Developing and validating a strategic plan for total quality management in nursing

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Abstract

Background: Total quality management allows healthcare firms to discover customer needs, benchmark for best practices, and improve procedures to provide appropriate care and reduce the frequency and severity of medical errors. Create an action plan, establish an evaluation framework, identify monitoring tools, detect measures, and recognize critical performance. **The study aimed** to develop and validate a strategic plan for total quality management in nursing. *Methods:* The descriptive exploratory design was used to achieve the aim of the present study. This study was conducted at Specialized Medical Hospital (SMH MU) in Mansoura University Hospitals. purposeful sample of (n = 87) head nurses, (n = 135) from nurses, and a Jury committee (n = 30). Data was collected using one 1Questionnaire format and two opinion questionnaire sheets. *Results:* Nursing staff (head nurses & nurses) awareness related to the concept and the reasons of TQM were, 60.1180 ±9.60967and 23.4009 ±5.95584 respectively. nursing staff (head nurses & nurses) awareness related to obstacles to adopt total quality management was high (94.2297±9.97673). The perspectives of head nurses and nurses on the values of the nursing strategic plan for TQM did not differ much. While there was a statistically significant difference in the vision and mission of the nursing strategic plan for TQM between head nurses and nurses at a p-value of 0.05, (.000). In the SWOT analysis of the strategic elements, there was a statistically significant difference between nurses and head nurses at p-value (.000).No statistically significant difference related to key performance indicators. Both head nurses and staff nurses were agreed on TQM performance indicators*. Conclusion and recommendations:* The suggested strategic plan TQM in nursing should be utilized and allocate the needed and required resources for higher quality care, improved patient happiness, improved employee morale and enhanced productivity as a result of implementing the recommended plan.

Keywords: TQM, Nursing, Strategic planning, Developing, Validating.

Introduction

All types of organizations are facing challenges, In order to maintain their growth and remain competitive; they must examine their internal and external environments for opportunities and challenges. Many organizations have adopted and implemented the total quality management (TQM) strategy, which is widely acknowledged as a key determinant in the organization's success and survival. One type of the fastest growing organizations is health care organizations, which have now been restructuring the service delivery system in order to reduce the costs, to increase competitiveness and to survive **(krisanaphan, 2019)**.

Healthcare quality has become a major and pressing issue, and many hospital administrators are attempting to enhance it. The push from the government and insurance companies to enhance quality, as well as increased competition in the health market and increased awareness about patient safety, has made the health system more complicated, leading to the adoption of a hospital quality management system. **(Zare, Karimi,Mahfoozpour, &Marzban, 2019).**

Service quality is defined as the ability to achieve desired objectives by legal means, with desired aims being "the highest level of health that may be achieved."It's also defined as meeting the needs of the individuals who need the service the most, at the lowest cost to the company, while staying within the boundaries and rules set by

higher authorities and purchasers. (**Akhade, Jaju, &Lakhe, 2016**).

Customers can access service quality using the quality aspects of Tangibility, Reliability, responsiveness, assurance, and empathy are all important qualities. Tangibility can be seen in physical buildings, equipment, and the appearance of employees. Reliability is defined as the capacity to deliver on a promise consistently and precisely. Customers perceive responsiveness as a readiness to assist them and deliver fast service. Assurance is defined as the ability of an employee's knowledge and civility to inspire trust and confidence. Empathy is described as a firm's concern for and personal attention to its clients (**Raed, Abudalaziz, Kholoud& Tariq, 2017**).

Quality control, quality assurance, and comprehensive quality management are all part of the quality management process (TQM). The goal of quality control is to keep an eye on the goods and services being provided, as well as to detect and correct any problems that may occur. Quality assurance refers to the planned and systematic efforts to ensure that a service meets quality standards or meets all of the customer's quality expectations. While the underlying principle of the (TQM) concept is on assuring quality at every stage rather than the end-of-system output quality (**Bilal, 2018**).

TQM is defined as a comprehensive approach of organizational and a shift in healthcare attitudes that allows people to learn and apply quality methods, save expenses, and meet the requirements of patients and other customers. It is described as maximizing patient happiness while taking into account the earnings and losses associated with a healthcare process. (**Balasubramanian, 2016**).

According to quality experts and organizations with quality awards, leadership, employee satisfaction, leadership and management of internal stakeholders, quality improvement, emphasis on teamwork, communication for quality, resource management, supplier management, system and process management, policy and strategy are all key elements of TQM implementation (**Alqasimi, 2017**).

For continuous process improvement, TQM processes are organized into four consecutive categories: plan, do, check, and act (PDCA cycle). Educationalists define the problem to be addressed, collect relevant data, and determine the root cause of the academic problem in the planning phase; in the doing phase, educationalists develop and implement a comprehensive solution, and decide on a measurement to gauge its effectiveness and efficiency; in the doing phase, educationalists develop and implement a comprehensive solution, and decide on a measurement to gauge its effectiveness and efficiency; in the doing phase, educationalists develop and implement a comprehensive solution, and decide on a measurement to gauge its effectiveness and Educationalists confirm the result in the checking step by comparing before and after data; in the action phase, educationalists document their findings, notify others about process changes, and offer recommendations for the problem to be addressed in the next PDCA cycle (**Iyer, 2019**).

A full understanding of important success criteria, hurdles to achieving these factors, and managerial tools and procedures to overcome these barriers, as well as continual organizational learning, are required for successful TQM implementation. TQM implementation is hampered by resistance to change and people's attitudes, difficulties in finding funding and time for training while sustaining current library services, and difficulty changing organizational structures (**Ajmal, Tuomi, Helo&Sandhu, 2016**).

Significance of the study

Total quality management has been a serious concern in healthcare organizations for decades (hospitals). Government legislation, customer influence, and hospital management initiatives have all contributed to a greater focus on quality. As a result, the government's position as the primary supplier of health-care services has shifted. Furthermore, the healthcare industry is evolving from a producer-oriented to a customer-oriented economy as the impact of customers and public demands grows. As a result, The patient becomes a customer or, in other words, a consumer. Consider strategic planning to be a more developed and expanded version of the nursing process that may be applied to plans, challenges, and practices. Nursing is a large organization, and nurses are well-versed in the process. By applying strategic planning

approaches to nursing that are compatible with the nursing profession's knowledge and practice defining where nursing is now, health-care change management defers to nursing's culture, work, and field. As well as presenting a vision for nursing's future work. Nurses and head nurses, particularly those leading advanced nursing practice projects, should be familiar with strategy and strategic planning in order to establish change strategies. Health policy and, as a result, the health care offered to individuals, families, and communities are influenced by strategies. A direct strategic partner who participates in the decision-making process in most cases **(Balasubramanian, 2016).**

2. Methods

2.1 The study aim and research questions:

This study aimed to develop and validate a strategic plan for total quality management in nursing at Specialized Medical Hospital (SMH MU) in Mansoura University Hospitals - Egypt. *The objectives were to:* a) assess nursing staff(head nurses and nurses) awareness regard the concept and reasons of TQM, b) assess requirements and obstacles of TQM from the head nurse and nurses perspective, c) identify opinions of head nurse and nurses as regards proposed a strategic plan for total quality management in nursing, d) develop a strategic plan for total quality management in nursing based on the assessment data and examine the validity of the designated plan by jury committee.

The research questions were:

1. To assess awareness of nursing staff(head nurses and nurses) regard the concept and reasons of TQM .

2. To assess requirements and obstacles of TQM from nursing staff(head nurses and nurses) perspective?

3. To identify opinions of head nurse and nurses as regards proposed a strategic plan for total quality management in nursing at SMH-MU Hospitals?

4. What are the components of strategic plan required for TQM in nursing?

2.2. The study design

The present study utilized descriptive exploratory design was utilized in the current study.

2.3 Setting

This research was carried out at Specialized Medical Hospital (SMH MU) in Mansoura University Hospitals in Egypt. That includes three floors for providing medical care for patients with different internal diseases in delta region; with a capacity of approximately 194 beds.

2.4 Sample

There are two types of samples: purposeful sample contains as following: (n = 87) head nurses, (n = 135) nurses from all categories of nursing staff who accepted to participate and completed the study. Exclusion criteria include nurses less than one year of employment. Also, jury committee (n = 30), they were professors and experts in strategic planning (head and members of strategic planning unit at Mansoura , Zagazig , Alexandria, Ain Shams and Cairo University and Hospitals.

2.5 Instruments

This research used two tools to collect data; an total quality management (TQM) questionnaire format; developed by Mitchell, et al (2014) and a strategic plan for total quality management in nursing questionnaire based on the literature; Vinzant, & Vinzant, (1996), Mosadeghrad, (2014) and Moustafa& Naiem (2017).

The following tools were used to collect data for this study:

A- Total quality management (TQM) questionnaire format: A self-administered questionnaire was utilized to assess nursing staff awareness regard TQM . It was included four sections as follows;

I Personal characteristics of nursing staff such as job title, education, experience, age and training courses about (TQM). **II,** concept of TQM scale, were 21 items. **III,** the reasons of TQM scale were 8 items. **IV** the requirements of TQM scale were 43 items to cover five sub-domain namely; (Leadership, 13   items; Capability, 5 items; Training, contain 11 items; Communication, 8   items   and   Teamwork

requirement, ,6 items. **(V)** Cover the obstacles of TQM, were 26 items.

Scoring system. The respondents check their answer against five point's likert as follows: strongly agree (5), agree (4), neutral (3), disagree (2), strongly disagree (1). The rafts of the statements were summed-up and the total score was calculated and converted into arithmetic mean and standard deviation.

The reliability of the scale were tested and found that this TQM questionnaire had high internal consistency (Cronbach's α coefficients were 0.78, 0.86, 0.90, and 0.88   for concept, reasons, requirements and obstacles of TQM, in that order).

B- A strategic plan for TQM in nursing questionnaire of opinionnaires:

Sheets was designed to assess the content validity and face validity regard proposed strategic plan for total quality management in nursing. It involved   three parts: a) the opinions of head nurse and nurses b) On a two-point scale, experts' judgments on each item were recorded: relevant, not relevant, and d) general or overall opinions regarding the form.

2.6 Data collection

The study was carried through the following stages: Assessment and planning, implementation, and evaluation phase.

The assessment and planning phase:

Ethical considerations:

Managerial arrangements were made, and official approval to conduct the study and collect the data was secured from the chairman of the board of trustees at Mansoura University Hospitals. The study's goal was explained to the participants by the researcher. Nurses and head nurses were properly told about the research aim before agreeing to participate in the study. The questionnaire was filled out voluntarily by all of them.

A pilot study: Was conducted on (10%) of the participants (14) head nurses and (9) nurses from different departments in specialized medical hospitals, that randomly selected the study sample, and excluded from the total sample. Based on the pilot study, a necessary modification was made**.**

The implementation phase:

Assess the nursing staff awareness about TQM, the time required to answer this sheet was 20-30 min; This time was influenced by work conditions and the interplay of numerous elements. data collected during the course of two months, from the beginning to the end of June 2020 Some participants' data was collected by the distribution of a questionnaire sheet to the subjects, which was then returned to the researcher once completed.

The developmental and validating phase:

A proposed strategic plan for total quality management in nursing was designated and validity of the plan based on the literature and results of the assessment.

2.7 Data analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 23, SPSS Inc. Chicago, IL, USA). At the coding and data entering stages, quality control was performed. In terms of personal characteristics, the data was presented using frequency and percentages. Mean, standard deviation, and independent-samples t-test are measures of central tendency and dispersion.

3. Results

1. Demographic characteristics of the study sample

According to the results, showed that all the studied nursing staff were female, most of them was married. The majority of them were bedside nurse (60.8%), the nursing institute qualification was the highest (61.7%), meanwhile, slightly less than one quarter of the sample (17.1%) were bachelor degree of nurses and having Years of experience (35.1 %) between 10-20 years and the majority (78.4%) there are no attendance the training course about quality.

2. Nursing staff(Head nurses' and nurses' staff awareness about the concept and reasons of TQM (n =222).

Table (2) This table revealed that, the mean score of nursing staff (head nurses & nurses) awareness related to the concept and the reasons of TQM were,   60.1180 ±9.60967and 23.4009 ±5.95584 respectively.

3. Nursing staff (Head nurses' and nurses' staff awareness of the requirements and obstacles to adopt total quality management (n =222).

Table (3) illustrates that the mean score of nursing staff (head nurses & nurses) awareness related to obstacles to adopt total quality management was high (94.2297±9.97673), following by, training requirement and communication requirement, 33.0180±8.60967, 24.4009 ±5.95584 respectively. While the lowest awareness related to capability requirement to adopt total quality management (15.9820±4.05389).

4. Opinions of head nurses' and nurses' as regards proposed planning for planning TQM strategic plan (n = (87) head nurses, n = (135) nurses')

Table 4 shows that no significant difference was found between head nurses and nurses opinions regarding all items of planning for the planning of strategic plan preparedness for TQM.

5. Opinions of head nurses' and nurses' as regards proposed values, vision and Mission for TQM strategic plan (n =(87) head nurses , n = (135) nursing staff)

Table (5) It is evident that There was no significant difference in opinion on the values of the nursing strategic plan for TQM between head nurses and nurses. While there was a statistically significant difference between head nurses and nurses when it came to the vision and mission of the nursing strategic plan for TQM, with a p-value of (.000), with head nurses agreeing more than nurses.

6. Opinions of head nurses' and nurses' as regards proposed SWOT analysis (Method of analyzing strengths, weaknesses, opportunities, and threats) of TQM strategic plan (n = (87) head nurses, n = (135) nursing staff).

In the SWOT analysis of the strategic factors, **Table 6** revealed that there was a statistically significant difference between nurses and head nurses at p-value (.000). More nurses than head nurses agreed with the SWOT analysis.

7. Opinions of head nurses' and nurses' as regards proposed goals and objectives, TQM performance indicators and general strategic items of strategic plan for TQM in nursing (n =(87) head nurses , n = (135) nurses)

Table (7) A statistically significant difference was found at p-value (.000) between head nurses and nurses' opinions relating to the goals and objectives of the nursing strategic plan for TQM, in which head nurses agreed with the goals and objectives more than nurses; additionally, a statistically significant difference was found at p-value (.011) between head nurses and nurses' opinions relating to the general strategic items, as well as the TQM action plan(.010) and evaluation matter for TQM in nurs (.002),in which head nurses were agree of general strategic items more than nurses, while no statistically significant difference related to key performance indicators. Both of them were agree of TQM performance indicators.

8. Agreement of jury committee about developing a strategic plan for total quality management in nursing components.

Table 8 shows the agreement of jury committee about a strategic plan for total quality management in nursing components. The results in this table revealed that all jury group agreed regard most components a strategic plan as the following; values, mission, general strategic items and the evaluation matter for TQM in nursing. Furthermore, 96.66% of jury committee agreed on the subject of planning TQM strategic plan, vision, goals and objectives and key performance indicators (KPI's).

Table 1: distribution of the nurses regarding their demographic characteristics: n= 222

Variables	No	%
Age (years)		
▪ 21-30	70	31.5
▪ 31 -40	77	34.7
▪ >40	75	33.8
Position		
▪ Head nurse	87	39.2
▪ Bedside nurse	135	60.8
Marital status		
▪ Single	4	1.8
▪ Married	218	98.2
Educational qualification		
▪ Bachelor degree	87	17.1
▪ Nursing institute	137	61.7
▪ Diploma of nursing	47	21.2
Years of experience		
▪ 5-10	70	31.5
▪ 10-20	78	35.1
▪ >20	74	33.3
Training course about Quality		
▪ Yes	48	21.6
▪ No	174	78.4

Table (2): Nursing staff(head nurses and nurses) awareness about the concept and reasons of TQM (n =222).

Variables	No of questions	Mean ± SD
1.Nursing staff awareness about the concept of TQM.	21	60.1180 ±9.60967
2. Nursing staff awareness about the reasons of TQM.	8	23.4009 ±5.95584

Table (3): Nursing staff (head nurses' and nurses) awareness of the requirements and obstacles to adopt total quality management (n =222).

Requirements of TQM	No of questions	Mean ± SD
1.Leadership requirement	13	42.4865± 9.39805
2.Capability requirement	5	15.9820 ±4.05389
3.Training requirement	11	33.0180 ±8.60967
4.Communication requirement	8	24.4009 ±5.95584
5.Teamwork requirement	6	20.5495 ±4.03993
2.Obstacles	26	94.2297 ±9.97673

Table (4): Opinions of head nurses' and nurses' as regards proposed planning for planning TQM strategic plan (n = (87) head nurses, n = (135) nurses')

Dimensions for TQM strategic plan in nursing	Head nurses n =(87)	Nurses' n = (135)	*t*-test	Sig
Planning for planning TQM strategic plan	×% ± SD		.494	.620
	1.8909 ± .18100	1.8781 ± .24722		

Table (5): Opinions of head nurses' and nurses' as regards proposed values, vision and mission for TQM strategic plan (n = (87) head nurses , n = (135) nursing staff)

Dimensions for TQM strategic plan in nursing	Head nurses n =(87)	Nurses' n = (135)	*t*-test	Sig
Values	×% ± SD		1.135	.291
	1.1455 ± .21693	1.1188 ± .23544		
Vision	1.5170 ± .07817	1.5149 ± .13805	148	.007*
Mission	1.8455 ± .22813	1.7642 ± .34310	2.203	.005*

Table (6): Opinions of head nurses' and nurses' as regards proposed SWOT analysis (Method of analyzing strengths, weaknesses, opportunities, and threats) of TQM strategic plan (n = (87) head nurses, n = (135) nursing staff).

Dimensions for TQM strategic plan in nursing	Head nurses n =(87)	Nurses' n = (135)	t-test	Sig
Method of analyzing strengths, weaknesses, opportunities, and threats.(SWOT analysis)	×% ± SD		4.515	.000*
	1.6779 ± .28459	1.9084 ± .22910		

Table (7): Opinions of head nurses' and nurses' as regards proposed goals and objectives, TQM performance indicators and general strategic items of strategic plan for TQM in nursing (n = (87) head nurses , n = (135) nurses)

Dimensions for TQM strategic plan in nursing	Head nurses n =(87)	Nurses' n = (135)	t-test	Sig
Goals and objectives	×% ± SD		3.871	.000*
	1.2545 ± .22813	1.2152 ± .41167		
Key performance indicators (KPI's)	1.1364 ± .34474	1.1987 ± .39967	1.360	.123
General strategic items	1.3657 ± .17034	1.2573 ± .26277	2.057	.011*
Action plan for TQM in nursing	1.6914 ± .25147	1.6190 ± .24062	2.676	.010*
The evaluation matter for TQM in nursing	1.5063 ± .21437	1.4415 ± .17532	2.843	.002*

Table (8): Agreement of jury committee about developing a strategic plan for total quality management in nursing components.

The components of strategic plan for TQM in nursing	Jury group (n = 30)	
	Number	%
Planning for planning TQM strategic plan	29	96.66
Values	30	100.00
Vision	29	96.66
Mission	30	100
SWOT analysis		
• Strengths	28	93.33
• Weaknesses,	29	96.66
• Opportunities	30	100
• Threats	29	96.66
Goals and objectives	29	96.66
Key performance indicators (KPI's)	29	96.66
General strategic items	30	100
Action plan categories for TQM in nursing		
• Administrative support and procedures		
• Continuous improvement (Training & education)	29	96.66
• Nursing staff involvement and role in TQM	27	90
• Supplier management	26	86.66
• Customer focus	30	100
• Information analysis	29	96.66
	30	100
The evaluation matter for TQM in nursing	30	100

Discussion

I. Awareness of nursing staff (head nurses and nurses) regard the concept and reasons of TQM.

Regarding awareness of nursing staff (head nurses and nurses) consider the concept of TQM, the finding of the present study showed that the majority of nurse staff had high mean score about the concept of TQM. This may be related to awareness of nurse's staff to

TQM. This finding agreed with **Algunmeeyn, (2019)** who reported that it grew in importance and many hospitals strove to implement TQM as a means of developing and upgrading their services. It is significant for healthcare organizations in the enhancement of their care service quality, as well as helping them to improve their management, achieve more effective organization, increase staff satisfaction, promote commitment to the organization, encourage teamwork among staff and management, and increase patient satisfaction.

It disagreed with **Pourrajab, Basri, Daud, & Asimiran, (2015)**who reported that the medium level of TQM for students revealed that students less satisfied or more critical with current implementation of TQM. Therefore, the students' satisfactions (customer satisfaction principle of TQM) are not completely apparent. Also, this result disagree with **Shaban Safan and Elkholy , 2018** who reported that unit nurse managers' perception of TQM practices criteria was poor. As a nurse manager develop, publish and advertise to staff nurses' TQM framework which include value, objective, and quality guidelines. Be role model of TQM culture among staff nurses. Develop clear and effective strategies and supporting plans for achieving TQM objectives.

In addition, this result incongruence with **Gul, Jafery, Rafiq, & Naeem, (2012)**who concluded that the extent of implementing TQM in the Jordanian hospitals is very poor. Poor implementation may be attributed to deficient knowledge about the importance of TQM and insufficient training programs and financial support for improving health services and patient satisfaction.

On the topic of awareness of nursing staff(head nurses and nurses) look upon the reasons of TQM, the present study exposed that more than half of nursing staff reported the need for further improvement in the quality of performance, and need to reduce costs in the health care services provided by the hospital. This may be related to ability of staff to work with stander and reach to patient satisfaction. This result agrees with **Gul, Jafery, Rafiq, & Naeem, (2012)** who added that rewards and recognition is the major driver in employees'

performance. At the end of the day, it is the money or acknowledgement that matters the most to workers. They feel that whatever they have been doing is meaningful and they have awarded fairly. So, rewards and appreciation can satisfy the employees and would aiding their commitment towards the company. Loss of brain and intelligence would be lessened.

II. Requirements and obstacles of TQM from nursing staff (head nurses and nurses) perspective.

The current findings revealed that the study samples' awareness regarding the requirements of TQM: the majority of nurse staff related to leadership, Training requirement and communication requirements. This result agrees with **Talib, Rahman, &Azam, (2011)** who concluded that the primary need for conceptual model of TQM practices impacting its adoption in health care organizations is top management commitment (leadership). As a result, top management should take the lead in efforts to improve the quality of health-care institutions. Other critical practices for successful TQM adoption include cooperation and participation, process management, and customer focus and happiness. This result also-agree with **Alderwick, Charles, Jones, & Warburton, (2017)** who reported that quality is significantly influenced by leadership and management techniques. It has also been demonstrated that board dedication to quality improvement is associated to higher-quality care, emphasizing the importance of boards as leaders in this field .

On the topic of awareness of nursing staff regard the obstacles of TQM, the present study exposed that high mean score of nursing staff aware and agreed about the obstacles of TQM listed by the researchers for example, the obstacles related to workers resistance to change hospital ,lack of competition between hospital in the health directorate and centralization of decision making. Our study results agree with **Halis, TWATI, & Halis, (2017) also,** in consistent with **Shameer, & Sing, (2013)**who revealed that Lack of leadership (LL), insufficient human resource development and management (IHRDM), lack of strategic quality planning (LSQP), and insufficient resources were among the TQM

hurdles evaluated (IR), additionally supported by, Moustafa, & Gaber (2014) And disagrees with **Balasubramanian, (2016)** .

III. Opinions of head nurse and nurses as regards proposed a strategic plan for TQM in nursing at SMH-MU Hospitals.

The current findings revealed that there was no significant difference in opinion between head nurses and nurses on all aspects of strategic plan preparedness for TQM planning in the study samples. This could be related to the fact that strategic planning is a challenging assignment for nurses. This was in line with **Mutafa, 2003**, and **Palo, & Padhi, (2003)**, who found a positive and significant relationship between training and teamwork, as well as adherence to quality policy and strategy. Also **Ebner, 2014** noted that preparing to plan is a critical first step in the planning process, and that the institution must be ready and committed to participate. This result disagree with **Alam, &Alabdulaali, (2016)** who indicated that the nurses' quality, patient safety, and general safety expertise was considered sufficient. The level of compliance on quality and patient safety indicators was higher than the level of knowledge.

According to the present study, it was found that there was no significant difference in opinion on the values of the nursing strategic plan for TQM between head nurses and nurses. Professional values are the primary norms that any professional body adheres to. These principles serve as a guidance and inspiration for members of a certain profession's professional behavior. **Lai, & Lim, (2012).** According to **Bentzen, Harsvik, &Brinchmann, (2013)** the nurses from all units describe how values and reflection on values are of great importance for the quality in nursing. This result disagrees with **Poorchangizi et al, 2017** who indicated that the nurses' professional values received an excellent overall grade.

While, in terms of the vision and mission of the nursing strategic plan for TQM, there was a statistically significant difference between head nurses and nurses., in which head nurses were agree of the vision and mission more than nurses that might be due to head nurse have a critical role in establishing a clear

and consistent professional vision, providing ongoing support to care employees, and participating actively in care practice as role models. This result agree with **Rokstad, Vatne, Engedal, &Selbæk, (2015)** head nurse should be articulate a clear vision, and involve all employees in professional development.

According to the findings of the current study, there was a statistically significant difference between nurses and head nurses when it came to the SWOT analysis of strategic factors. Nurses were more agreeable to all SWOT analysis elements than head nurses. The SWOT analysis was utilized to perform qualitative research in the study, and this conclusion was compatible with **Abay, et al., 2016**. In the same line with **Manzano, García, Ayala & Calvo, 2014** who added that it will be important to define action plans to address job instability and the profession's devalued image .Moreover, nurses and head nurses should attend workshops and training sessions on SWOT analysis, according to **Sullivan, 2020.**

The current study found a statistically significant difference between head nurses and nurses' opinions on the goals and objectives of the nursing strategic plan for TQM, with head nurses agreeing with the goals and objectives more than nurses, as well as general strategic items, TQM action plan, and TQM evaluation matter in nursing, which could be due to qualification, educational level, and administrative experience. In other studies, many authors **Compelio, Caranto, & David, (2015)** explained that, the vision, mission, goals, and objectives of the student nurses are often well understood and accepted by nurses . This was consistent with **Carney, (2009)** confirmed that for health-care executives, defining and implementing a strategy is vital to their success.

While the findings of this study revealed that there was no statistically significant change in key performance indicators. TQM performance (metrics) indicators were agreed upon by both of them. In the same line, These results confirmed by **Ali, &Alolayyan, (2013)** who indicated that the variables of TQM practices and hospital performance have a positive association.

IV. The validity of the designated plan by jury committee.

Finally, concerning the validity of the framework model of the TQM strategic plan, content validity was indicated by total agreement about all items among the jury committee. As for face validity, the jury group experts have agreed upon all items. The framework model of the TQM strategic plan can be of great help to healthcare organizations to move out of the barriers and successfully implement TQM concepts and practices.

Conclusion and recommendations*:*

Nursing staff (head nurses & nurses) awareness related to obstacles to adopt total quality management while the lowest awareness related to capability requirement and it needs to be improved. In nursing, a strategic strategy for TQM was designed and validated. The researcher suggested that the suggested strategic plan for TQM in nursing be implemented at (SMH MU; disseminated by Mansoura University Hospitals administration to all nursing staff and leaders; reviewed, revised, and updated annually as appropriate and necessary to reflect continuing improvements. The University Hospitals of Mansoura should determine and assign the necessary and required resources for the implementation of the approved plan.

Nurse managers should be trained on how to use their TQM in formulating a good decision, professional development opportunities to develop first-line nurse managers' decision-making process, Bachelor's level nursing curriculum in nursing educational institutions should include TQM course, design and implement training programs for all nursing staff; give incentives for higher quality care, improved patient satisfaction, improved employee morale, and enhanced productivity among nursing staff.

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