

Managers' Implementation of Benchmarking and Its Relation to Accomplishment of Competitive Advantage and Flourishing from Nurses' Perspective at One of Al-Azhar University Hospitals, Egypt

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ABSTRACT

Background: Benchmarking is a quality methodology for organizations to reach their ideal processes and ideal outcomes through using other organizations as a reference. **Aim of the study:** Determining the relationship between Managers' implementation of benchmarking and accomplishment of competitive advantage and flourishing of staff (established via nurses' points of view) at Al-Azhar university hospital, New Damietta, Egypt. **Methods: Setting:** the study was carried out at Al-Azhar university hospital, New Damietta, Damietta governorate, Egypt. Design: a descriptive correlational design. **Subjects:** was consisted of 218 nurses. Tools and procedure: three different tools (benchmarking tool, competitive advantage tool, and flourishing scale). The fieldwork lasted from January to March 2021. **Results:** all studied nurses were female their mean ages were (29.81) with a standard deviation of (5.54). (70%) of them have a diploma in nursing, (9.2%) have a bachelor's in nursing science, also (6.4%) have a doctoral degree in nursing sciences. Moreover, the total mean score of managers' accomplishment of a competitive advantage as seen by nurses was (39.62) with a standard deviation of 9.29, and the total mean score of nurses flourishing was (48.35) with a standard deviation of (8.33). Also, The study revealed that managers implement benchmarking for accomplishing competitive advantage with a coefficient of determination ($R^2 = 0.743$), and the degree of effect ($\beta = 0.862$). Managers' implementation of benchmarking leads to the flourishing of staff with a coefficient of determination ($R^2 = 0.286$), and the degree of effect ($\beta = 0.535$). **Conclusions:** nurses have high mean scores of regarding managers' implementation of benchmarking and accomplishment of competitive advantage, Also, nurses have high flourishing scores. Hence, there is a statistically significant correlation between managers' implementation of benchmarking and their accomplishment of competitive advantage as seen by nurses, and nurses' flourishing. **Implications for nursing management:** Engaging nurses in important and innovative reflective practices have the importance of being with others in relationships and interaction patterns that leads to a high standard of performance, make them happy, and thrive at work. The analysis should be expanded to other contexts, both cross-sectional and longitudinally, as a guideline for further studies. This would make it possible to generalize to a wider population.

Key Words: benchmarking, competitive advantage, healthcare managers, nurses, flourishing, Al-Azhar university hospitals.

Introduction

Today's healthcare market is seriously competitive; Benchmarking is a major concern these days, not only in healthcare but also in a variety of sectors. Since the late 1970s, the principle of benchmarking has been used in industry as a systematic approach to quality measurement and improvement of services, with companies seeking to equal or exceed the best competitive advantage. In January 1991, benchmarking was applied to health care for the first time. Benchmarking identifies strengths and weaknesses within organizations. Identifies the level of performance possible by

looking at the performance of others, and how much improvement can be achieved. Promotes changes, delivers improvements in quality, productivity, and efficiency, and helps to better satisfy customers' needs by developing new criteria, and targets that contribute to the achievement of market competitive advantage (Royal College of Nursing, 2017).

According to (Alexandra & Buttigieg, 2016) benchmarking is a total quality management tool applied for continuously evaluating and improving the health care organization's efficiency in comparison to the best in the healthcare sector through learning about innovative operating methods or

procedures in other healthcare organizations. The Joint Commission on accreditation defined Benchmarking as a systematic, data-driven method of quality improvement that includes comparing output internally and/or externally to find, achieve, and maintain best practices. (Wind & Van Harten, 2017).

According to (Ettorchi -Tardy et al., 2012& Goncharuk et al., 2015) Implementation of benchmarking should adopt five main stages: the first stage "Planning" includes a selection of the areas of benchmarking and its goals; establishment of the priorities for improvement; identification of key processes, and resources; allocation of key performance indicators, and definition of data collection methodology for the analysis. The second stage "Analysis" includes a selection of the group of organizations for comparison; a collection of the data of the selected group and its processes; a collection of the data about own processes; and a definition of the methodology for data analysis. The third stage "Integration" includes the estimation of the efficiency of own and comparable organizations; identification of the gap in performance on the main analyzed process; analysis of the causes of the performance gap; finding of the ways and making of recommendations to bridge the gap in the level of efficiency. The fourth stage "Implementation" is the implementation of changes to improve performance. The fifth stage "Maturity" is to monitor progress in the implementation of benchmarking plan and its impact on the basic processes.

Competitive advantage, if it is sustained, could be advantageous to the organization. To achieve a competitive advantage, organizations turn to use an approved standard procedure (Hakkak, 2015). Benchmarking for competitive advantage is essential for any organization attempting to adopt high-quality practices. Benchmarking is the most effective strategy for achieving and retaining a competitive advantage since it encourages the organization to focus on best practices and quality improvement (Knipe, 2002). Keegan (2007) defined competitive advantage as the higher degree of attractiveness that a healthcare organization provides. Each healthcare organization's competitive advantage is based on the properties or dimensions that enable it to

provide better services to consumers than its competitors (Zabieh, 2014). While new healthcare technologies and their value for health care organizations as a new strategy come with challenges, managers may use competitive advantage factors to reduce decision-making risks and retain high-quality health care services by identifying competitive advantage factors. Healthcare managers should be open to benchmarking and utilizing the latest technological advancements and technology transfer from other organizations (Hosseini et al., 2018).

According to (Isoraite, 2018), health care managers can accomplish a competitive advantage within their organizations by identifying their competitors, defining their priorities, developing strategies, evaluating their strengths and weaknesses, identifying their goals, strategies, and operational performance, calculating competitor retaliation, and selecting competitors.

When an organization allowing a dynamic job with sufficient opportunities for advancement, a standardized work climate where promotion is focused on hard work and the acquisition of formal and informal education and training, and where innovation is encouraged the staff feels flourished. Moreover, when the working staff is free to innovate in a stable organization, producing new and improved services in effective manners. In other words, a flourishing organization provides everyone with opportunities for personal and professional fulfillment (Murphy et al., 2014).

Flourishing is associated with enhanced physical and mental health, as well as the overall quality of life (Priastana, 2020). Flourishing can be described as being within an optimal range of human functioning associated with wellness, generativity, performance, growth, and resilience. The conceptual structure of flourishing is composed of positive emotions, emotional stability, vitality, optimism, resilience, self-esteem, engagement, competence, and positive relationships. (Huppert & So, 2013). To flourish, according to Diener et al., one must have meaning and intent, positive and fulfilling relationships, be involved and interested in one's life,

contributing to the well-being of others, competency, self-acceptance, confidence, and respect". People who are flourishing are more likely to be content with their lives, aware of their talents, and willing to succeed, prosper, and contribute meaningfully to society (Diener et al., 2010)

Significance of the study

One important aspect of benchmarking is that it is meant to be more than just a general comparison of one organization (or part of an organization) to another; it involves the research and dissemination of best practices (Thonon et al., 2015). The key benefit of using the benchmarking approach is that it allows organizations to gain competitive advantages by following the approach of building rather than copying. The innovative application of benchmarking in practice affects work process rationalization, quality promotion, and product and service selection, as well as increased productivity, market activity expansion, the advancement of technologies, creativity, competitiveness, and profitability. As Al-Azhar hospital managers considered to be looking for a way to prioritize the hospital efficiency and accomplish competitive advantage, the benchmarking process implementation will most definitely produce effective outcomes. Hence, the essence of benchmarking is a continuous, unending improvement that enabling managers to comprehend exactly how many qualitative and quantitative improvements are needed to achieve and sustain the competitive advantage and well-being of staff. So every manager should realize benchmarking through emphasizing competitive advantage and staff flourishing.

Aim of the study

The purpose of this study was to determine the relationship between Managers' implementation of benchmarking and accomplishment of competitive advantage, and flourishing of staff (established via nurses' points of view) at Al-Azhar university hospitals, New Damietta, Egypt, through-

- Assessing managers' implementation of benchmarking, as seen by nurses,

- Determine managers' accomplishment of competitive advantage, as seen by nurses,
- Measuring the flourishing level of nurses,
- Identifying the relationship between managers' implementation of benchmarking and accomplishment of competitive advantage from nurses' points of view and the flourishing of nurses.

Research question

1. Are the hospital' managers implement benchmarking strategy, as seen by nurses?
2. Is there an accomplishment of competitive advantage by the hospital managers, as seen by nurses?
3. What is the level of nurses' flourishing?
4. Is there a relationship between Managers' implementation of benchmarking and accomplishment of competitive advantage and nurses' flourishing?

Subjects & Methods

Technical design

Research design

The researcher to conduct the study used a descriptive correlational research design.

Descriptive correlational studies are used to describe variables and the natural correlations that exist between and among them. Through the descriptive research design, the nature of links, or associations between and among variables, is investigated using correlational designs. These models are used to see if changes in one or more variables are linked to changes in another (s). Correlations look at the intensity, direction, and size of links or associations (Polit, Beck & Hungler, 2001).

Setting

This study was conducted at Al-Azhar University Hospital, New Damietta, Damietta governorate, Egypt. Affiliated to Al-Azhar University that is one of the world's major and oldest universities. The hospital building was delivered by New Damietta City; Authorized on July 7, 1999, and it was officially in operation on August 10, 1999. The hospital is

composed of different units and departments, including Outpatient services (a large outpatient capacity including multi-specialty clinics such as pain, cardiology, dental, and ophthalmology). Clinical pathology unit, Sterilization department, Endoscopy unit, Operations department, Intensive care unit, cardiology, and Chest unit, specialized clinical pharmacy offering a variety of services. Patient education and Palliative care services, Abdominal departments, A comprehensive surgery department, Gynecological & Obstetric units, Pediatric units, Nurseries department, Dialysis and Kidney department, Physiotherapy department, Radiology department, and Blood donation bank.

Sampling design

The target population consisted of all head nurses with a total number of (n=36) and a sample of staff nurses (n=182), working in Al-Azhar Hospital with at least one year of experience at the hospital.

Sampling design

The sample size was determined using openepi.com (Dean, Sullivan & Soe, 2013). Using the following equation:

Sample size

$$n = \frac{DEFF * Np(1-p)}{[(d^2/Z^2(1-\alpha/2)^2 * (N-1) + p * (1-p))]}$$

Population size (for finite population correction factor or fpc) (N): 310

Hypothesized % frequency of outcome factor in the population (p): 50% +/- 5

Confidence limits as % of 100(absolute +/- %)(d): 5%

Design effect (for cluster surveys-DEFF): 1

The final sample size is 182 staff nurses at a confidence level of 97 %. A simple random sample technique was utilized to complete the staff nurses' sample.

Tools of data collection

Three tools were utilized in this study. Tool 1, the benchmarking questionnaire consisted of two parts. Part 1 included personal and job data of nurses, including age, level of education, years of experience, and job position. Part 2

included questions about benchmarking that adapted from Al-Metaary (2011). This is intended to assess benchmarking implementation by hospital managers as seen by their staff nurses. Part 2 comprised 30 questions, categorized under five stages. Planning stage: consisted of eight statements (e.g., Managers properly plan to conduct benchmarking). Analysis: consisted of seven statements (e.g., Managers continuously monitor benchmarking processes to improve work quality). Integration: consisted of six statements (e.g., the managers adopt a clear plan to make the required change in the hospital). Implementation: consisted of five statements (e.g., Managers systematically translate steps to ensure a proper comparison process). Maturity: consisted of four statements (e.g., Managers can smelt roads that transferred from other hospitals to the hospital for adoption).

Tool 2: Competitive advantage questionnaire.

This tool was adapted from Al- Metaary (2011) and used to assess managers' accomplishment of Competitive advantage as seen by their nurses. It consists of 10 items (e.g., the hospital seeks to achieve competitive advantages by providing distinguished services; the hospital's performance is constantly being compared to other related hospitals)

Scoring system.

A five-point Likert scale, ranging from one = "strongly disagree" to five = "strongly agree," was used to rate each statement in the aforementioned tools.

Tool 3: flourishing scale

This scale was developed by Diener et al., (2010) and has been used to assess nurses flourishing, it consists of eight statements (e.g. I am committed and interested in my activities; I am competent and able to perform the activities that are important to me)

Scoring system

A seven-point Likert scale, ranging from one = "strongly disagree" to seven = "strongly agree," was used to rate each statement. The potential score for the scale ranges from a minimum of 8 degrees to 56 as the highest

possible score, and the highest score obtained by the respondent indicates his flourishing level.

Administrative design and ethical considerations

An official letter was sent from the Faculty of Nursing to hospital medical and nursing directors requesting their formal agreement to the study carried out. The medical director of Al-Azhar University Hospital approved the study after checking the study proposal and tools. The aim of the study was explained to nurses who participated in the study; their consent to participate was obtained and they were assured about the confidentiality of the information gathered and assured that it will be used only for the study. They were informed about their right to refuse or to withdraw at any time.

Operational design

Preparatory phase: During this phase, the researchers reviewed the literature related to the study subject using paper and electronic sources both locally and internationally. This helped in the selection and preparation of the data collection tools.

Validity of tools:

The three tools were tested for clarity, relevance, applicability, comprehensiveness, understanding, and ease of implementation by a panel of seven nursing professors from various faculties of nursing, all of whom are specialists and experts in nursing administration.

Reliability of tools

The tools tested for reliability using Cronbach's alpha technique. The result for the benchmarking questionnaire was Cronbach's alpha=0.965, and for the competitive advantage tool, it equaled 0.936. Also, the flourishing tool was =0.893.

Pilot study: 10% of nurses were included in the pilot study. The purposes of the pilot study were to ascertain the clarity and feasibility of the tools and to detect any possible problems concerning data collection tools that might face the researchers and interfere with data collection. It also helped to identify the suitable time and place for data collection and

to estimate the exact time needed for data collection.

The fieldwork:

An interview technique was utilized. The researcher met the respondents during three shifts to distribute the questionnaires. During these meetings, the researcher explained the purpose of the study, and how to complete the questionnaires, and assured the respondents of the anonymity of their answers, that the information was used for scientific research only, and kept entirely confidential. The respondents filled out the questionnaires individually and took 25–30 minutes to complete them. The data was collected in the period starting on January 2021 to March 2021.

Statistical analysis and data interpretation:

Data were fed to the computer and analyzed using IBM SPSS Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp. Qualitative data were described using numbers and percentages. Quantitative data were described using the mean, the standard deviation for parametric data after testing normality using the Kolmogorov-Smirnov test. The significance of the obtained results was judged at the (0.05) level.

Data analysis

Spearman's correlation:

Spearman's rank-order correlation is used to determine the strength and direction of a linear relationship between two non-normally distributed continuous variables and/or ordinal variables.

Linear regression analysis was used for the prediction of independent variables of continuous parametric outcome (after log transformation). Significant predictors in the correlation were entered into the regression model with the calculation of R² that quantity effect of combined variables on the desired outcome and the prediction equation ($Y = \beta + a \cdot x$)

Results

Table 1. Illustrates that all studied nurses were female their mean ages were 29.81 with a standard deviation of 5.54. The table shows

that nurses who have a diploma in nursing were 70.6% followed by nurses who have a specialized diploma with a percentage of (10.6%), and those who have a bachelor's in nursing science with a percentage of (9.2%). Also, the table indicates a positive result as 6.4% of the studied nurses has a doctoral degree in nursing sciences. Moreover, It can be seen from the table that nurses' median working years in hospital is 7.0 years with a range of (1- 23) years.

The results included in table 2 show that the total mean score of benchmarking implementation by hospital managers as seen by nurses was 117.84 with a standard deviation of 24.58. Moreover, the table indicates the mean scores and the standard deviations of the implementation of the benchmarking stages by hospital managers. As it was found that, the planning stage has the highest mean score (30.93), and a standard deviation (6.91). followed by the analysis stage with a mean score (27.34), and a standard deviation (6.32), and the integration stage with a mean score of (24.23) and a standard deviation (5.03), while both implementation and maturity stage of benchmarking implementation have the lowest mean score (19.83), and a standard deviation (4.51).

As shown in Table 3, which demonstrates the accomplishment of competitive advantage among hospital managers as seen by nurses, it is obvious that the total mean score of the managers' accomplishment of a competitive advantage as seen by nurses was 39.62 with a standard deviation of 9.29. Moreover, 65.1% and 47.2% respectively of the study nurses strongly agreed that "The hospital seeks to achieve competitive advantage by providing distinguished services, and Managers are constantly trying to implement benchmarking processes at the hospital to achieve high performance". While, 36.7%, and 38.5% respectively, strongly agreed that " The employees are acquis different skills to provide services that help them to compete with other hospitals. The managers are constantly trying to follow up the new work of other hospitals, and make use of them in line with the hospital environment. Managers are constantly trying to develop their skills to adopt rational, and

thoughtful policies to improve hospital practices to achieve competitive advantage".

Table 4 indicates the frequency distribution of flourishing scores among studied nurses. as indicated in the table, The total mean score of nurses flourishing was (48.35) with a standard deviation of (8.33), as can be seen from the data, the highest percentage of nurses responses were for strongly agree, and somewhat agree on the items of flourishing. The table also reveals that 63.3% and 62.4% respectively of nurses stated that People respect them and that they lead a purposeful and meaningful life.

Correlation between total scores of benchmarking, benchmarking stages, competitive advantage, and the flourishing of nurses are illustrated in table 5. As the table illustrates, there is a statistically significant correlation between managers' implementation of benchmarking and their accomplishment of competitive advantage as seen by nurses, and nurses' flourishing ($P < .001$). Also, all benchmarking stages were positively correlated with both variables (accomplishment of competitive advantage, and nurses flourishing) where the Maturity stage of benchmarking has the highest correlation score with the competitive advantage, and nurses' flourishing, followed by the Implementation stage of benchmarking and the competitive advantage, and Planning stage of benchmarking and flourishing of nurses ($P < .001$).

Table 6 indicates the degree of nurses' perception of managers' accomplishment of competitive advantage according to their implementation of benchmarking. As the statistical analysis indicates, managers implement benchmarking for accomplishing competitive advantage with a coefficient of determination ($R^2 = 0.743$) and the degree of effect ($\beta = 0.862$), which means that 0.743 of competitive advantage accomplishment result from implementation of benchmarking. Also, Table 6 highlights the degree of nurses flourishing according to their managers' implementation of benchmarking. As the statistical analysis indicates, managers' implementation of benchmarking leads to the flourishing of staff with a coefficient of determination ($R^2 = 0.286$), and the degree of effect ($\beta = 0.535$), which means that 0.535 of

nurses flourishing related to the implementation of benchmarking.

Table 7. Indicates the degree of nurses' perception of managers' accomplishment of competitive advantage according to their implementation of benchmarking stages. As the statistical analysis indicates, managers' implementation of benchmarking stages leads to the accomplishment of a competitive advantage except for the analysis stage of benchmarking. As the degree of effect for

planning is ($\beta=.189$), for integration is ($\beta=.356$), for implementation is ($\beta=.232$), and maturity is ($\beta=.231$). While for analysis is ($\beta=-.063$). This ensuring that competitive advantage accomplishment is a result of benchmarking implementation. Regarding the degree of nurses' flourishing and implementation of benchmarking stages, results refer to that both Analysis, and Implementation stages of benchmarking were the significant predictors of nurses' flourishing, ($\beta=.353$) for Analysis, and ($\beta=.239$) for implementation.

Table (1): personal and job data of the studied nurses (n=218).

Personal and job data	n=218	%
Gender		
Male	0	0.00
Female	218	100.0
Occupation		
Head nurses	36	16.5
Staff nurses	182	83.5
Educational level		
Diploma of nursing	154	70.6
Bachelor of Nursing Science	20	9.2
Master of Nursing Sciences	7	3.2
Doctoral of Nursing Sciences	14	6.4
Specialized Diploma	23	10.6
	Mean±SD	Min-Max
Age(years)	29.81±5.54	20-59
	Median	Range
Total Working Experience (years)	8.0	1.0-41.0
Working years in hospitals	7.0	1.0-23.0
Working years in current occupation	6.0	1.0-21.0

Table (2): benchmarking mean and median scores among studied nurses

benchmarking stages	Mean±SD	Median(min-max)
1. Planning stage	30.93±6.91	33(8-40)
2. Analysis stage	27.34±6.32	29(7-35)
3. Integration stage	24.23±5.03	26(6-30)
4. Implementation stage	19.83±4.51	21(5-25)
5. Maturity stage	19.83±4.51	19.83(5-25)
Total benchmarking	117.84±24.58	124.5(31-147)

Table (3): Frequency distribution of Competitive advantage scores among studied nurses.

Competitive advantage	Strongly disagree		Disagree		Neutral		agree		Strongly agree	
	no	%	no	%	no	%	no	%	no	%
The hospital seeks to achieve competitive advantage by providing distinguished services	8	3.7	11	5.0	12	5.5	45	20.6	142	65.1
The hospital's performance is constantly being compared to other related hospitals	10	4.6	20	9.2	34	15.6	86	39.4	68	31.2
Managers seek to make various adjustments in the pattern of services provided to bring about the required changes and excellence.	13	6.0	22	10.1	25	11.5	59	27.1	99	45.4
The employees are equipped with different skills to provide services that help them to compete with other hospitals	14	6.4	13	6.0	34	15.6	77	35.3	80	36.7
Managers realize that achieving a competitive advantage only comes through the adoption of deliberate steps that are continuously implemented in the hospital.	12	5.5	26	11.9	33	15.1	59	27.1	88	40.4
Managers frequently compare the performance	11	5	25	11.5	19	8.7	77	35.3	86	39.4

Competitive advantage	Strongly disagree		Disagree		Neutral		agree		Strongly agree	
	no	%	no	%	no	%	no	%	no	%
Items										
of their hospitals with others to make improvements										
The managers are constantly trying to follow up the new work of other hospitals and make use of them in line with the hospital environment	7	3.2	26	11.9	36	16.5	65	29.8	84	38.5
Managers adopt clear standards and foundations in the hospital to achieve competitive advantage	10	4.6	22	10.1	38	17.4	50	22.9	98	45.0
Managers are constantly trying to develop their skills to adopt rational and thoughtful policies to improve hospital practices to achieve competitive advantage.	10	4.6	19	8.7	25	11.5	80	36.7	84	38.5
Managers are constantly trying to implement benchmarking processes at the hospital to achieve high performance.	13	6.0	18	8.3	31	14.2	53	24.3	103	47.2
Mean±SD	39.62±9.29									
Median(min-max)	42(10-50)									

Table (4): Frequency distribution of flourishing scale among studied nurses.

Items	Strongly Disagree		disagree		Disagree to some extent		Disagree		Neutral		Somewhat agree		Strongly agree	
	no	%	no	%	no	%	no	%	no	%	no	%	no	%
I lead a purposeful and meaningful life	5	2.3	5	2.3	3	1.4	7	3.2	16	7.3	46	21.1	136	62.4
My social relationships are supportive and rewarding	4	1.8	1	0.5	9	4.1	10	4.6	36	16.5	48	22.0	110	50.5
I am engaged and interested in my daily activities	0	0	4	1.8	11	5	17	7.8	20	9.2	53	24.3	113	51.8
I actively contribute to the happiness and well-being of others	5	2.3	5	2.3	5	2.3	17	7.8	18	8.3	45	20.6	123	56.4
I am competent and capable in the activities that are important to me	2	0.9	2	0.9	6	2.8	12	5.5	32	14.7	55	25.2	109	50
I am a good person and live a good life	3	1.4	5	2.3	4	1.8	16	7.3	30	13.8	55	25.2	105	48.2
I am optimistic about my future	5	2.3	3	1.4	11	5	13	6	32	14.7	63	28.9	91	41.7
People respect me	10	4.6	3	1.4	4	1.8	10	4.6	19	8.7	34	15.6	138	63.3
Mean±SD	48.35. ±8.33													
Median(min-max)	51(24-56)													

Table (5): correlation between benchmarking, competitive advantage, and the flourishing score of staff and among studied nurses.

Study variables		Competitive advantage score	Flourishing of nurses score
Benchmarking total score	Rs	.836*	.534*
	P	<.001	<.001
Planning stage of benchmarking	Rs	.673*	.526*
	P	<.001	<.001
Analysis stage of benchmarking	Rs	.755*	.455*
	P	<.001	<.001
Integration stage of benchmarking	Rs	.783*	.498*
	P	<.001	<.001
Implementation stage of benchmarking	Rs	.809*	.507*
	P	<.001	<.001
Maturity stage of benchmarking	Rs	.817*	.528*
	P	<.001	<.001

rs: Spearman correlation coefficient *statistically significant if $p < 0.05$

Table (6): linear regression for prediction of log competitive advantage, and flourishing score among studied nurses.

	competitive advantage score				flourishing score			
	β	t	P-value	R ²	β	T	P-value	R ²
Benchmarking total score	0.862	24.97	<.001*	0.743	0.535	9.3	<.001*	0.286

Table (7): linear regression for prediction of log competitive advantage, and flourishing score by benchmarking stages among studied nurses.

Benchmarking stages	competitive advantage				flourishing			
	β	t	P-value	R ²	β	T	P-value	R ²
Planning stage of benchmarking	.189	2.963	.003*	0.777	-.056	-.501	.617	0.306
Analysis stage of benchmarking	-.063	-.937	.350		.353	2.993	.003*	
Integration stage of benchmarking	.356	4.604	.001*		.009	.063	.950	
Implementation stage of benchmarking	.232	3.443	.001*		.239	2.004	.046*	
Maturity stage of benchmarking	.231	3.391	.001*		.044	.366	.715	

Discussion

Benchmarking is a continuous improvement strategy and a change management process. Once begun, the entity should continue to benchmark against best practices to improve continuously. Benchmarking is a way of moving away from tradition. If an organization wants to maintain the status quo, it should not benchmark. Benchmarking opens an organization to change and learning, with the overall goal of achieving a competitive advantage. However, a good basis for benchmarking is important. Areas to

examine, such as whom to functions to benchmark, and how to carry out the benchmarking, are decisive (Freytag & Hollensen, 2001).

According to (Erdil & Erbiyik, 2019) Benchmarking is one of the strategies that has emerged because of attempts to improve and remain permanent. Benchmarking has been a significant policy for the organization's management and supply chain in recent years. This approach enables managers to improve their vulnerabilities, evaluate opportunities more effectively, be more customer-focused,

and survive in a competitive advantage while maintaining the corporate culture.

In hospitals, nurses make up the majority of the staff. Nurses are involved in a variety of critical patient care and logistics procedures (Heslop & Lu, 2014). As a result, nurses must recognize the effects of practice shifts or nursing care quality in general, and be forced to engage in the benchmarking process regularly (Burston et al., 2014). The purpose of this study was to determine the relationship between Managers' implementation of benchmarking and accomplishment of competitive advantage and flourishing of staff (established via nurses' points of view) at Al-Azhar university hospitals, New Damietta, Egypt, through assessing managers' implementation of benchmarking, Determining managers' accomplishment of competitive advantage, and measuring the flourishing level of nurses.

As the study findings Illustrated, all the studied nurses were female their mean ages were 29.81 with a standard deviation of 5.54. Nurses who have a diploma of nursing were the majority of the study sample, followed by nurses who have a specialized diploma, and those who have a bachelor in nursing science with a percentage of(9.2%), also the study findings indicate a positive finding as 6.4% of the studied nurses have a doctoral degree of nursing sciences. Moreover, nurses' median working years in the hospital is 7.0 years with a range of (1- 23) years.

Planning, analysis, integration, execution, and maturity are the five phases of benchmarking. The first phase establishes the benchmarking object, data collection, and activities to be compared. The second phase involves doing an analysis to evaluate the difference between the organization and its competitors, as well as establishing new standards and trends. The communication phase of the integration represents the acceptance of standards, new practices, and the definition of operational goals that need to be modified. Due to the dynamic changes, new plans for action, implementation, promotion, and re-establishment are formed during the fourth phase. The best processes are strengthened, and transferred into work

processes during the maturity stage (Harrington 1996, Hoppszallern, 2003, Cvetkovi, Arsi, 2010, Babovic et al., 2012).

Regarding benchmarking implementation by hospital managers as seen by nurses, findings of the present study stated a high mean score of benchmarking implementation by hospital managers as seen by nurses. Moreover, the study findings indicate a high mean score of the implementation of the benchmarking stages by hospital managers, as it was found that the planning stage has the highest mean score followed by the analysis stage, and the integration stage, while both the implementation and maturity stage of benchmarking implementation have the lowest mean scores. These findings could be related to, the introduction of a pay-for-performance model in the hospital management system, and that the hospital's managers work against specific metrics, and emphasizing the value of benchmarking and accurate outcomes, collecting, and analyzing data to determine a target performance level or benchmark against which current performance can be measured. As well as, comparing these benchmarks or performance indicators to data collected by other accredited hospitals.

According to Erdil & Erbiyik (2019), benchmarking can help with validating objectives, aims, and applications, as well as lowering expenses. The work culture should be changed or strengthened. Assisting in the identification of the organization's goals and objectives, identifying best practices for achieving those goals and objectives, ensuring strategic management, revealing better practices within the organization, motivating employees, and improving competitive advantage and organizational performance.

The present study finding goes in the same line with Beckford, (1998) who reported that benchmarking first requires senior management commitment, particularly to supporting actions arising from the exploration. Second, it requires staff to be trained and guided in the process to ensure that maximum benefit is obtained. Finally, it requires the allocation of part of the relevant employees' time to enable it to be carried out.

The Royal College of Nursing, (2017) stated that nurses who are passionate about improving nursing care, and who are committed to providing high-quality evidence-based nursing, find benchmarking a very effective way of engaging with colleagues. It helps them demonstrate changes in practice that make a positive impact and real difference for people in care.

In contrast with the previous study finding, (Güven-Uslu, 2005, and Martin, 2016) clarified that there are limits to the rapid or broad implementation of benchmarking principles in hospitals and that patients and their expectations were not referred to in benchmarking. They also suggested that implementation programs should be used for benchmarking hospitals, and the evaluation criteria are used based on.

Benchmarking refers to a search of best practices and applying them to cover identified gaps, achieve required improvements, and accomplish continuous process improvement in an organization towards gaining competitiveness (Alosani et al., 2016). The main advantage of applying to benchmark is the establishment of competitive advantages for the hospital with the postulate not to copy, but to create. But even with detailed step-by-step benchmarking, having a sufficient amount of information, and highly skilled workers, Every entrepreneur should understand that collecting accurate, timely, and complete information is only half the job, and the other 50% of benchmarking is creativity (Kos, 2016).

The findings of the present study reflect, a high mean score of nurses' perception regarding the hospital managers' accomplishment of competitive advantage. A high percentage of nurses agreed on "The hospital seeks to achieve competitive advantage by providing distinguished services. Managers are constantly trying to implement benchmarking processes at the hospital to achieve high performance, and more than one-third of them strongly agreed that the employees are acquiring different skills to provide services that help them to compete with other hospitals. The managers are constantly trying to follow up the new work of other hospitals, and make use of them in line with the hospital

environment, and Managers are constantly trying to develop their skills to adopt rational and thoughtful policies to improve hospital practices to achieve competitive advantage.

This finding could be related to factors correlated to the hospital efficiency such as Al-Azhar University Hospital's market position, its goals, capacities and resources, infrastructure, service efficiency, innovation, technology, and training. A study in a private hospital accomplished by Anyim, (2012) found out that the hospitals have built customer and brand loyalty through the quality offering of services, having sufficient staff, good behavior of staff, adequate facilities, having knowledgeable medical staff, process, and technology and customer service.

Findings of a study done by Chang et al., (2017) reported that managers facing a competitive healthcare environment should adopt competitive strategies to improve the performance of the hospital. According to Vorhies, and Morgan, (2005), Market-based organizational learning has been identified as an important source of sustainable competitive advantage. One particular learning mechanism, benchmarking, is a widely used management tool that has been recognized as appropriate for identifying and enhancing valuable marketing capabilities. However, despite widespread admonitions to managers, the benchmarking of marketing capabilities as a route to sustainable competitive advantage has received scant empirical attention. Wang, (2014) added that Competitive advantage is obtained when an organization develops or acquires a set of attributes that allow it to outperform its competitors.

Flourishing can be defined as living in an optimal range of human functioning, a life that is filled with goodness, generativity, personal growth, and resilience (Dunn and Dougherty 2008; Seligman 2011; Van Zyl and Rothmann 2012). Flourishing is defined as an effort to achieve self-actualization and fulfillment within the context of a larger community of individuals, each with the right to pursue his or her such efforts. It encompasses the uniqueness, dignity, diversity, freedom, happiness, and holistic well-being of the individual. Achieving human flourishing is a life-long existential journey of

hopes, achievements, regrets, losses, and illness, suffering, and coping. Regarding nurses' flourishing, the findings of this study indicated that nurses have high flourishing scores, as can be seen from the data, the highest percentage of nurses' responses were for strongly agree, and somewhat agree on the items of flourishing. Findings also revealed that nearly two-thirds of nurses stated that People respect them and that they lead a purposeful and meaningful life. The previous findings could be interpreted as the hospital engage nurses in holistic and reflective practices, motivating them to function in a collaborative role to provide care in multiple settings with an emphasis on community-based care management which promotes their self-fulfillment through personal and professional development. Also, the hospital enhances strategies that create a safe working environment while appreciating the cognitive and physical limits of human performance.

Regarding the Correlation between total scores of benchmarking, benchmarking stages, competitive advantage, and the flourishing of nurses, findings of the present study illustrated that there is a statistically significant correlation between managers' implementation of benchmarking and their accomplishment of competitive advantage as seen by nurses, and nurses' flourishing ($P < .001$). Also, all benchmarking stages were positively correlated with both variables (accomplishment of competitive advantage, and nurses flourishing) where the Maturity stage of benchmarking has the highest correlation score with the competitive advantage, and nurses' flourishing, followed by the Implementation stage of benchmarking and the competitive advantage, and Planning stage of benchmarking and flourishing of nurses ($P < .001$).

According to Babović, Raičević, Carić (2012), benchmarking affects the creation of new ideas and lucrative solutions to improve the existing organization, process, and competitive services of high quality. It is, without doubt, the easiest way of applying and achieving best practice leaders for the maximization of profit in work. Hone, Jarden, Schofield, & Duncan, (2014). Added that a considerable body of empirical evidence indicated that flourishing is a desirable condition that any organization would benefit from protecting and promoting among its workers. In his study Kos, (2016) concluded that

the main advantage of applying to benchmark is the establishment of competitive advantage through a detailed systematic benchmarking process, having a sufficient amount of information and highly skilled workers. (Redelinghuys, Rothmann & Botha, 2019) supported the previous findings by indicating a strong association between positive organizational practices and employee flourishing.

Moreover, findings indicated the degree of nurses' perception of managers' accomplishment of competitive advantage according to their implementation of benchmarking. As the statistical analysis indicated that, managers implement benchmarking for accomplishing competitive advantage with a coefficient of determination ($R^2 = 0.743$) and the degree of effect ($\beta = 0.862$), which means that 0.743 of competitive advantage accomplishment results from the implementation of benchmarking. Also, findings highlighted the degree of nurses flourishing according to their managers' implementation of benchmarking. As the statistical analysis indicated that, managers' implementation of benchmarking leads to the flourishing of staff with a coefficient of determination ($R^2 = 0.286$), and the degree of effect ($\beta = 0.535$), which means that 0.535 of nurses flourishing related to the implementation of benchmarking. Concerning the degree of nurses' perception of managers' accomplishment of competitive advantage according to their implementation of benchmarking stages. As the statistical analysis indicated, managers' implementation of benchmarking stages leads to the accomplishment of a competitive advantage except for the analysis stage of benchmarking. As the degree of effect for planning is ($\beta = .189$), for integration is ($\beta = .356$), for implementation is ($\beta = .232$), and maturity is ($\beta = .231$). While for analysis is ($\beta = -.063$). This ensuring that competitive advantage accomplishment is a result of benchmarking implementation. Regarding the degree of nurses' flourishing and implementation of benchmarking stages, findings referred to that both Analysis, and Implementation stages of benchmarking were the significant predictors of nurses' flourishing, ($\beta = .353$) for Analysis, and ($\beta = .239$) for implementation.

Previous findings could be related to that the hospital staff is involved in the hospital different processes, and the working team is on board with what they need to do, when they need to do it and how giving everyone a seat at the table and letting their voices be heard, which help to encourage and foster creativity (Fallon, 2021). On the same line, Buhlman, (2016) reported that to achieve and sustain a competitive advantage, hospital managers must understand and respond to what influences effective nursing practice as a critical component of high-value care and an essential driver of the health system success. In their study (Bakker, Sanz-Vergel, 2013) predicted that personal resources would particularly have a positive effect on flourishing when emotional demands would be high. Also, they predicted that work pressure would act as a hindrance demand so that personal resources would only be positively related to flourishing if work pressure would be low. The findings reveal that positive self-beliefs foster nurses' flourishing, particularly when emotional demands are high and when work pressure is low. In such interventions, the work environment is optimized at the individual level, and coaching is tailored to individual needs feedback about one's resources and engagement.

Conclusions

Based on study findings, it can be concluded that: nurses have a high mean score of perception regarding benchmarking implementation by hospital managers. Moreover, have a high mean score of the implementation of the benchmarking stages by hospital managers, as it was found that the planning stage has the highest mean score of application followed by the analysis stage, and the integration stage, while both the implementation and maturity stage of benchmarking implementation have the lowest mean scores. A high mean score of nurses' perception regarding the hospital managers' accomplishment of competitive advantage, also, nurses have high flourishing scores. Hence, there is a statistically significant correlation between managers' implementation of benchmarking and their accomplishment of competitive advantage as seen by nurses, and

nurses' flourishing. Also, all benchmarking stages were positively correlated with both variables (accomplishment of competitive advantage, and nurses flourishing).

Implications for Nursing Management

Based on the findings of the present study, the following recommendations were suggested:

- Hospital managers should continuously make analytical processes as a stage of benchmark comparison due to their importance in the improvement processes, which leads to achieving superior competitiveness.
- Hospital management should take care of the implementation and maturity stages of benchmarking implementation since they contribute to achieving superior competitive advantage.
- Adopting the best methods in executing the benchmarking comparison with considering the procedures that aim at making a change in the execution since it contributes to achieving superior competitiveness.
- Benchmarking should be applied across all operations all over the hospital to achieve maximum benefit; it will ultimately lead to superior competitive advantage and enable operations to become more successful and flourish the working staff.
- Engaging staff in critical and creative reflective activities has the potential to crack open to what is often unsaid about the value placed on being with others in relationships and interaction patterns that make people happy and flourish in the workplace.
- Hospitals to achieve maximum competitive advantage through service differentiation, ought to improve their services especially the availability of reservation/advanced booking to manage demand. offering a limited range of treatment, or adding other services. accessibility to the hospital in terms of a courtesy bus for patients, and designated parking for patients, and conducting research to determine patient needs, wants and satisfaction levels.

- A recommendation for further research includes the expansion of the study to other contexts, both from a cross-sectional and a longitudinal. This will enable generalization toward a larger population. Studies should also assess additional antecedents and outcomes related to workplace flourishing

Conflicts of interest disclosure

The author declares that she has no conflicts of interest.

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