

### **4. METHODOLOGY**

The study is empirical in nature. The study was done among the employees and to predict the various factors that affects information sharing among the employees working in the private hospitals and health care units located in Trichy City, Tamilnadu. Since variables are not directly observable, a self - prepared structured questionnaire with five scale ratings was used to measure perception of respondents. The secondary

data was collected mainly from the various sources like journals, magazines, website, books, articles etc.

#### 4.1 Respondents

In this research the respondents were the employees working in private hospitals and health care units located in Trichy City, Tamilnadu. The purpose of the study was informed to the respondents in advance. The researcher has assured that, the data from the respondents would be kept confidential and only the statistical inferences would be published without mentioning the organization's name. Out of 110 questionnaires distributed among the respondents, 96 questionnaire were completely filled by employees working in health care units and it was used for further analysis.

**Table 4.1: Demographic Distribution of Respondents** (figures in %)

Nature of work	Medical 45.8%		Non – Medical 54.2%	
Designation	Worker level 45.8%	Nurse 27.1%	Supervisory Level 20.8%	Middle management level 6.2%
Age	Below 25 Years 51%	26 to 30 Years 30.2%	31 to 40 Years 15.6 %	41 to 50 Years 3.1%
Marital status	Married 42.7%	Unmarried 54.2%	Others 3.2%	
Salary	Below 10,000 Rs 72.9%	Rs 10,001 to 20,000 15.6%	Rs 20,001 to 40,000 5.2%	Above Rs. 40,000 6.2%
Education	Diploma 29.2%	PG 14.6%	UG 44.8%	School Level 11.5%
Gender	Male 28%		Female 72%	

## 4.2 Analysis of data

In this analysis statistical package SPSS 19.0. were used. Analysis tool such as Descriptive statistics, Factor analysis and reliability estimates were used for the findings.

**4.3 Reliability estimates for the measurement** The **Cronbach alpha** was used to calculate the internal reliability of the variables.

## 5. FINDINGS

### 5.1 Descriptive Statistics

5 Scale rating questionnaire were given to respondents to analyse the strength of variables in information sharing among the employees. Respondents were asked to give rating between 1 (lowest) and 5 (highest). Variable 'Information about training and development activities organized in the hospitals is shared' secured rank-1 with the highest mean score and the variable 'Information related to various functions is communicated without any barriers' secured the last rank with the lowest mean score.

**Table-5.1 Descriptive Statistics**

Variable	Variables	Mean	Std. Deviation	Rank
1	Receive proper Information about patients	4.0312	.81374	8
2	Feedback from the customers are collected and shared with the responsible person	4.0104	.73262	9
3	The strategies adopted by Competitors is shared among the employees	3.8958	.78779	14
4	Future plans regarding development of the hospital is shared among the employees	4.0104	.73262	9
5	Senior management decisions are shared using proper channel	4.0000	.83351	11
6	Do the updating technologies are properly shared by the colleagues and superiors	4.0000	.85840	11
7	Aware of the various processes and procedures going on in other departments	4.1146	.69388	3
8	Information about new initiatives in the health care is provided on time	4.1042	.80104	4
9	Information about training and development activities organized in the hospitals is shared	4.1979	.80289	1
10	Team and individual successes is shared among the employees at the right forums.	3.9062	.85935	13
11	Information related to various functions is communicated without any barriers	3.8750	.79802	15
12	Properly receive and review the Information shared with me	4.0625	.69301	6
13	Knowledge is exchanged quickly on time using suitable technology	4.0833	.67538	5
14	Supervisor openly shares knowledge with me	4.0417	.83246	7
15	Encouraged to openly share my knowledge with others	4.1562	.79905	2

## 5.2 Factor Analysis

In this factor analysis to identify few coherent factors, an exploratory factor analysis using principal component analysis with Varimax rotation was carried out by using SPSS Version 19.0. The questionnaire was not clearly hypothesized.

### 5.2.1 Preliminary Analysis

It shows an abridged version of R- matrix. The half of this table contains the Pearson correlation coefficient. Remaining half contains the one tailed significance of these coefficients. To check the pattern of relationships R-matrix can be used. Determinant value of the matrix for this data 0.01 is greater than the value of 0.00001, multicollinearity is not a problem for these data. Since all the SAQ correlate well and there is no need to eliminate any questions at this stage.

This table- 5.2.1 shows the Kaiser-Meyer-Olkin(KMO) it is useful for measure of sampling adequacy and Bartlett's test for sphericity. The value greater than 0.5 as acceptable. Here the value is 0.694, so that factor analysis could be appropriate for these data. Bartlett's test for sphericity is ( $p < 0$ ), and therefore factor analysis is used for these data.

**TableNo – 5.2.1 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.694
Bartlett's Test of Sphericity	Approx. Chi-Square	922.963
	df	105
	Sig.	.000
a. Based on correlations		

### 5.2.3 Factor Extraction

The table-5.2.2 shows the Eigen values connected with each linear component before extraction, after extraction and after rotation. Before extraction, 16 linear components are in the data set. The components having Eigen values  $> 1$  are selected and hence the first five factors which the value  $> 1$  receive more amount of variance. i.e 77.830%. Five factors are equalized after rotation .Before rotation, factor 1 is accounted for 36.975% compared to 13.894, 10.679, 8.798, and 7.483%), however after extraction it accounts only for 21.057% of variance which is compared to 16.963, 13.531, 13.354, and 12.925% respectively).

**Table No. – 5.2.2 Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.518	38.249	38.249	5.546	36.975	36.975	3.159	21.057	21.057
2	1.292	14.050	52.300	2.084	13.894	50.869	2.544	16.963	38.020
3	.899	9.769	62.069	1.602	10.679	61.548	2.030	13.531	51.550
4	.783	8.516	70.584	1.320	8.798	70.347	2.003	13.354	64.905
5	.686	7.460	78.045	1.122	7.483	77.830	1.939	12.925	77.830
6	.562	6.107	84.152						
7	.338	3.676	87.828						
8	.311	3.382	91.210						
9	.203	2.203	93.413						
10	.154	1.674	95.087						
11	.132	1.433	96.520						
12	.107	1.160	97.680						
13	.096	1.046	98.726						
14	.074	.801	99.527						
15	.044	.473	100.000						

**Extraction Method: Principal Component Analysis**

The communalities before and after extraction shows in the Table-5.2.3. In Principal component analysis all variance is common on the initial assumption and all communalities before extraction are 1. The component matrix before rotation shows in the Table 5.2.4. The 5 factors are extracted at this stage and above 0.4 loadings are displayed alone. 0.7782 is the average communalities and most of the values exceed 0.7. After extraction communalities are more than 0.7, then criterion can be accurate and we can proceed for the further analysis.

**Table No. 5.2.3 Communalities**

<b>Variable No.</b>	<b>Variables</b>	<b>Initial</b>	<b>Extraction</b>
1	Receive proper Information about patients	1.000	.832
2	Feedback from the customers are collected and shared with the responsible person	1.000	.867
3	The strategies adopted by Competitors is shared among the employees	1.000	.579
4	Future plans regarding development of the hospital is shared among the employees	1.000	.782
5	Senior management decisions are shared using proper channel	1.000	.829
6	Do the updating technologies are properly shared by the colleagues and superiors	1.000	.892
7	Aware of the various processes and procedures going on in other departments	1.000	.772
8	Information about new initiatives in the health care is provided on time	1.000	.761
9	Information about training and development activities organized is shared	1.000	.655
10	Team and individual successes is shared among the employees at the right forums.	1.000	.732
11	Information related to various functions is communicated without any barriers	1.000	.697
12	Properly receive and review the Information shared with me	1.000	.708
13	Knowledge is exchanged quickly on time using suitable technology	1.000	.796
14	Supervisor openly shares knowledge with me	1.000	.902
15	Encouraged to openly share my knowledge with others	1.000	.872

**Extraction Method: Principal Component Analysis**  
**Table No- 5.2.4Component Matrix<sup>a</sup>**

Variable No.	Variables	Component				
		1	2	3	4	5
1	Receive proper Information about patients		.850			
2	Feedback from the customers are collected and shared with the responsible person	.732				
3	The strategies adopted by Competitors is shared among the employees	.440		.557		
4	Future plans regarding development of the hospital is shared among the employees			-.673		
5	Senior management decisions are shared using proper channel	.691			.461	
6	Updating technologies are properly shared by the colleagues and superiors	.834				
7	Aware of the various processes and procedures going on in other departments		.621		.469	
8	Information about new initiatives in the health care is provided on time	.823				
9	Information about training and development activities organized in the hospitals is shared	.457				.539
10	Team and individual successes is shared among the employees at the right forums.	.661				
11	Information related to various functions is communicated without any barriers	.705		-.429		
12	Properly receive and review the Information shared with me	.436			.464	
13	Knowledge is exchanged quickly on time using suitable technology	.682		.464		
14	Supervisor openly shares knowledge with me	.795				
15	Encouraged to openly share my knowledge with others	.564	.632			

**Extraction Method: Principal Component Analysis**

a 5 components extracted

## 5.2.4 Factor Rotation

In rotated component matrix, factor loadings which displays only above 0.4. When the rotated matrix is compared with un-rotated solution, five factors are load highly on one factor is identified.

**Table No- 5.2.4 Rotated Component Matrix**

Variable No.	Variables	Component				
		1	2	3	4	5
1	Receive proper Information about patients				.853	
2	Feedback from the customers are collected and shared with the responsible person		.801			
3	The strategies adopted by Competitors is shared among the employees	.419				.492
4	Future plans regarding development of the hospital is shared among the employees			.870		
5	Senior management decisions are shared using proper channel	.890				
6	Updating technologies are properly shared by the colleagues and superiors	.854				
7	Aware of the various processes and procedures going on in other departments				.807	
8	Information about new initiatives in the health care is provided on time	.509		.559		
9	Information about training and development activities organized in the hospitals is shared					.780
10	Team and individual successes is shared among the employees at the right forums.	.472		.406		.490
11	Information related to various functions is communicated without any barriers		.459	.602		
12	Properly receive and review the Information shared with me					.749
13	Knowledge is exchanged quickly on time using suitable technology	.687				
14	Supervisor openly shares knowledge with me		.811			
15	Encouraged to openly share my knowledge with others		.738		.462	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 13 iterations.

## 5.2.5 Interpretation and Implications

The last step is to identify the factor that load on to the same factor. The factor that loads highly on factor 1 is variable 10 (Information about training and development activities), factor 2 is variable 15 (Manager openly shares his knowledge with executives), factor 3 is variable 4 (information about future plans), factor 4 is variable 6 (Information about use of technology), and factor 5 is variable 13 (spending time regularly on reviewing lessons learned).

**Table-5.2.7 Factors which affect the Information sharing among Employees in Hospitals & Health Care Units**

Factor No.	Factors	Components of Factors
1	Information Governance	V-5 Senior management decisions are shared using proper channel
		V-6 Updating technologies are properly shared by the colleagues and superiors
		V-13 Knowledge is exchanged quickly on time using suitable technology
2	Relationship with superiors and colleagues	V-14 Supervisor openly shares knowledge with me
		V-2 Feedback from the customers are collected and shared with the responsible person
		V-15 Encouraged to openly share my knowledge with others
3	Collaboration and Partnership	V-4 Future plans regarding development of the hospital is shared among the employees
		V-11 Information related to various functions is communicated without any barriers
		V-8 Information about new initiatives in the health care is provided on time
4	Reciprocity	V-1 Receive proper Information about patients
		V-7 Aware of the various processes and procedures going on in other departments

5	Career Advancement Opportunities	V-9 Information about training and development activities organized in the hospitals is shared
		V-12 Properly receive and review the Information shared with me
		V-3 The strategies adopted by Competitors is shared among the employees
		V-10 Team and individual successes is shared among the employees at the right forums.

## 6. CONCLUSION

This research, helps to build and validate a scale to assess the major dimensions of informationsharing among the employees working in private hospitals and health care sectors with less number of variables, which is acceptable to Indian sample. Five Factors have evolved out of factor analysis such as Information Governance, Relationship with superiors and colleagues, Collaboration and Partnership, Reciprocity and Career Advancement Opportunities are the factors that indicates the happening and efficiency of information sharing process among the employees in health care sectors. Which can be used as a measuting tool tounderstand the process and level of information sharing in health care organizations.

## REFERENCES:

- [1] Connelly C.E., Kelloway E.K. Predictors of employees' perceptions of knowledge sharing cultures. *Leadersh Organ Dev J.* **2003**;24(5):294–301.
- [2] Dalkir K. 2nd ed. Boston: Massachusetts Institute of Technology; **2011**. Knowledge management in theory and practice.
- [3] Michael A. Beitler, Lars W. Mitlacher, **(2007)** "Information sharing, self-directed learning and its implications for workplace learning: A comparison of business student attitudes in Germany and the USA", *Journal of Workplace Learning*, Vol. 19 Issue: 8, pp.526-536
- [4] Rigby D.K. 2011. *Management tools 2011: an executives' guide*. Boston: Bain & Company.
- [5] Savolainen, R. **(2006)**. Information use as gap-bridging: The viewpoint of sense-making methodology. *Journal of the American Society for Information Science and Technology*, 57(8), 1116-1125.
- [6] Sonnenwald, D. H. **(2006)**. Challenges in Sharing Information Effectively: Examples from Command and Control. *Information Research*, 11(4).
- [7] Talja, S. **(2006)**. Information sharing. In A. Spink and C. Cole (eds), *New Directions in Human Information Behavior*, p. 113-134. Springer: Netherlands.
- [8] Tidd J. Innovation management in context: environment, organization and performance. *Int J Management Rev.* **2001**;3(3):169–183.
- [9] Wilson, T. D. **(2010)**. Information sharing: an exploration of the literature and some propositions. *Information Research*, 15(4), paper 440.