Effect of Authentic Leadership Educational Program for Head Nurses on Staff Nurses' Organizational Commitment

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Received January 22, 2019, accepted March 3, 2019.
doi: 10.47104/ebnrojs3.v1i2.88

ABSTRACT

Context: Authentic leadership is required to build trust and achieving positive organizational outcomes. Organizational commitment acts as one of the outcomes of authentic leadership. Head nurses, as leaders can use an authentic leadership style that positively influence staff nurses and increase their organizational commitment.

Aim: The present study aimed to examine the effect of authentic leadership educational program for head nurses on staff nurses' organizational commitment.

Methods: A quasi-experimental research design utilized to achieve the aim of the current study. The study was conducted in all inpatients units at Benha University Hospital, Egypt. Subjects included all available (32) head nurses and a purposive sample of (120) staff nurses who were working in the setting that mentioned above. Three tools were utilized for data collection namely; authentic leadership knowledge self-assessment questionnaire, authentic leadership attitude self-assessment questionnaire, and organizational commitment assessment questionnaire.

Results: There was a statistically significant correlational improvement in both the studied head nurses' knowledge and attitude regarding authentic leadership after implementation of the program. Besides, there was a statistically significant improvement of the studied staff nurses' organizational commitment after implementation of the program. Also, there was a highly statistically significant correlation (P-value<0.001) between the studied head nurses' knowledge and attitude regarding authentic leadership and the studied staff nurses' organizational commitment post-program.

Conclusion: The study concluded that there was a positive effect of the authentic leadership educational program for head nurses on the staff nurses' organizational commitment. The study recommended that an authentic leadership educational program should be recognized and implemented for all head nurses and whom in a management position in the nursing field in other hospitals as needed. Hospital and Nursing administrators should do their best for keeping and enhancing staff nurses' organizational commitment.

Keywords: Authentic leadership, educational program, head nurses, organizational commitment, staff nurses

1. Introduction

The leadership styles were recognized by scholars in support of the development of the nurse manager includes transformational, servant, situational, coaching, caring and authentic leadership styles. Although, this list is not all inclusive, these concepts relate to the core of nursing theories and concepts. Leadership style should promote inter professional collaboration, transform the team, inspire them to want to do more, and support innovative ideas *(Schmidt, 2013).* One of the most important roles of a nurse leader is to help practicing nurses re-engage in the soul of nursing. The nursing leader must consider strategies to put in place that will result in increasing morale, retention, and commitment *(Linette & Sherman, 2014).* Nurse leaders are the connection between strategic priorities and front-line implementation *(Infantino, 2016)* there is an increase in workloads at healthcare facilities. In turn, it has a negative impact on the provision of quality care for patients *(Masselink & Lee, 2010).* For elevating apprehensions to health care organizations, nursing leadership should involve potentiation, coordination, and articulation of nursing activities for the delivery of quality care. Nurse leaders play an essential role in promoting supportive structures for daily professional practice with the capacity to adapt innovations and improvements that will promote positive nurse, patient, and organizational outcomes *(Labrague, McEnroePetitte, Leocadio, Van Bogaert, & Tsaras, 2018).* Walumbwa defined authentic leadership as "a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development" *(Sagnak & Kuruoz, 2017).*

Authentic means the behavior that displays and encourages positive mental dimensions and a principled climate that cultivates self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency *(Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010).* Authentic leadership is a

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relatively new concept and, as such, become a growing phenomenon of interest among nursing researchers *Wong, Laschinger, and Cummings, (2010); Bennett, (2015)*, appointed to a new construct of authentic leadership, has emerged, which refers to the cultivation of positive self-development by encouraging greater self-awareness and restrained positive behaviors to the leader and his/her followers.

Components of authentic leadership generally considered to be composed of self-awareness, balanced processing of information, and relational transparency. Self-awareness refers to recognizing and believing one's motives, emotions, desires, and any information related to oneself. Balanced processing of information whether the information is positive or negative, it is about collecting and interpreting all information related to the self without any prejudice, and relational transparency refers to displaying one's true self; it involves leaders sharing information *(Choi & Cho, 2013; Walumbwa et al., 2010).*

Authentic leaders are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspectives, knowledge, and strengths. Authentic leaders also are aware of the context in which they work, and are confident, hopeful, optimistic, resilient, and of high moral character.

Authentic leaders guided by a set of ultimate values that represent an orientation toward doing what is right for those on their team *(Shapira-Lishchinsky, 2014).* Authentic leaders are gaining insight into the self through exposure to others and being aware of one's impact on other people. *(Sherman, 2017).*

Authentic leadership focuses on the development of the leader based on the role of self-awareness *(George, 2016).* Authentic leaders focus on follower development toward a growing evidence that authentic leadership is most desirable and practical for leading human beings and achieving positive outcomes in organizations. When organizational leaders act upon their actual values, beliefs, and strengths to help followers, there is a higher level of employee well-being, which in turn positively affects follower performance. Authentic leadership highlights the importance of self-awareness and being genuinely true to self and followers *(Registered Nurses' Association of Ontario, 2013).*The need for authentic leadership is to enhance the capacity of nurses to voice their concerns, increase their impetus to fight for their personal and professional rights, and to strategize measures *(Labrague et al., 2018).*

Commitment was defined by the management experts as an attitude or orientation towards the workplace. Staff Maintaining a committed workforce is a definite advantage. Committed nurses provide asset value of stable, dedicated workforce; lower training and development costs; retention of nurses with the knowledge, skills, and abilities that are critical to organizational success; improved organizational image within the community; besides, a committed workforce influences customer loyalty *(Eslami & Gharakhani, 2012).*

Organizational commitment (OC) is the relationship between the organization and their staff. The organizational commitment represents more about how employees feel towards the organization, and it is an effective response to the whole organization *(El hamirad, Faraji, Ramazani, and abadizadeh, 2017)*. Organizational commitment has conceptualized in terms of the strength of staff involvement and identification with an organization *(Chen, 2006).*

Organizational commitment consists of three components: the staff as well as nurses having absolute belief in the objectives and values of the organization, making all efforts necessary for the benefit of the organization, and having a strong desire to continue with that organization. *Luthans (2002) s*tates that organizational commitment is the process by which the members of the organization feel they have a share in the well-being and success of the organization and a type of attitude that reflects the commitment to an organization.

The principles of nursing include care, compassion, communication, courage, competence and commitment *(Royal College of Nursing, 2016).* A nurse must be committed to their passion and purpose and have the type of commitment that turns into perseverance *(Guyton, 2012)*. Staff nurses' organizational commitment has importance due to the crucial role in improving the efficiency of staff nurses, improving staff nurses' efficiency gets through improving working conditions, and staff nurses' integration with the workplace. Besides, it can increase job satisfaction, work performance, and quality of care. However, it can decrease absenteeism, stress, burnout, and turnover intention *(Chen, Wang, & Hou, 2017).*

According to *Meyer and Allen (1996)*, the model of organizational commitment pointed to that commitment includes affective, continuance, and normative dimensions. Affective commitment: This is when employees of an organization identify themselves with the organization and become committed with an emotional bond to the organization and its environment.

This affective commitment includes concepts such as trust, self-identity, and commitment to the organization. Continuance commitment means that the employee feels obliged to stay in an organization so as not to lose years of investment with the idea that their departure would take a heavy toll on an organization. Normative commitment indicated organizational commitment for reasons related to ethical standards and social norms. Therefore, normative commitment may be considered an obligation or necessity because normative commitment perceived as social responsibility *(Dwahan & Mulla, 2012).*

Organizational commitment characterized by three factors. First is a strong belief in and acceptance of the organization's goals and values. Second is a readiness to exert considerable effort on behalf of the organization. The last is a strong desire to remain in the current organization *(Rukh, Shahrukh, & Iqbal, 2018).* Staff nurses' commitment is the situations where staff nurses develop loyalty or commitment to the working place.

Nurses' commitment as an attitude includes a strong desire to stay in the workplace, exert excessive effort for

the hospital, and a strong belief in accepting its values and goals. So, it refers to the links between the workplace and the staff *(Zein Eldin & Abdel Rahman, 2013).* Organizational commitment is the corresponding strength of an individual's identification with and involvement in a particular organization. Committed nurses tend to believe in the purpose and importance of the organization, work hard for the organization, and expect to stay with the organization *(Smithikrai, & Suwannadet, 2018).*

2. Significance of the Study

Head nurses are nurse managers who consider a key for achieving organizational goals in every unit inside the hospitals *(Infantino, 2016)*. Population growth resulting in a greater need for health care services *(Sigma, 2018).* Staff nurses are the back bone of nursing care in any health organization. The focus of the 21st century will be on the art of caring in nursing *(Adams, 2016).* The most significant investment that can result in the delivery of quality patient care is the development of current and future nurse leaders (head nurses) *(Weber, Ward, & Walsh, 2015).*

The cost of an unqualified head nurse can be quantified by estimating the cost of losing a nurse' organizational commitment. Leadership is one of the significant core components for organizational sustainability in the competitive world. The organizational deterioration and long-term success of organizations have been linked to influence the prevailing leadership styles. Suitable leadership style is an important for nurses' lives that can have an effect on satisfaction, quality of care, retention which increases commitment to the organization *(Ahluwalia, & Preet, 2017).*

Leadership development programs for head nurses are often necessary. When nurse managers and leaders are not fully prepared to take on the task of managing a unit or a nursing the results can lead to high turnover of staff nurses and poor patient satisfaction due to lack of organizational commitment so continuous education and training opportunities for head nurses is very important. The study of authentic leadership for head nurses and their effect on various organizational aspects as on staff nurses' organizational commitment was not conducted before at Benha university hospital, Egypt. So, the current study was conducted aimed to examine the effect of authentic leadership education program for head nurses on staff nurses' organizational commitment.

3. Aim of the study

The present study aimed to examine the effect of authentic leadership education program for head nurses on staff nurses' organizational commitment.

3.1. Research hypotheses

The study supposed the following hypotheses

- The head nurses' knowledge regarding the authentic leadership will be improved after the implementation of the educational program about authentic leadership compared to their pre-intervention level.
- The head nurses' attitude regarding authentic leadership will be favorable compared to their pre-intervention level.
- Staff nurses' commitment level will be improved after implementation of the head nurses' authentic leadership educational program compared to the pre-intervention level.
- There will be a significant correlation between the staff nurses' commitment and head nurses' authentic leadership style

4. Subjects & Methods

4.1. Research design

A quasi-experimental design utilized to conduct the current study. A quasi-experimental is an empirical interventional study used to estimate the causal effect of an intervention on target population without random assignment *(Di Ninardo, 2008).*

4.2. Research Setting

The current study conducted at Benha University Hospital. In inpatients Units (32 units) that include (9 Critical Care Units and 23 non-Critical Care Units). Critical Care Units were "General intensive care unit (ICU), cardiac care unit (CCU), cardiothoracic ICU, chest ICU, hepatic ICU, emergency ICU, pediatric ICU, pediatric dialysis unit, and general dialysis unit." Inpatients non-critical care units include Obstetrics Unit, Female surgery Unit, Male Surgery Unit, Uro-surgery Unit, ENT-Unit, Emergency care unit, Neurosurgery Unit, Ophthalmology Unit, Dermatology Unit, Rheumatoid Unit, and Neuro-Psychiatric Unit. Besides, 6 Medical units, Chest Unit, Three Pediatric Care Units, Cardiothoracic Care Unit, and Intermediate medical care unit.

4.3. Subjects

Two groups of subjects (head nurses and staff nurses) were included in the study.

First group: All available (32) head nurses who were working in a previous mentioned setting and who met the folloing inclusion criteria:

- Head nurses with at least one year of experience in their current position.
- Head nurses who did not participate in a previous training course or program about authentic leadership.

Second group: Staff nurses (120) who met the following inclusion criteria

- Staff nurses with at least five years of job experience.

Sample type: Purposive sample

Sample size: was calculated based on the following equation:

$$n = \frac{N}{1 + N(e)^2}$$

- Where "n" was sample size n=120
- N was the total number of nurses. N=414
- e was coefficient factor = 0.005*(Yamane, 1967).*

4.4. Tools of the study

Data for the present study collected by using the following three tools:

4.4.1. Authentic Leadership Knowledge Self-Assessment Questionnaire

This questionnaire developed by the researchers based on the review of the related literature *Meyer and Allen, (1996); Dwahan and Mulla, (2012); Walumbwa, Avolio, Gardner, Wernsing, and Peterson, (2008)* to assess head nurses' knowledge level regarding authentic leadership through the program. It divided into two parts.

Part one includes personal characteristics of head nurses as; age, sex, level of education, and experience years.

Part two includes the authentic leadership knowledge self-assessment questionnaire. It consists of twenty multiple-choice questions that grouped under the main four dimensions as the following: Concepts related to authentic leadership (5 questions), basic components of authentic leadership (5 questions), qualities necessary for authentic leaders (5 questions), and importance of authentic leadership in the organization (5 questions).

Each question granted, one grade was given for a correct answer, and zero if the answer was incorrect. A Subtotal score for each sheet calculated, and a total score was considered by summing up the grades of the sheets. The maximum possible total score was 20. The total scores converted into percentages. The total level of knowledge considered satisfactory if the percent score was 60% or more and unsatisfactory if less than 60%.

4.4.2. Authentic Leadership Attitude Self-Assessment Questionnaire

This questionnaire adopted from *Walumbwa et al. (2008)*. This tool aimed to assess the head nurse's attitude regarding authentic leadership. It consisted of 16 items that grouped under four dimensions as the following: Self-awareness includes (4 items) as" I can list my greatest strengths." An internalized moral perspective includes (4 items) as "My actions reflect my core values." Balanced processing includes (4 items) as "I listen very carefully to the ideas of others before making decisions" and relational transparency includes (4 items) as "I openly share my feelings with others."

Scoring system

Head nurses' responses measured on a five points Likert Scale ranging from (1) strongly disagree to (5) strongly agree. Total scores of an attitude of studied head nurses regarding authentic leadership classified as follow; negative <60%, positive 60-75%, and highly positive >75%.

4.4.3. Organizational Commitment Assessment Questionnaire

This tool was developed by *Meyer and Allen (1996).* This tool aimed to assess the staff nurse's organizational commitment level. It consisted of two parts:

First part included personal characteristics of staff nurses as age, educational qualification, and years of experience.

The second part consists of 18 statements that categorized under three dimensions namely; affective commitment (6 statements) as "The organization has a great deal of personal meaning for me," continuance commitment (6 statements) as "I am dedicated to this organization because I fear what I have to lose in it" and normative commitment (6 statements) as "My organization deserves my loyalty because of its treatment towards me."

Scoring system

Staff nurses' responses (answers) measured on a five points Likert Scale that ranging from (1) strongly disagree to (5) strongly agree. The Total scores of studied staff nurses regarding their organizational commitment classified as the following: Low <60%, moderate 60-75%, and high >75% *(Khalil & Abd Elrahman, 2019).*

4.5. Procedures

The study executed according to the following steps. Contents of data collection tools tested for its validity by a jury of five academic staff (professors) in nursing administration from different faculties of nursing in Egypt namely; Benha faculty of nursing, Ain shams faculty of nursing, El Monofia faculty of nursing, Zagazig faculty of nursing and Helwan faculty of nursing. The validity of the tools aimed to judge its clarity, simplicity, accuracy, comprehensiveness, and relevance. All items were reviewed and accepted by the jury committee.

Cronbach's Alpha coefficient test did reliability. The reliability results were as the following: Self-administer authentic leadership knowledge assessment questionnaire was (0.915). The authentic leadership attitude (self-assessment) questionnaire was (0.995). The organizational commitment questionnaire was (0.967).

Official permission obtained from authorities of Benha University Hospital to collect the necessary data for this study from inpatient units that studied head nurses and staff nurses were working in it during the time of implementing this study after explaining its purposes.

A pilot study was carried out on 10% of study subjects that included (3 head nurses and 12 staff nurses) before starting the actual data collection to ascertain the clarity and applicability of the study tools and the feasibility of the research process. It also needed to estimate the time necessary to fill in three tools of data collection. Based on the pilot study, the analysis accordingly was done. The pilot study, participants included in the study because no modification was done in the study tools.

The agreements of studied subjects (head nurses and staff nurses) for the participation in the study were taken after the aim of the study was explained to them before the data collection, they were allowed to refuse to participate, and they could withdraw at any time of the research. Besides, they assured that the information would remain confidential and utilized for scientific research purposes only.

Field work: The study was carried out from the beginning of October 2017 to the end of November 2018 as the following sequence:

Pre-implementation phase: It carried out from the beginning of October 2017 to the mid of November 2017. Preparation of tools for data collection and the teaching sessions for authentic leadership program based on a review of national and international related literature using journals, textbooks, internet, and theoretical knowledge of the various aspects concerning the topic of the study.

The contents of the program include the following:

- Concepts and components of authentic leadership and its importance for nursing staff.
- Qualities necessary for authentic leaders as (thinking out of the box, emotional intelligence at work, building rapport, coaching and using feedback powerfully, empowering individuals and teams, and creating secure connections with others).
- Authentic leadership skills as (effective communication, active listening, sufficient motivation, negotiation, and problem-solving).
- Role and responsibilities of head nurses as authentic leaders in high-performance building teams.
- Authentic leadership styles, power, and building trust
- Ethics for the sustainable success of the authentic leader.

Implementation phase (intervention): This phase carried out through the following sequence:

Frist: head nurses divided into three small groups; each group included 10 or 11 head nurses). The preprogram tests carried out from the mid of November 2017 to the mid of December 2017. In the beginning, the preprogram tests were fulfilled by the studied head nurses and staff nurses before the beginning of the program. An authentic leadership knowledge self-administer questionnaire took from 10–15 minutes to be completed, and authentic leadership attitude self-administer questionnaire took from 10–15 minutes to be completed by head nurses.

Besides, the organizational commitment questionnaire took about 10–15 minutes to be completed by the staff nurses. This preprogram test conducted to allow the researchers to collect a baseline assessment of studied head nurses regarding their authentic leadership knowledge and attitudes. Also, staff nurses' organizational commitment level assessed in order to compare the findings with and follow-up program tests. The data collected four days/week in the morning and afternoon shifts.

Second: Implementation of the program sessions after the questionnaires completed, the researchers (according to the available time) implemented the program for studied head nurses. The time plan for the program implementation takes the period from the mid of December 2017 to the end of January of 2018. The program was Taken 12 hours for each group that distributed as the following: 6 sessions, 2 hour/session, three days/week in the morning, or afternoon shift. At the beginning of the program sessions, an orientation to the program and its purpose took place.

The head nurses informed about the time and place of sessions that were carried out at the newly established training center or available suitable setting according to collaboration between nursing directors, researchers, and studied head nurses. Each session started by setting objectives and an overview of the new topic. At the end of each session, the head nurses' questions discussed and answered to ensure understanding. The same teaching strategies, available resources, relevant content, and instructional strategies for each session utilized to implement the program by the researchers according to their collaboration. Methods of teaching used like the following: Lecture, group discussion, role-play, and brainstorming. Teaching and instructional media included the following; hand out, and PowerPoint presentation.

Evaluation phase (post and follow up program evaluation): During this phase, the effect of the educational program was evaluated; by using the same format of tools used before the program implementation. This phase conducted at the following sequence:

The post-program test carried out after six months of program implementation and took one month started from the end of July 2018 to the end of August 2018.

Follow up program test carried out after nine months of program implementation and took one month started from the end of October 2018 to the end of November 2018.

4.6. Data analysis

The collected data organized, tabulated, and statistically analyzed using statistical package for social science (SPSS) version 25 for windows, running on IBM compatible computer. Descriptive statistics applied (e.g., frequency, percentages, mean, and standard deviation). Test of significance, Chi-square "X^2," and correlation coefficient (r) used. A significant level value considered when $p < 0.05$ and a highly significant level value considered when $p < 0.001$. No statistically significant difference considered when $p > 0.5$.

5. Results

Table 1 shows that the total number of head nurses were 32; staff nurses were 120. Regarding their age, more than half of both of them aged 25-<35years, and the majority of both of them were females (91%, 84.2%) for head nurses and staff nurses, respectively. Regarding their years of experience 50% of the head, nurses had 15-<25years of experience while 45.0% of staff nurses had 5-<15years of experience. Regarding their qualifications, 50.0% of head nurses had bachelor's degrees and 61.6% of staff nurses had a bachelor's degree in nursing.

Table 2 clarifies that there was a highly statistically significant improvement at (P-value ≤0.001) of total knowledge of authentic leadership through the educational program phases. Also, the majority (97%) of studied head nurses have a satisfactory level of their total knowledge regarding authentic leadership post the educational program compared to 19% before implementation and 78% at the follow up with a statistically significant difference between the three phases of the program.

Table 3 clarifies that there was a highly statistically significant improvement of studied head nurses' total attitude regarding authentic leadership through the educational program. Regarding authentic leadership attitude dimensions, there was a highly statistically significant improvement at (p ≤0.001) related to relational transparency dimension pre. Post and follow up. A highly statistically significant improvement for self-awareness, and balanced processing pre and post (at p<0.001), and statistically significant improvement between pre and follow up (at p <0.05) as reported by studied head nurses.

Figure 1 illustrates that there was high improvement in level of head nurses' attitude regarding authentic where 86%, 63% of them had a high-level post and nine months follow up the program respectively compared to preprogram scores (9%).

Table 4 clarifies that there was a statistically significant improvement (P ≤0.05) of the mean and standard deviation of total organizational commitment among studied staff nurses thorough the educational program phases. Regarding the dimensions of the organizational commitment, the highest mean was 28.59±5.13 regarding normative commitment immediate post-program, and the lowest mean was regarding the continuance commitment 22.84±3.6 as reported by studied staff nurses.

Table 5 shows that there was a highly positive statistically significant correlation at (p-value <0.01) between staff n1urses' organizational commitment and head nurses` total authentic leadership knowledge and attitude pre, immediately post, and follow up program.

Table 6 reveals a highly positive statistically significant correlation (p-value ≤0.001) between the studied head nurses' personal characteristics (age, years of experience, and educational level) and head nurses' authentic leadership attitude and there was highly positive statistically significant correlation (p-value ≤0.001) between the studied staff nurses' personal characteristics (age, years of experience, and educational level) and staff nurses' organizational commitment.

Table (1): Frequency and percentage distribution of the studied participants' personal characteristics.

Personal characteristics	Head nurses (32)		Staff nurses (120)	
	No	%	No	%
Age in years				
< 25	4	12.5	22	18.3
25-<35	22	68.7	68	56.7
35 -<45	6	18.8	30	25.0
Mean ±SD	31.67±5.12		27.54±4.87	
Sex				
Male	3	9.0	19	15.8
Female	29	91.0	101	84.2
Years of experience of the current job				
1-<5	4	12.0	0	0
5-< 15	8	25.0	54	45.0
15-<25	16	50.0	26	21.6
≥ 25	4	12.5	40	33.4
Mean ±SD	22.85±5.84		14.27±6.12	
Nursing qualification				
Diploma degree	5	15.6	0	0
Associated degree	7	21.9	46	38.4
Bachelor's degree	16	50.0	74	61.6
Master's degree	4	12.5	0	00.0

**(n1=32&n2=120) (n1 are head nurses&n2 are staff nurses)*

Table (2): Comparison of the studied head nurses' knowledge regarding authentic leadership thorough the educational program phases (n=32).

Authentic leadership knowledge	Pre-program		Post-Program		Follow up-Program		$(X^2)1$	$(X^2)2$	P1 Pre & post	P 2 pre & follow
	No.	%	No.	%	No.	%				
Concepts related to authentic leadership (5 items)										
Incorrect	24	75	5	16	8	25	27.529	25.767	0.000	0.000
Correct	8	25	27	84	24	75				
Basic components of authentic leadership (5 items)										
Incorrect	23	72	4	13	10	31	24.891	23.219	0.000	0.000
Correct	9	28	28	88	22	69				
Qualities necessary for authentic leaders (5 items)										
Incorrect	25	78	8	25	9	28	23.111	20.418	0.000	0.000
Correct	7	22	24	75	23	72				
Importance of authentic leadership in the organization (5 items)										
Incorrect	25	78	4	13	6	19	36.242	33.659	0.000	0.000
Correct	7	22	28	88	26	81				
Total knowledge										
Unsatisfactory	26	81	1	3	7	22	46.543	42.885	0.000	0.000
Satisfactory	6	19	31	97	25	78				

**A highly statistically significant difference ($P \leq 0.001$) * statistically significant difference ($P \leq 0.05$). $(X^2)1$: pre & post-($X^2)2$: pre & follow up

Table (3): Comparison of head nurses' attitudes regarding authentic leadership dimensions thorough the educational program (n= 32).

Authentic leadership attitude dimensions	Pre-program Mean±SD	Post-program Mean±SD	Follow up program Mean±SD	t-test 1*	p-value 1	t-test 2	p-value 2
Self-awareness	7.075±4.1	19.025±2.108	16.835±3.5	7.851	0.001	13.905	0.002
Internalized moral perspective	7.375±4.1	19.535±1.01	17.45±3.64	8.047	0.001	15.791	0.000
Balanced processing	6.785±4.36	19.625±0.79	17.905±3.4	8.833	0.00	16.852	0.040
Relational transparency	7.075±4.2	19.435±0.913	17.565±4.02	8.002	0.001	16.620	0.001
Total	28.315±16.6	77.625±3.317	69.75±13.879	8.338	0.040	16.394	0.001

**T-Test 1: pre & post, T-Test 2: pre & follow up*

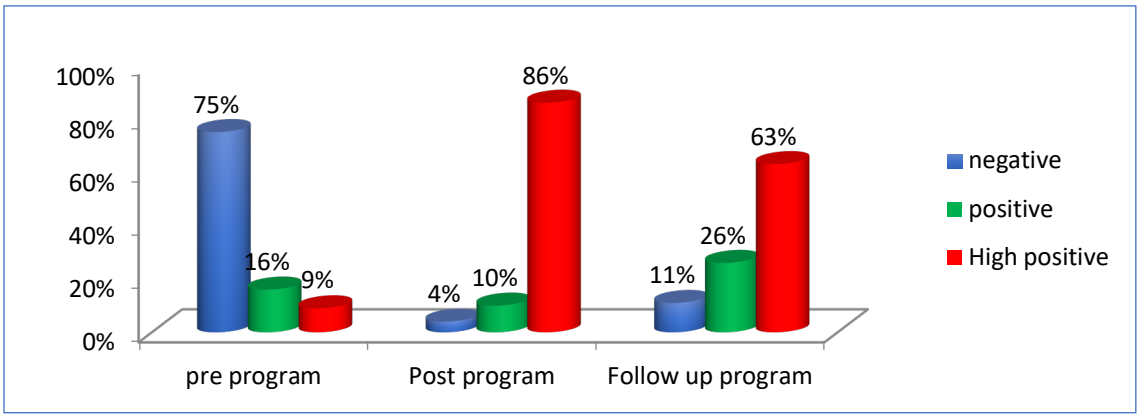

Figure (1): Total levels of studied head nurses' attitude regarding authentic leadership thorough program (n= 32).

Table (4) Comparison of studied staff nurses' organizational commitment dimensions thorough the educational program phases (n= 120).

Organizational Commitment	Pre-program Mean ± SD	Post-program Mean ± SD	Follow-up program Mean ± SD	T-test 1*	P value	T-test 2	P-value
Affective Commitment	8.408±3.9	27.50±4.66	22.7±4.43	33.62	0.000	26.36	0.010
Continuance Commitment	8.633±3.9	22.84±3.6	18.69±4.44	26.52	0.000	26.52	0.040
Normative Commitment	9.025±4.2	28.59±5.13	24.57±3.42	31.83	0.000	29.40	0.014
Total	26. 6±11.3	78.94±11.5	70±9.32	34.09	0.000	33.28	0.045

* *T-Test 1: pre & post.T-Test 2: pre & follow up*

Table (5): Correlations between studied head nurses' total authentic leadership (knowledge & attitude) and staff nurses' organizational commitment through the different three phases of the educational program.

Head nurses' authentic leadership at different times of assessment		Total organizational commitment Pre	Total organizational commitment post	Total organizational commitment Follow up
Total knowledge pre	r	0.240	0.123	0.42
	P value	0.000	0.000	0.000
Total knowledge post	r	0.327	0.138	0.118
	P value	0.000	0.000	0.000
Total knowledge follows up.	r	0.213	0.215	0.286
	P value	0.000	0.000	0.000
Total attitude pre	r	0.199	0.11	0.299
	P value	0.000	0.000	0.000
Total attitude post	r	0.273	0.225	0.526
	P value	0.000	0.000	0.000
Total attitude follow up	r	0.168	0.179	0.339
	P value	0.000	0.000	0.000

** Correlation is significant at ≤ 0.05 level (2-tailed). ** Correlation is highly significant at ≤ 0.01 level (2-tailed).*

Table (6): Correlation between personal characteristics and studied head nurses' authentic leadership attitude and studied staff nurses' organizational commitment.

Personal characteristics	Authentic leadership attitude among head nurses		Staff nurses' organizational commitment	
	r	P value	r	P value
Age in years	0.499	0.000	0.321	0.000
Years of experience	0. 265	0.000	0.477	0.000
Nursing Qualification	0.512	0.000	0.574	0.000

** Correlation is significant at ≤ 0.05 level (2-tailed). ** Correlation is highly significant at ≤ 0.01 level (2-tailed).*

6. Discussion

Verdict the expected organizational context of optimism, organizations turn towards the leadership and the role of leader. So, the organization tries to test and implement new types of leadership. One of them is authentic leadership that has a positive impact on an individual's commitment toward the organization *(Walumbwa et al., 2008)*. The authentic leaders took as a role model of integrity, transparency, authenticity, and character, and they give direction to the employees and explain the meaning to the employee's work and their lives *(Gardne, Avolio, Luthans, May, &Walumbwa, 2005)*. The individuals would be more committed toward achieving their goals and objectives if they perceived a high level of leader's authenticity *(Gardne et al., 2005).*

The study began by seeking an understanding of who the participants are, personal data collected, such as the age, gender, level of education, and the years of experience. The results of the present study indicated that the total number of head nurses was twenty-three and staff nurses were one hundred twenty. Concerning their age, more than half of both of them aged from 25 to less than 35 years old. Moreover, the majority of both of them were females. Regarding their years of experience, half of the head nurses had from 15 to less than 25 years of experience, while near half of staff nurses had from 5 to less than 15 years of experience. Concerning their qualifications, half of the head nurses had a bachelor's degree, and more than half of staff nurses had a bachelor's degree in nursing.

Concerning head nurses' knowledge regarding authentic leadership, the result of the present study revealed that The majority of head nurses have an adequate level of their total knowledge regarding authentic leadership post educational program compared to the lowest percentage before implementation and the follow-up, with a statistically significant difference between the three phases of the program; pre, post, and follow up the program. This finding might be attributed to the ability of head nurses to gain knowledge quickly, and they were interested in the research topic. Also, the program was successful in improving their knowledge.

In the same line*, Abd Elrahman and Abd Allah, (2018)* reported a general improvement in head nurses' knowledge regarding transformational leadership post-program and after three months follow-up as compared to their pre-program level. These findings are supporting the first research hypothesis.

Regards the head nurses' authentic leadership attitude, the present study clarified a statistically significant improvement of the mean score of head nurses' attitude regarding authentic leadership thorough program phases. The improvement included the dimensions of self-awareness, internalized moral perspective, balanced processing, relational transparency post-program and follow up after the program compared to pre-program scores as reported by head nurses. This improvement could be due to the content of the program applied through a smart technique that encourages all participants to participate in the case study as a model for each dimension while a training program could foster the development of the four dimensions of authentic leadership *(Gardne et al., 2005).*

This finding agrees with *Baron and Parent, (2015*), who studied "The developing authentic leadership within a training context." They reported qualitative support for this four-factor model of authentic leadership. They suggested that the participants noticed marked development in three dimensions of authentic leadership (self-awareness, relational transparency, and balanced treatment of information). In contrast, the development of the fourth dimension, the adoption of an internalized moral perspective, appeared to be more than a moderate level of authentic leadership. Indeed, certain researchers assert that the nature of one's convictions or values cannot be systematically positive and lead to take moral positions *(Shamir & Eilam, 2005; Sparrowe, 2005).*

In this sense, the results fuel such criticism by suggesting that individuals may develop self-awareness, become more transparent in their relations with others, and show greater openness to differing perspectives on oneself and one's position, all without necessarily making decisions or undertaking actions based on personal standards or moral values. Further investigation will be needed to confirm whether the model can be generalized to other settings and other participants. On the other hand, this finding was in disagreement with *Tanafranca, (2018),* who conducted study entitles "Evidence-based authentic leadership training." They reported that no statistical significance noted with self-awareness and other components of authentic leadership pre and post-training/intervention. Also, *Rego, Lopes, and Nascimento (2016)* found that the average value obtained by authentic leadership as a global construct and by its four dimensions is slightly below the midpoint of the range.

Moreover, this disagreement could be related to the authentic leadership training programs is essential and interest point of research in their homeland, but in Egypt, the authentic leadership considers a new trend in Egyptian nurses' culture. Because research on authentic leadership theory is still in its infancy, *(Cooper, Scandura, & Schriesheim, 2005)***,** had asserted that scholars in this area need to give careful attention to four critical issues including ascertaining whether authentic leadership can be taught. These findings were supporting the second research hypothesis.

Regarding staff nurses' organizational commitment, the present study clarified that there was a statistically significant improvement of the mean and standard deviation of organizational commitment among staff nurses. This improvement may be due to the high effect of our authentic leadership program that causes a change in head nurses' knowledge and behavior when dealing with staff nurses. Additionally, this could influence performance and absenteeism *(Rego et al., 2016).* Furthermore, it is crucial to distinguish between the self-awareness of the managers' characteristics and the perceptions of the leaders' characteristics of their followers *(Gill, Gardner, Claeys, & Vangronsvelt, 2018).*

The present study seeks to fill the gap by exploring affective commitment, continuance commitment, and normative commitment. The highest mean score reported was related to normative commitment, while the lowest mean score was related to affective commitment pre-program. It was processed and tested post-program and follow up, which all illustrated a statistically significant improvement of the mean score of organizational commitment among nurses' overall. It could enhance the relationships and consistency between staff nurses` organizational commitment and the authentic leadership style for head nurses.

Lorber and Savič, (2014) conducted a study about "Factors affecting nurses' organizational commitment in Slovenian hospitals" and found that the level of commitment among staff nurses was high to medium. Moreover, *Nasiripour, Raeissi, Omrani, Khosravizadeh, and Alirezaei, (2015)* displayed a relationship between nurses' organizational commitment and service quality. They also mentioned that the nurses' organizational commitment was moderate. These findings are supporting the third research hypothesis.

The present study clarified that there was a positive, statistically significant correlation between the total head nurses' authentic leadership and staff nurses' organizational commitment through the program. It may be due to the focus of the program on the authentic leadership dimension of self-awareness, relational transparency, and balanced treatment of information. Also, in the researchers' opinion, knowledge acquisition, and having a knowledge base is an essential requisite for improving attitude. Therefore, authentic leadership programs improved staff nurses' knowledge, and accordingly, their attitude improved.

In the same line*, Smith (2018)* perceived that authentic leadership of managers was associated with an increase in reported affective and normative commitment and a decrease in staff nurses' continuance commitment. This finding also aligns with the findings by *Walumbwa et al. (2008),* who mentioned that authentic leadership related to increased overall organizational commitment or affective commitment individually. This finding addresses a gap in the literature and expands our understanding of how authentic leadership influences the three components of commitment individually in nursing. The role played by an authentic leader in increasing affective and normative commitment is essential, as these commitment components are associated with other positive outcomes related to work performance and productivity.

The results of *Rego et al. (2016)* agreed with our findings, which are consistent with *Walumbwa et al. (2008)*, who appointed that authentic leadership influences organizational commitment. Taking into account of the results obtained by the confirmatory analysis of organizational commitment that suggests a profile of affective commitment / dominant normative commitment, the authentic leadership also influences the normative dimension. Also, consistent with *Kate Yeboah-Appiagyei, Addai Emmanuel Kyeremeh, Enyonam Peace Amoako, and Joseph Osei-Tutu, 2018),* who reported that a positive relationship between authentic leadership and organizational commitment. It implied that an increase in a leader's authentic characteristic behavior would translate

into an improvement in organizational commitment. Thus, employees who are led by authentic leaders are more likely to be committed to their organization. It also means that when individuals within organizations establish that their leader is sensitive to their grievances, trustworthy, and thus very supportive, they responded by showing more commitment.

Previous researchers like, *Walumbwa et al. (2008),* showed that authentic leadership has a direct and significant effect on organizational commitment, gives evidence to this study. These findings are supporting the fourth research hypothesis as authentic leadership could positively affect the behaviors and attitudes of nurses *(Ilies, Morgeson, & Nahrgang, 2005).* It also postulated that it could influence developing commitment, organizational citizenship behaviors, and performance. Authentic leadership causes followers to feel more committed to achieving the goals and objectives that have set, given their degree of perceived authenticity *(Kernis, 2003; Kernis & Goldman, 2005).* Followers will get to know, appreciate, and admire their leader's, oneself wants, needs, and desires, as well as their role–position as a leader and thus as a representative spokesperson for the overall organization (social identification).

Furthermore, *Smith, (2018)* illustrated that the relationships among the main study variables reported that authentic leadership significantly correlated with affective, normative, and continuance commitment, all of which are consistent with previous research on leadership and commitment.

The present study revealed that there was a positive statistically significant correlation between ages, years of experience, and educational level for head nurse's authentic leadership and staff nurses' organizational commitment. This finding might be due to that the longer an individual has worked for an organization, the more committed they will feel. Also, more experienced nurses may have developed higher degrees of judgment towards their work and management, which may influence their perceptions of leadership.

On the other hand, *Smith, (2018*) reported no significant relationships found between age, years of experience in the organization, and years of experience in the unit, to any of the main study variables (authentic leadership, affective commitment, normative commitment, continuance commitment, and job turnover intentions).

7. Conclusion

The current study concluded that the studied head nurses' knowledge level regarding the authentic leadership was improved after the implementation of the authentic leadership educational program compared to their pre-intervention level. Also he head nurses' attitude regarding authentic leadership became favorable compared to their pre-intervention level. In addition staff nurses' commitment level was improved after implementation of the head nurses' authentic leadership educational program compared to the pre-intervention level. And there was a strong positive, statistically significant correlation between head nurses' authentic leadership and staff nurses' organizational commitment after implementation of the program.

8. Recommendations

Based on the findings of the current study, the following recommendations were suggested.

- Authentic leadership educational program should be recognized and implemented for all head nurses and whom in a management position in the nursing field in other hospitals as needed
- Nurse leaders should create a productive working environment that enhances staff commitment.
- Workshop should be conducted to all head nurses to increase their knowledge and competencies regarding the development of their authentic leadership.
- Head nurses must focus on strengthen their authentic leadership behavior
- The concepts of authentic leadership and organizational commitment in other health sectors in other geographical areas should be investigated as needed.
- Further in-depth research is needed to investigate the effect of head nurses' authentic leadership on staff nurses productivity.
- Nursing education must highlight the need for strong leadership competencies due to fulfillment of this need can enhance the capacity of nurses to voice their concerns, increase their impetus to fight for their personal and professional rights and to strategize measures to elevate apprehensions to organizations.

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