



## Assessment of Marketing Program on Total Quality Management and Organizational Commitment of Head Nurses at Zagazig University Hospitals

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### Abstract:

**Background:** Marketing is a service activity that drives hospitals' medical services to the patient. Marketing is beneficial to both hospitals and the public. For hospitals, it brings business and promotes a good image. For the public, it promotes health and well-being through free health information, and reduces waste of medical resources. **Aim:** The present study aimed to assess the effect of marketing program on total quality management practice and organizational commitment of head nurses. **Design:** A cross sectional design was used to conduct the present study. **Setting:** the study was conducted at Zagazig University hospitals. **Subjects:** All head nurses working at the previously mentioned settings at time of data collection (70). **Tools:** Two tools were used for data collection: Total Quality Management Practice Survey and Organizational Commitment Scale. **Results:** Indicated that statistical significant improvement in the levels of all dimensions of total quality management after implementation of the program. Additionally, the percentage of organizational commitment for head nurses increase after program implementation to 78.6%. **Conclusion:** Implementation of marketing training program was associated with improvement in the opinions of head nurses about total quality management practice. Also there was a statistically significant improvement in all types of organizational commitment after program implementation. **Recommendation:** The hospital should Maintaining continuous development activities for nurses to improve their attitudes, knowledge and skill about marketing practice and provide orientation program regards hospital mission and vision with a clear organizational objectives.

**Key words:** Marketing, Total Quality Management, Organizational Commitment, Head nurses.

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### 1.Introduction

Successful hospitals have one thing in common that are strongly giving attention to customer needs and heavily dedicated to marketing. These hospitals share a passion for identifying and satisfying client desires in well-defined target markets. It motivate everyone in the organization to help build lasting client relationships based on creating value. Strong client relationship with organizations and value are especially important today. It's more important than ever. To build strong customer relationships based on real and enduring value (Rao, 2021).

Marketing is a social and managerial process by which individuals and groups

obtain what they need and want through creating offerings and exchanging products of value with others. Marketing was seen as a for-profit organization structure, it has become more widely used and vital in social sector organization as well, marketing theory can be used and applied to enhance patient care, nursing and hospital. This is because marketing can be "thought of art of finding, developing, and profiting from opportunities in the time of fiscal crisis of financial and uncertainly, and it is an especially critical survival strategy (Kakeesh, 2021).

The present day international market environment is characterized by increased number of competitors and intensified

efforts at all levels and each domain. Under these circumstances quality development and its continuous advancement has developed a significant meaning (**Elsehrawy et al., 2018**). Quality has become one of the three key elements on which the creation of a successful service and the organization's reputation is based. Hospitals and other healthcare organization across the globe have been progressively implementing total quality management (TQM) to reduce costs, improve efficiency and provide high quality patient care (**Hill et al., 2020**).

TQM is a set of management practice throughout the organization geared to ensure the organization consistently meets or exceed customer requirements. Total quality management refers to the management strategy that involves all organizational functions i.e. design sales and marketing, engineering, production, finance, marketing and customer care service with the aim of satisfying customers and achieving the vision and mission of the organization. Total quality management implementation ensures that the employees and management jointly engage in the production of goods and services. The integration of quality management and quality goods and services promotes increase in the organizational opportunities and reduces chances of failure due to minimum utilization of the available resources (**Awn, 2022**).

The quality of a hospital's service is strongly associated with its human resources performance. Employees' performance will improve if they have a commitment to the organization employing them. A way to enhance this organizational commitment is by internal marketing. Internal marketing is a method to motivate, develop, and retain employees in order to achieve a quality of service and fulfill customers' expectations (**Abd-Elmageed et al., 2021**).

Organizational commitment is defined as a view of an organization's member's

psychology towards his/her attachment to the organization that he/she is working for. Organizational commitment plays a pivotal role in determining whether an employee will stay with the organization for a longer period of time and work passionately towards achieving the organization's goal. Organizational commitment plays a pivotal role in determining whether an employee will stay with the organization for a longer period of time and work passionately towards achieving the organization's goal (**Mousa and Puhakka, 2019**).

Globally, nursing leaders face challenges of shortages and high turnover rates of nurses. Organizational commitment is a predictor of turnover intention in nursing staff, and nursing managers must therefore find effective management approaches capable of influencing organizational commitment. Internal marketing is a useful management tool for this. To ensure that nurse is equipped with the necessary ability to adapt to technological and environmental change, nursing managers should provide staff with continual education and training. This could ensure that nurses have the ability to provide patients with a consistent quality of nursing care (**Gullu, et al., 2020**).

#### **Significant of the study:**

Marketing is important to improve the competitive advantage, increase the visibility, create a solid reputation among patients, understand the needs and expectations of consumers, and to understand the patients' perceptions of the quality and results of their experience within the medical organization, offering memorable experiences to patients and, of course, building a strong, effective, dominant brand on the health services market (**Kakeesh, et al., 2021**).

Use of marketing encourages nursing management to transmit the visions and goals of their hospital. It also allows nursing staff to understand the overall aims and mission. Marketing is a way to assist hospitals in improving the quality of the

services that they provide while executing highly labour-intensive tasks. Through marketing, a hospital can enhance the organizational commitment of its employees to attain higher service quality (Chasanah, et al., 2021).

### **Aim of the study:**

The aim of this study was to assess the effect of marketing program on total quality management practice and organizational commitment for head nurses at Zagazig University Hospitals through:

- 1- Assess the opinions of head nurses about total quality management practice after program implementation.
- 2- Assess the level of organizational commitment of head nurses after program implementation.

## **2. Subjects and methods**

### **Research Design:**

Cross-sectional research design

### **Setting:**

The study was conducted at Zagazig University hospitals.

### **Subjects:**

The subject was included all head nurses working at Zagazig University hospitals who available at the time of data collection (n=70).

### **Tools of data collection:**

**Tool I: Total Quality Management practice Survey:** It was developed by Lee, (2010) to assess the opinions of head nurses about total quality management practice before and after program implementation. It consisted of two parts:

**Part 1:** Personal characteristics data e.g., age, gender, marital status, educational qualification, years of experience.

**Part II:** It consists of 42 items divided into 6 dimensions namely: leadership (7 items), strategic planning (7 items), customer focus (7 items), human resource focus (7 items), process management (7 items), and information analysis (7 items).

### **Scoring system:**

Scoring system based on cut of value divided into three categories, low level of

head nurse's opinions related to total quality management practice less than 50%, moderate level of head nurse's opinions related to total quality management practice ranged from (50-75%) and high level of head nurse's opinions related to total quality management practice more than 75%.

**Tool II: The Organizational Commitment Scale:** It was developed by Tayyab (2012), to measure organizational commitment among head nurses. It consists of 24 items divided into 3 dimensions namely: affective (8 items), normative (8 items), and continuance (8 items).

### **Scoring system:**

The score of the items were summed up and the total divided by the number of the items giving a mean score for the part. These scores were converted into percent score. low level of head nurse's organizational commitment less than 60%, and high level of head nurse's organizational commitment 60% or more.

### **Validity & Reliability**

The tools of data collection were tested for their content and face validity sheet by a jury of five experts from nursing administration of the faculty of nursing at Zagazig University. Cronbach's alpha test was used to test the reliability of data collection tools through measuring their internal consistency. Total Quality Management practice Survey = 0.73; The Organizational Commitment Scale = 0.91.

### **Pilot study:**

A pilot study was carried out with 10% of the study sample (7) head nurses to test the tools feasibility, understandability and to estimate the time consumed for filling in the forms.

### **Administrative Design:**

Official permissions were obtained from the Dean of the Faculty of nursing, Zagazig University to conduct the study.

### **Ethical considerations:**

The study was approved by the ethics research committee at the Faculty of

Nursing, Zagazig University. Oral and written consent were taken from subjects and reassured them about confidentiality and anonymity of the study and their right to refuse or withdraw from the study at any time without giving any reason.

### Statistical Design:

Data entry and statistical analysis were done using Statistical Package for Social Sciences (SPSS). Suitable descriptive statistics were used. Chi-square test was used to detect the relation between the variables. Paired t-test was used to compare between mean scores; r (correlation) to correlate between studied variables. Pearson correlation analysis was used for assessment of the interrelationships among quantitative variables. P-values which were less than 0.05, 0.001 were considered as statistically significant and highly significant respectively.

### 3. Results:

**Table 1:** This table show personal characteristics of head nurses. It is clear that The study sample consisted of (70) head nurses whose age ranged between (22 – 45) years, all the study sample were

females (100%). The majority of head nurses were married (85.7%). The highest percentage of them had bachelor degree in nursing (75.7%). Their medians years of experience were 12.7.

**Table 2:** This table shows statistical significant improvement in the levels of all dimensions after implementation of the program. Before program implementation all head nurses had a low level of opinion in all dimensions and in the total score of total quality management practice, but after program implementation the highest percentage of head nurses had a high level of opinion whether in total score and in the all dimensions of total quality management practice.

**Table 3:** This table shows that less than half of head nurses were having high commitment before the program implementation, while this percentage increase after program implementation to 78.6%. The highest was the continuance type (88.6%), while the lowest was the affective one (78.6%). The post-program phase revealed statistically significant improvements in all three types. This was most evident in continuance commitment ( $p < 0.001$ ).

**Table 1: Socio-demographic characteristics of head nurses in the study sample (n=70)**

	Frequency	Percent
<b>Age:</b>		
<30	10	14.3
30-45	40	57.1
>45	20	28.6
Range	22.0-59.0	
Mean±SD	35.9±7.8	
Median	40.0	
<b>Gender:</b>		
Male	0	0.0
Female	70	100
<b>Marital status:</b>		
Married	60	85.7
Unmarried	10	14.3
<b>Educational qualification:</b>		
Nursing Diploma	12	17.1

Bachelor of nursing	53	75.7
Others(master/doctorate degree)	5	7.2
<b>Years of Experience years :</b>		
<10	9	12.9
10-15	41	58.5
>15	20	28.6
Range	2.0-39.0	
Mean±SD	12.7±8.4	
Median	12.7	

(\*) Statistically significant at  $p < 0.05$

**Table 2. Levels of head nurses' opinion about total quality management practice throughout the program phases(n=70)**

Levels of Opinion	Time				X <sup>2</sup> test	p-value
	Pre (n=100)		Post (n=100)			
	No.	%	No.	%		
<b>leadership:</b>						
High	0	0.0	50	71.4	20.58	0.001*
Moderate	0	0.0	10	14.3		
Low	70	100.0	10	14.3		
<b>Strategic planning:</b>						
High	0	0.0	53	75.7	27.91	0.001*
Moderate	0	0.0	7	10		
Low	70	100.0	10	14.3		
<b>Customer focus:</b>						
High	0	0.0	60	85.7	20.64	0.001*
Moderate	0	0.0	1	1.4		
Low	70	100.0	9	12.9		
<b>Human resource focus:</b>						
High	0	0.0	58	82.8	24.14	0.001*
Moderate	0	0.0	2	2.9		
Low	70	100.0	10	14.3		
<b>Process management:</b>						
High	0	0.0	68	97.1	28.5	0.001*
Moderate	0.0	0.0	0	0.0		
Low	70	100.0	2	2.9		
<b>Information analysis:</b>						
High	0	0	40	57.1	31.11	0.001*
Moderate	0.0	0.0	10	14.3		
Low	70	100	20	28.6		
<b>Total levels :</b>						
High	0	0.0	52	74.3	46.24	0.001*
Moderate	0	0.0	8	11.4		
Low	70	100.0	10	14.3		

(\*) Statistically significant at  $p < 0.05$

**Table 9: Organizational commitment levels as reported by head nurses throughout the program phases(n=70)**

Organizational commitment levels	Time				X <sup>2</sup> test	p-value
	Pre (n=100)		Post (n=100)			
	No.	%	No.	%		
<b>Affective:</b>						
High	20	28.6	55	78.6	18.04	0.001*
Low	50	71.4	15	21.4		
<b>Continuance:</b>						
High	10	14.3	62	88.6	20.67	0.001*
Low	60	85.7	8	11.4		
<b>Normative:</b>						
High	12	17.1	57	81.4	22.69	0.001*
Low	58	82.9	13	18.6		
<b>Total levels:</b>						
High	30	42.9	55	78.6	32.32	0.001*
Low	40	57.1	15	21.4		

(\*) Statistically significant at  $p < 0.05$

#### 4. Discussion:

Marketing was seen as a for-profit organization structure, it has become more widely used and vital in social sector organization as well, marketing theory can be used and applied to enhance patient care, nursing and hospital. Marketing is very important for healthcare facilities, as it ensures we get our services to our patient in an efficient and effective manner, allow hospital to build a learning culture that lead to improve total quality management and enhances organizational commitment among nurse managers (Daqar, 2020).

In the present study, data on the demographic characteristics of the participants were evaluated. All the studied participants were female and the majority of head nurses were married and the study sample age ranged from 25-59 years old and more of them had bachelor degree in nursing. This finding was in agreement with Elsehrawy et al., (2018) in Mansoura University, who investigate the Effect of Marketing Training Program on Total Quality Management Practice

and found that the vast majority of the study sample were women and had bachelor degree in nursing.

In addition, those results are in agreement with Ragab and Ali, (2020) who studied the Formulation of Internal Marketing Strategy to Improve Nurses' Work Engagement and founded that most of participants were females with an average age of 36.35 (SD 7.83) worked more than 20 years, the majority of them were married and held a Bachelor degree or higher.

The result of the present study clarified that low total quality management practice level in head nurses at Zagazig University hospital in pre-program. While when comparing pre-program with the post-program stage, it show an increase in the level of total quality management practice this improvement may be due to the effect of the intervention program, attendance of the program affect positively on head nurses' total quality management practice.

These result were in good agreement with El-Tohamy and Al-Raoush, (2015)

who conducted a study in Jordan titled "The impact of applying total quality management principles on the overall hospital effectiveness: An empirical study on the HCAC accredited governmental hospitals" and revealed that total quality management principles had a significant positive impact on hospital effectiveness in the HCAC accredited governmental hospital in Jordan which led to an increase in the hospital performance. These findings in disagreement with the results of **Zehira et al., (2012)** who conducted a study about total quality management Practices' Effects on Quality Performance and Innovative Performance in Turkey. They found that, all dimensions of total quality management are in acceptable level.

In this study, post program process management dimension become the highest mean score, this may be due to head nurses attending marketing program have a focus with details in the processes and procedures take place in their departments which increased from the pre-program stage to post-program phase. The previous results are consistent with **Serafinas and Stravinskiene, (2020)**, who examined the link between business process management and quality management, and found that process management are useful for organizations that implement quality management systems.

The result of the present study clarified that, there were statistical significant improvement in all types of organizational commitment after implementation of the program this could be due to marketing program is helpful in positively influencing head nurses' organizational commitment, and also due to they participate in decision making, they had more opportunities to deal with supervisor directly, they had a clear channel of communications at hospital, had more years of experiences, and they are emotionally attached to their organization.

In this respect, **Vincent, (2016)** who conducted study about commitment to social justice and its influence on job satisfaction and suggested that managers reported moderate organizational commitment to their organization. Otherwise, the previous results are consistent with **Kalogiannidis et al., (2020)** who stated that total Quality Management (TQM) and marketing greatly influence the level of organizational performance through various ways.

The present study results clarified that, affective commitment level has the lowest percentage after program implementation therefore, suggested that communication channels between the nursing managers and staff should be strengthened to clearly convey the hospital's vision and goals to frontline nurse. This result is not consistent with a study done by **Azizollah et al., (2016)** in Iran about organizational commitment in nurses, which showed that the lowest mean score pertained to the normative commitment.

## 5. Conclusion:

In the light of results of the current study, it can concluded that, there was a statistically significant improvement on head nurses opinions about total quality management practice after program implementation. Also there was a statistically significant improvement in all types of organizational commitment after program implementation.

## 6. Recommendation:

- 1-Replication of the study on a larger probability sample is highly recommended to achieve generalizable results.
- 2-Maintaining continuous development activities for nurses to improve their attitudes, knowledge and skill about marketing practice.

- 3- Provide orientation program regards hospital mission and vision with a clear organizational objectives.
- 4- Nurse manager should be aware of the staff nurses' needs for achievement and staff development to allow them to participate in workshops and continuous educational programs.

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