Relation between Head Nurses Leadership Skills and Styles and Staff Nurses Teamwork Behaviors

Shimaa Badwey Almamoun [(1)]; Safaa M. Abdelrahman[(2)]; Mona Thabet [(3)]; Amira Mostafa [(4)]

1. B.Sc. Nursing.
2. Professor of Nursing Administration, Faculty of Nursing - Minia University.
3. Assistant Professor of Nursing Administration, Faculty of Nursing –Minia University.
4. Assistant Professor of Nursing Administration, Faculty of Nursing –Minia University.

Abstract

Background: The quality of relationship between supervisors and subordinates as well as leadership of head nurses playing an important role in their subordinates such as teamwork behaviors, job performance and promotions. **The study aimed to** investigate relation between head nurses' leadership skills and styles and staff nurses' teamwork behaviors. **Research design:** A descriptive correlation research design. **Setting:** The study was applied at the Edfu General Hospital. **Sample:** All staff nurses who worked in previous hospital during the period of data collection (no.= 458). **Tools of data collection:** Three tools were used, 1st tool was leadership skills questionnaire, 2nd tool was administrative styles questionnaire, and the 3rd tool was two parts as the first part was demographic data sheet about staff nurses and second part was teamwork behaviors questionnaire. **Results:** reveals that nurses staff's perception about total skills of the leader that their (69.7%) of the leader have moderate level of total skills, also highest mean of the leadership style is team administration then paternalism/ materialism administration, and (72.5%) of nurses have fair level of team work behaviors. **Conclusion:** There were positive relation between leadership skills, their leadership styles and nurses' teamwork behavior except authority-obedience administration. **Recommendations:** Encourage nurses and nurses' managers to receive training programs about team building and team dynamics to enhance their abilities in handling team conflicts and create an atmosphere of coordination, collaboration and team spirit.

Keywords: Leadership Skills, Styles, Staff Nurses Teamwork Behaviors.

Introduction

The complex and multi-faceted nature of modern healthcare requires nursing leadership professionals who can create effective intra-departmental and facility-wide systems of healthcare delivery, while leading a productive and efficient workforce. This allows for optimal patient care in any medical setting, from private hospitals and clinics to large medical centers and veteran's administration hospitals. Nursing administration is a broad term that encompasses nursing professionals who are knowledgeable of leadership practices as they relate to the nursing profession **(Yu-Wen et al., 2024).**

Leadership, since its appearance in literature in the 19th century, has been attributed to quality in education, research and management. The central theme of leadership in health care revolves around the effectiveness of leadership in the improvement of the quality of care, client satisfaction, patient outcomes and financial performance. Nursing requires leaders who are highly creative in their thinking, to be able to piece together multiple pieces of seemingly unrelated information, and test out new approaches in the pursuit of new meaning in support of nursing patient care. It will no longer be about the "nursing leader"; rather it will be about nursing leaders working with other health-related leaders and consumers **(Al-Thawabiya et al., 2023).**

Moreover, nurses' leader have the responsibility to implement all of the nursing procedures in a healthcare environment. While administrators can communicate with patients, they will be more than likely manage a team of nurses who will work on the front lines interacting with the patients who are seen in the facility. As a managerial team member in the nursing department, and administrator, head nurse should ensure that the department is complying with laws and that the department is fully staffed **(Maung, 2024).**

Leadership as a management function is mostly related to human resources and social interaction. It is the process of influencing a group of people towards achieving organizational goals. Leadership is the ability of a manager to influence, motivate, and enable employees to contribute toward organizational success **(Qtait,2023).**

Nurse managers as first-line leaders (head nurses) have a responsibility to induce changes in the clinical environment. Recently, this responsibility of nurse managers has become more important than ever due to demands for rationalization, cost cuttings, advancements in medical technology, and reduced lengths of hospital stay. Moreover, managers can utilize various leadership styles to lead and direct their employees including autocratic, bureaucratic, laissez-faire, charismatic, democratic, participative, transactional, and transformational leadership styles. There are no universal leadership style different leadership styles are needed for different situations. Effective leader must know when to exhibit a particular approach **(Moraca et al., 2024).**

So, the efficient use of leadership styles is an essential ingredient of good leadership skills. Leadership styles are the various combinations of tasks and behaviors which motivate people towards the achievement of set goals. A critical leadership skill is the use of different leadership styles. Leadership styles are a combination of tasks and transaction behaviors that influence people in achieving goals **(Alluhaybi et al., 2024).**

Team usually refers to a small group in which the members have a common purpose, interdependent roles and complementary skills **(Brgoch et al., 2020).** Teamwork has members with complementary skills and generates synergy through a coordinated effort which allows each member to

maximize his strengths and minimize his weaknesses **(Iorhen, 2019).**

Today, the practice of teamwork in the health care has gained in popularity. When nurses function as part of a unit, and when they act as part of a team, the job itself is easier and more efficient. Teamwork can significantly reduce workloads, increase job satisfaction and retention, improve patient satisfaction and improve job performance. Yet, while many caregivers, health professionals, and decision makers are calling for improved teamwork transformation to team-based healthcare **(Monroe et al., 2021).**

So, healthcare organizations enhance the concept of teamwork among its staff to increase the level of productivity and creativity in order to earn competitive advantages and enhance performance. Additionally, the core value of teamwork is the reduction of workload which helps the nurses to perform better without any kind of work pressure because the tasks were distributed equally among all the members of that team. Performance of team affects not just nurses but the organization ultimately, because it can expand the output of individuals through collaboration. Thus, nurses who work in teams become the standard for the organization **(Marques et al., 2020).**

Significance of the study

Head nurses are the important part of administration. The responsibilities of head nurses are to manage the nurses properly in order to stimulate them to provide the best quality of care to the patients. The provision of the supportive leadership can help employee to work cooperatively, retain the employees in the long run, and better health care services can be ensured **(Naseer et al., 2017)**.

Also, enhancing teamwork behaviors, attitudes and perceptions is the first step to ensure safe and quality patient care; in which these behaviors can be developed and enhanced by effective leadership provided from leaders as head nurses. As **Celik, et al. (2019)** found that the nurses' mean scores of attitudes toward general teamwork and their mean scores of team structure, team leadership, situation monitoring, mutual support, and communication subscales were at a good level. **Ali et al., (2020)** found in their study that highest percentage of head nurses had high level for transformational (63%) and transactional style (59.7%); also, more than half (58.8%) of head nurses had high level of leadership behaviors and more than one third (39.9%) had moderate level.

Aim of the Study

The aim of this study is to investigate relation between head nurses leadership skills and styles and staff nurses' teamwork behaviors.

Research Questions:
1. What are the head nurses' leadership skills and styles?
2. What is the staff nurses' teamwork behaviors?
3. Is there a relation between head nurses' leadership skills and styles and staff nurses' teamwork behaviors?

Subject and method
Study Design:

Descriptive correlational research design was utilized to fulfill the aim of this study.

Setting

The study was conducted at Edfu General Hospital, Eduf city in Aswan government, Egypt.

The new Edfu Hospital includes 3 buildings with 170 beds in all specialties and departments, 8 general outpatient clinics and 6 operating rooms to perform surgeries, a dialysis department with 63 dialysis machines, 21 nurseries and 20 intensive care beds, in addition to the completion of administration and recovery housing.

Subjects:

The study subjects included all staff nurses who worked in Edfu General Hospital, during the period of data collection. (no.= 458), and classified as follows.

Department	No of staff nurses
Internal medicine	36
Isolation	15
Outpatient clinics	16
Central sterilization	11
Pediatric	50
Obstetrics and gynecology	33
Dialysis	87
Orthopedic and general surgery	11
Neonatal intensive care unit	48
Intensive care unit	49
Burn	13
Operating room	29
Cardiopulmonary resuscitation	15
Emergency	45
Total	458

Data Collection Tools:

Data were collected through the utilization of three tools as follows:

Tool (I): Leadership Skills Questionnaire

This tool was a self-administered questionnaire filled out by the staff nurses. This tool was adopted from **Northouse (2014)** who modified it based on the work of **Anderson and Prussia (1997)**, and used by the researcher to measure the head nurses' leadership skills from the staff nurse's perception. This questionnaire consisted of 18 items divided into 3 domains (administrative, interpersonal, and conceptual) in which each domain consisted of 6 items. The items' responses were ranged as: 1 (not true), 2 (seldom true), 3 (occasionally true), 4 (somewhat true), and 5 (very true).

Scoring system

Dimension	no. of items	Low	Moderate	High
1- Administrative skill	6	6-13	14-22	23-30
2-Interpersonal skill	6	6-13	14-22	23-30
3 – Conceptual skill	6	6-13	14-22	23-30
Total leadership skills	18	18--42	43-66	67-99

Tool (II): Administrative styles questionnaire:

This tool was a self-administered questionnaire filled out by the staff nurses. It was adopted by **Al-Shudaifat (2015)** based Managerial Grid concept from **Blake and Mouton (1985)**. It was used to measure head nurses' leadership styles. The ASQ was composed of 36 statements, 6 items relating to each of the 6 styles (Caretaker Administration, Authority-Obedience Administration, Comfortable and Pleasant Administration, Constituency-Centered Administration, Team Administration, and Paternalism/ Materialism Administration).

The scale items were assessed by the responses ranging from 1 to 6 as follows: 6 (being the perception of administrator's most frequently observed style), 5 (being second most frequently observed style), 4 (being third most

frequently observed style), 3 (being fourth most frequently observed style), 2 (being fifth most frequently observed style), and 1 (being least observed leadership style).

The scoring system: the head nurses' style was determined according to the higher score of dominant or very dominant column as follows:

Dimension	no. of items	Very dominant	Dominant	Least Preferred	Backup
Caretaker Administration	6	6-13	14-21	22-28	29-36
Authority-Obedience Administration	6	6-13	14-21	22-28	29-36
Comfortable and Pleasant Administration	6	6-13	14-21	22-28	29-36
Constituency-Centered Administration	6	6-13	14-21	22-28	29-36
Team Administration	6	6-13	14-21	22-28	29-36
Paternalism/ Materialism Administration	6	6-13	14-21	22-28	29-36

Tool (III): teamwork behaviors questionnaire; this tool included two parts as follows:

Part one: Demographic data sheet about staff nurses. It included: gender, age, residence, years of experience, years of experience in the current department, marital status, and unit; this part was filled by the staff nurse.

Part two: This tool was developed by the researcher based on the literature **Roosmalen (2012), London Leadership Academy (2020), Carmenado, et al, (2012), Skolnick (2009), and Salas, et al. (2005)** to assess teamwork behaviors among staff nurses such as team structure, team leadership, team situation monitoring, team mutual support and communication, and the team relationship. It consisted of 46 items, the responded from never (1) to always (5).

Scoring system:

Dimension	no. of items	Low	Moderate	High
Team functions	7	7-16	17-26	27-35
My manager practices of team leadership,	8	8-18	19-29	30-40
My role as a leader	5	5-11	12-18	19-25
Situation Monitoring	6	6-13	14-21	22-30
Mutual Support	8	8-18	19-29	30-40
Communication	12	12-27	28-43	44-60
Total teamwork behavior	**46**	**46-107**	**108-169**	**170-230**

Validity of the study scales:

The tools (I, and II) were translated into Arabic, and tool (III) was developed then translated to Arabic; then a panel of five nursing administration specialists evaluated the tools' face validity and made the required revisions. A review of the tools' content coverage, clarity, phrasing, length, format, and overall appearance was requested from each member of the expert panel, and necessary modifications were made.

Reliability of the study scales

To establish the consistency of the tools were tested for reliability. The Cronbach's alpha test was used to determine the degree to which the tool's items measured the same idea and were correlated with one another. The results showed that the tools in the current study had good internal reliability, and were distributed as follows:

Administrative styles questionnaire	Cronbach alpha
Caretaker Administration	.85
Authority-Obedience Administration	.86
Comfortable and Pleasant Administration	.83
Constituency-Centered Administration	.93
Team Administration	.83
Paternalism/ Materialism Administration	.90
Leadership skills	**Cronbach alpha**
1- Administrative skill	.84
2-Interpersonal skill	.93
3 – Conceptual skill	.84
Total leadership skills	**.88**
Teamwork behavior dimension	**Cronbach alpha**
Team functions	.89
My manager practices of team leadership,	.76
My role as a leader	.91
Situation Monitoring	.88
Mutual Support	85
Communication	.80
Total Teamwork behavior	**0.92**

Pilot Study:

A pilot study was carried out before starting the data collection of nurses from Edfu General Hospital. This pilot study aimed to test the clarity, comprehensiveness, accessibility, and applicability of the tools and to estimate the appropriate time required to fill out the questionnaire. The pilot study involving 46 nurses, or 10% of the nurses, was carried out. The pilot study's findings were added to the final results without alteration.

Data Collection Procedure:

Official letters approval was requested from the faculty dean and the Scientific Research Ethics Committee of the Faculty of Nursing, Minia University; these letters included a succinct description of the study's aims. Approval to conduct the study was obtained from the Dean of the Faculty of Nursing, at Minia University. Permission and consent were obtained from the Undersecretary of the Ministry of Health. Followed by an official letter was acquired from the director of Edfu General Hospital, before the conduction of the pilot study as well as the actual study. Tools were translated into Arabic before getting the go-ahead from the jury to use them to gather research data. Consent was obtained from nurses who participated in the study, after explaining the nature and purpose of the study. After describing the goal and procedure of data collection, the tools were given to all of the nurses. During their morning shift, the researcher distributed the tools to the nurses and answered their questions Nurses took 20 to 23 minutes to respond to the tools as measured by the pilot study. Then collected the sheets from the nurses after completing the tools filling. Between the beginning of 10th of January 2023 to the 8th April 2023, data collection from nurses was carried out.

Administrative design:

- The Minia University Faculty Dean of the Nursing Faculty authorized the issuance of an official letter.
- Permission and consent were obtained from the Undersecretary of the Ministry of Health.
- Followed by an official letter acquired from the director of Edfu General Hospital

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Ethical Considerations:

- The Scientific Research Ethics Committee of the Faculty of Nursing at Minia University provided a formal initial of the study.
- The nurses were made aware that taking part in the study was entirely voluntary and that declining to do so would not have any negative effects.
- Consent was obtained from nurses who were willing to participate in the study, after explaining the nature and purpose of the study.
- The study subjects had the right to refuse to participate and or withdraw from the study without any rationale at any time.

- Study subjects' privacy was considered during the collection of data. Participants were assured that all their data were highly confidential; anonymity was also assured by assigning a number for each nurse instead of names to protect their privacy.

Statistical Design:

The collected data was tabulated, computerized, analyzed, and summarized by using descriptive statistical tests to test research questions using the SPSS version (25). Qualitative data were expressed as frequency and percentage. Probability (P-value) is the degree of significance, less than 0.05 was considered significant. The smaller the P-value obtained, the more significant the result (*), and less than 0.001 was considered highly significant (**).

Results

**Table (1): Percentage distribution of the nurse's demographic data (no.=458).**

Items	Nurses (no.= 458)	
	no.	**%**
Age		
• <25yrs.	290	63.3
• >25yrs	168	36.7
Mean ± SD	24.22±1.219	
Gender		
• Male	17	3.7
• Female	441	96.3
Residence		
• Urban	378	82.5
• Ruler	80	17.5
Marital status		
• Single	161	35.2
• Married	275	60.0
• Widow	20	4.4
• Divorced	2	.4
Years of experience in nursing		
• <3 yrs.	213	46.5
• ≥3 yrs.	245	53.5
Mean ± SD	3.89±1.267	
Years of experience in current department		
• <3 yrs.	321	70.1
• ≥3 yrs.	137	29.9
Mean ± SD	2.20±1.147	

Table (1) presents that (63.3%) of nurses are less 25 years of age with mean age 24.22±1.219 years, also (96.3%) of them are females and (82.5%) of them are living in the urban area. Regarding marital status, there are (60%) of nurses are married. Moreover, in relation to years of experience in nursing, there are (53.3%) of nurses have three or more years in the nursing experiences as well as (70.1%) of them have less three years of experience in their department.
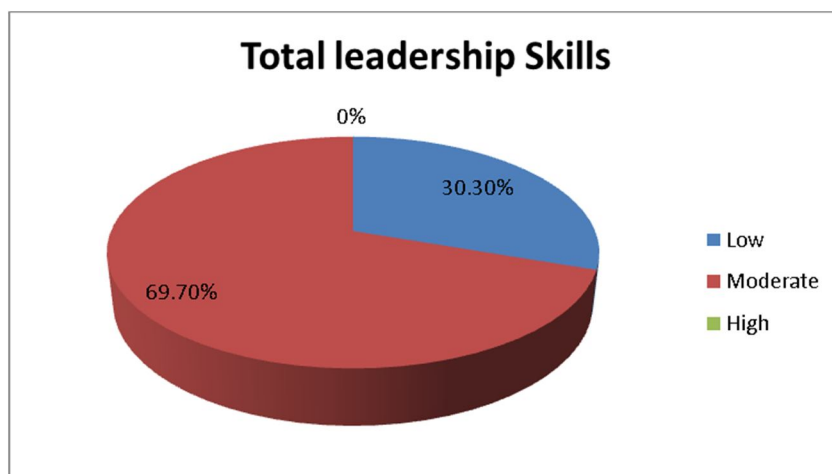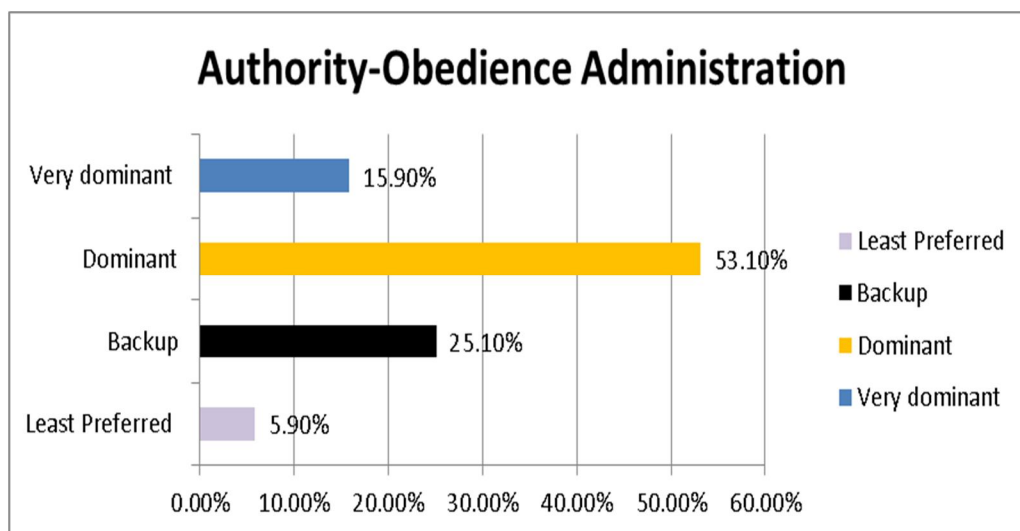

Figure (1): Nurses' perception about total leadership skills (no.=458)

Figure (1) displays that nurses staff's perception about total skills of the leader that their (69.7%) of the leader have moderate level of total skills, while there are (30.3%) of them have low level of total skills
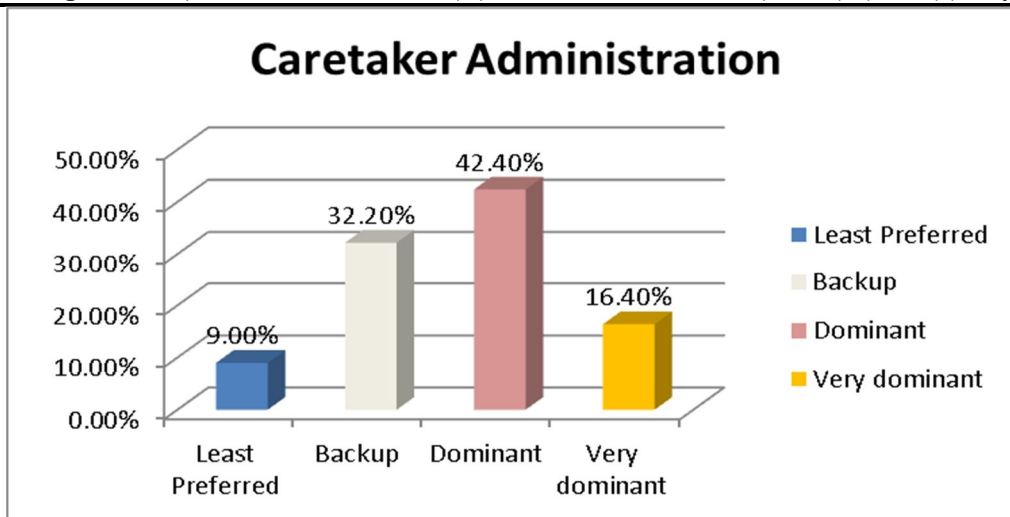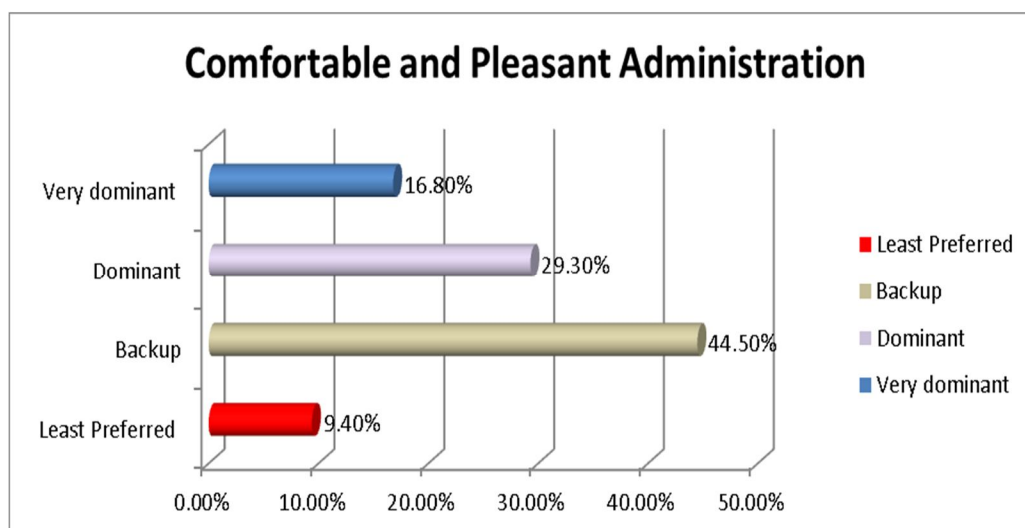
Figure (2): Nurses' perception about caretaker administration dimension of administrative styles (no.=458)

Figure (2) discuss that nurses staff's perception about total caretaker administration of the administrative styles that their (42.4%) of the leader have dominant style, while there are (32.2%) of them have backup style.

Figure (3): Nurses' perception about authority-obedience administration dimension of administrative styles (no.=458)

Figure (3) explains that nurses staff's perception about total authority-obedience administration of the administrative styles that their (53.1%) of the leader have dominant style, while there are (25.1%) of them have backup style.

Figure (4): Nurses' perception about comfortable and pleasant administration dimension of administrative styles (no.=458)

Figure (4) clarifies that nurses staff's perception about total comfortable and pleasant administration of the administrative styles that their (44.5%) of the leader have backup style, while there are (29.3%) of them have dominant style.
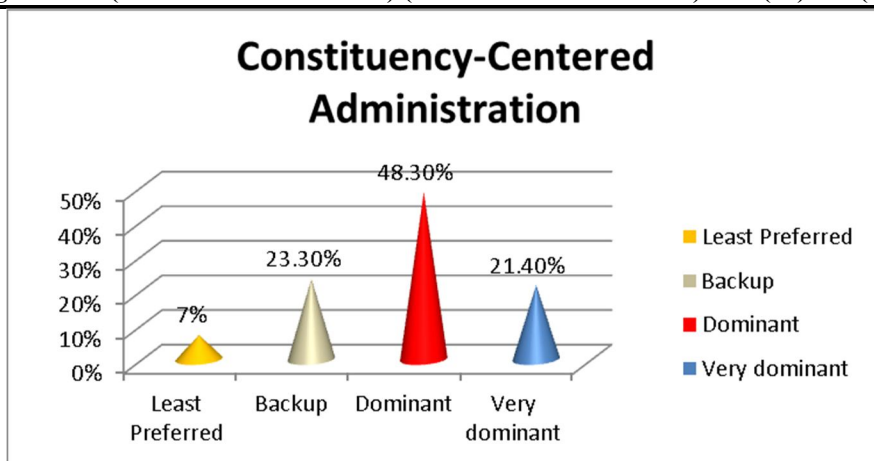
Figure (5): Nurses' perception about constituency-centered administration dimension of administrative styles (no.=458)

Figure (5) mentions that nurses staff's perception about total constituency-centered administration of the administrative styles that their (48.3%) of the leader have dominant style, while there are (23.3%) of them have backup style.
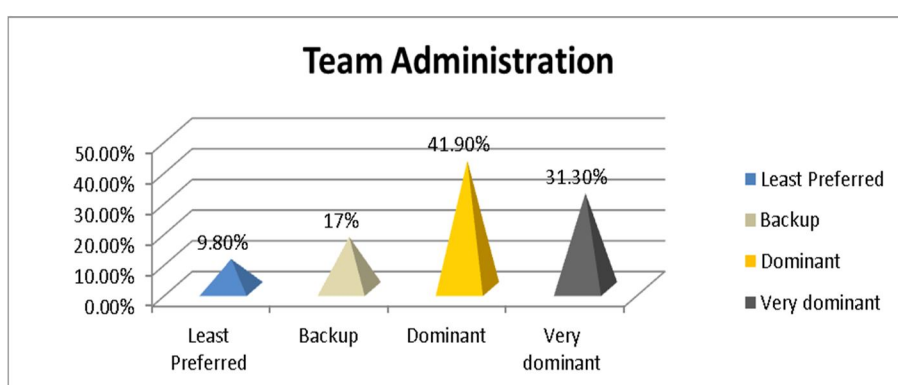

Figure (6): Nurses' perception about team administration dimension of administrative styles (no.=458)

Figure (6) illustrates that nurses staff's perception about total team administration of the administrative styles that their (41.9%) of the leader have dominant style, while there are (31.3%) of them have very dominant style.

Figure (7): Nurses' perception about paternalism/ materialism administration dimension of administrative styles (no.=458)

Figure (7) justifies that nurses staff's perception about total paternalism/ materialism administration of the administrative styles that their (45.5%) of the leader have dominant style, while there are (26%) of them have very dominant style.
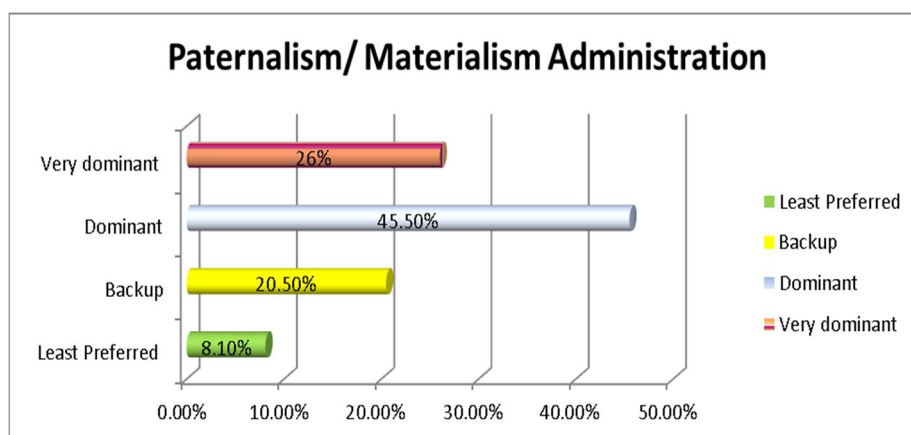
Table (2): Mean score of nurses' perception regarding administrative style (no=458)

Dimensions	Mean + SD	Minimum	Maximum	Range	Ranking
Caretaker Administration	22.75+5.98	6	35	29	6
Authority-Obedience Administration	23.66+5.55	8	36	28	3
Comfortable and Pleasant Administration	22.56+6.08	7	36	30	5
Constituency-Centered Administration	23.53+5.92	8	35	27	4
Team Administration	24.28+6.34	7	36	29	1
Paternalism/ Materialism Administration	23.95+6.42	7	35	28	2

Table (2) justifies that the highest mean is team administration with mean sore is 24.28+6.34, then paternalism/ materialism administration with mean sore is 23.95+6.42, follow by authority-obedience administration with mean sore is 23.66+5.55.
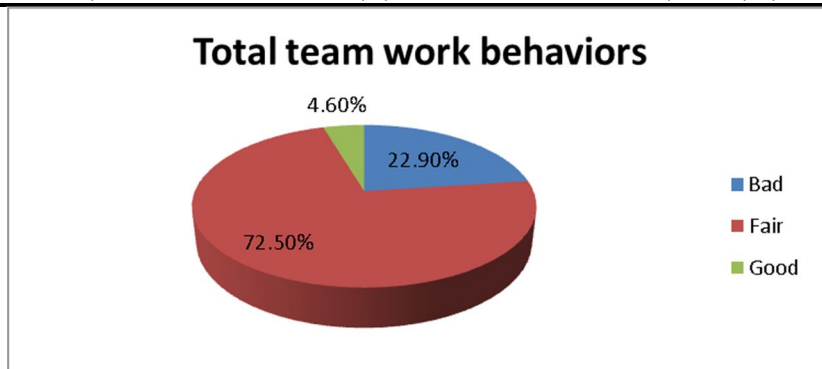
Total team work behaviors

4.60%
22.90%
72.50%

- Bad
- Fair
- Good

Figure (8): Nurses' total team work behaviors (no.=458)

Figure (8) reveals that (72.5%) of nurses have fair level of team work behaviors and (22.9%) of them have bad level of total team work behaviors.

Table (23): Correlation between leadership, management styles and teamwork behavior among nurses (no.= 458).

	Leadership skills	Caretaker Administration	Authority-Obedience Administration	Comfortable and Pleasant Administration	Constituency-Centered Administration	Team Administration	Paternalism/ Materialism Administration	teamwork behavior
Leadership skills		.007 .874	.008 .860	.028 .547	.049 .296	.075 .111	.017 .719	.107* .022
Caretaker administration			.389** .001	.453** .001	.503** .001	.513** .001	.416** .001	.064 .170
Authority-obedience administration				.333** .001	.424** .001	.352** .001	.393** .001	-.042 .372
Comfortable and pleasant administration					.471** .001	.416** .001	.365** .001	.056 .233
Constituency-centered administration						.765** .001	.531** .001	.001 .981
Team administration							.622** .001	.059 .208
Paternalism/ materialism administration								.064 .172
Teamwork behavior								

Table (22) introduces that positive relation between leadership skills, their leadership styles and nurses' teamwork behavior except authority-obedience administration (r= -.042).

Discussion

Nurses function as leaders when they demonstrate leadership characteristics in their nursing roles and lead other nurses and their communities to achieve a vision of quality health care. The effective nurse leader understands resource management, marketing, and media skills, communicates effectively, negotiates, motivates and influences others. Nurses who exert additional influence through instilling a sense of confidence in subordinates, which makes possible a higher achievement level than expected, are transformational leaders **(Aljebory, 2023).**

Also, leaders treat their followers with consideration and, through charismatic behaviors, inspire, motivate, and provide intellectual stimulation in the process. Transformational leaders develop followers by providing them with further responsibilities, and by having the confidence in them to fulfill these duties with self-assurance and inspiration. While the transactional leader adopts a caretaker role and focuses on day-to-day operations, the transactional leader sets goals, gives directions, seeks to control both situation and followers and uses rewards to reinforce followers' behaviors associated with meeting or exceeding established goals **(Maung, 2024).**

So, quality leadership was identified to be one of the major factors for promoting behaviors among the nurses for exhibiting greater responsibility and physical activity. Similarly, workplace incivility from supervisors was identified to be negatively related to nursing team work behavior. Nursing leadership behaviors play a crucial role in shaping nursing team work behavior as well as their performance, thereby achieving the organizational goals of ensuring the delivery of quality care and achieving better patient outcomes. Considering the nursing leadership theories, transformational and transactional leadership styles and their impact on nurses' satisfaction, burnout, and resilience have received lot of attention **(Alsadaan et al., 2023).**

Therefore, this study stressed on investigate relation between head nurses leadership skills and styles and staff nurses' teamwork behaviors.

Concerning nurses' personal data, the current study revealed that the highest percentage of the nurses' age was (<25yrs). Regarding their gender, the study results noted that the majority of the nurses were female. For their residence, the highest percentage of them were living in Urban areas. Concerning their marital status, about three-fifths of them were married. Regarding nurses' Years of experience in nursing, the study findings illustrated that more than half of

them were >3 yrs. Concerning their years of experience in the current department, the current study revealed that more than two-thirds of them were <3 yrs.

Regarding the total of administrative skills dimension of leadership styles, the present study results reported that about two-thirds of staff's perception had a moderate level of administrative skills of their leaders, while about one-third of them had a low level of total administrative skills. From the researchers' point of view, the variation in administrative skills of leadership style among staff nurses likely stems from differences in training, experience, and role expectations. Nurses leaders often receive more focus on clinical skills than administrative tasks, leading to moderate skills in those with some exposure and low skills in those with minimal experience. Additionally, many nurses perceived that their leaders may prioritize patient care over administrative duties.

This finding is supported by **Zhang et al. (2022)** who conducted a recent study on healthcare administrative skills and found that approximately two-thirds of healthcare staff rated their leaders' administrative skills as moderate, while around thirty percent of them rated them as low.

Contrary to the current study findings, **Schünemann et al. (2019)** research article reported that a majority of healthcare staff, about seventy percent, perceived their leaders' administrative skills as high, with only twenty percent rating them as moderate.

Regarding the total interpersonal skills dimension of leadership styles, the present study results reported that more than two-thirds of the staff's perception had a moderate level of interpersonal skills for their leaders. From the researchers' point of view, related to the nature of their work, which requires regular communication, teamwork, and collaboration. Leaders' skills are often developed through daily interactions with patients and colleagues, but may not be fully advanced due to limited formal leadership training or experience in leadership roles.

This is aligned with **White et al. (2020)** who conducted a recent study on nursing leadership skills and found that approximately about seventy percent of nursing staff rated their leaders' interpersonal skills in leadership as moderate.

On the other hand, **Shehata (2024)** reported that the majority of nursing staff, more than half, perceived their leaders' interpersonal skills in leadership as high, with only one-quarter rating them as moderate and the minority as low.

Regarding the total of conceptual skills dimension of leadership styles, the present study results reported that more than two-thirds of them had a moderate level of conceptual skills for their leaders. Because nurses realized that their leadership roles often involve understanding and managing patient care within a broader healthcare context. While they develop their skills through experience and problem-solving in their daily work, they may not reach a high level due to limited opportunities for formal leadership training or strategic decision-making.

This justification is congruent with **Mrayyan et al. (2023)** study which highlighted the effectiveness of comprehensive leadership training programs in significantly improving conceptual skills among nursing leaders.

This is not congruent with **Vila (2021)** who illustrated that more than half of nursing staff, perceived their leaders' conceptual skills in leadership as high, with only thirty percent rating them as moderate.

For the Nurses' perception of total leadership skills, the study findings revealed that the highest percentage of the nurses' staff perceived a moderate level of leadership skills of their leaders. This can be attributed to staff nurse's daily interactions where leaders demonstrate competence in managing routine tasks and providing guidance. Also, the leaders' abilities and skills to be good role models; they try to be positive motivators to their staff nurses to achieve their unit goals and achieve optimal nursing care for the patients.

This is supported by **Alluhaybi et al. (2024)** who reported that approximately more than two-thirds of nursing staff rated their leaders' leadership skills as moderate. Also, another recent study conducted **by Robinson (2021)** indicated that around 65% of nurses perceived their leaders' leadership skills as moderate.

However, **Robinson (2021)** reported that more than half of the nursing staff, perceived their leaders' leadership skills as high, with only nearly one-third rating them as moderate.

For the total nurses' perception of the caretaker administration dimension, the highest percentage of nurses (more than two-fifths) perceived the administrators had "a dominant style" of administrative styles. because many nursing administrators emphasize a nurturing approach, focusing on maintaining a supportive work environment, which aligns with the needs and values of nursing professionals. Nurses may appreciate this approach because it directly impacts their job satisfaction, morale, and ability to provide quality patient care, making it the most recognized and valued leadership style in their experience.

This is supported by **Alluhaybi et al. (2024)** who found that approximately forty-five of nurses perceived their administrators as having a dominant of the caretaker administration of the administrative style.

While **Bond (2021)** study noted that reported that a majority of nurses, perceived their administrators as having a collaborative rather than a dominant caretaker administrative style.

For the total nurses' perception of the authority-obedience administration dimension of administrative styles, the results revealed that more than half of the nurses' perception of the administrators had a "dominant style" of the authority-obedience administration dimension. This relates to strict control, clear directives, and adherence to rules, which can be prominent in highly regulated healthcare environments. This style is often necessary in situations requiring quick decision-making, compliance with protocols, and maintaining order in high-pressure settings. Nurses might recognize this as the prevailing style because it ensures efficiency, safety, and accountability, even if it may sometimes come at the expense of flexibility or collaboration.

This is attributed to **Pizzolitto et al. (2023)** systematic literature in which found that authoritarian leadership styles, which include authority-obedience characteristics were dominant from the participants' perceptions, and can sometimes lead to improved performance in specific contexts. This is particularly true in environments where clear directives and strict adherence to rules are necessary.

For the total nurses' perception of the comfortable and pleasant administration dimension of administrative styles, about forty-four percent of the nurse staff's perception of this dimension had a "backup style" of their administrator. this could relate to many nurses realizing that, while these

administrators are generally supportive and approachable, they tend to step in more actively only when needed, rather than maintaining a consistently proactive or hands-on approach. according their perception reflects a leadership style where administrators provide guidance and support primarily in response to specific situations or challenges, rather than as a constant presence.

This is aligned with **Tian (2023)** who found that in a comfortable and pleasant administration style, staff nurses perceived that more than forty of them as a "backup style," significantly enhancing job satisfaction and reduces burnout among nurses. This style fosters a supportive work environment, leading to better patient care and lower turnover rates.

The study findings are not supported by **Ellis (2021)** who showed that while some nurses appreciate the supportive nature of a backup style in a comfortable and pleasant administration style, others may feel it lacks the decisiveness needed in critical situations.

For the total nurses' perception of the constituency-centered administration dimension of administrative styles, nearly half of the nurses' perception of the leader had a "dominant style". This could relate to nurses suggesting that these leaders are seen as taking charge, setting clear expectations, and making decisions that prioritize the needs and interests of the organization or group as a whole. This reflects a leadership approach that is directive and assertive, focusing on achieving collective goals and maintaining order within the team.

This is aligned with **Saleh et al. (2020)** who reported that more than half of the nurses perceived that their administrators had a dominant leadership style in the constituency-centered administration dimension, which can lead to improved efficiency and decision-making.

For the total nurses' perception of the team administration dimension of administrative styles, more than forty percent of the nurses' perception of the administrators had a dominant style. This indicates that these administrators are viewed as authoritative leaders who actively guide and direct the team, ensuring that tasks are completed efficiently and goals are met.

This finding is attributed to **Zaheer et al. (2021)** who illustrated that staff nurses perceived that a dominant leadership style in the team administration dimension can lead to enhanced team performance. This is particularly true in high-stress environments where clear directives and strong leadership are necessary for efficient functioning.

For the total nurses' perception of the paternalism/ materialism administration dimension of administrative styles, nearly half of the nurses' perception of the leader had a dominant style. this could relate to the leadership approach that combines authority with a protective or supportive attitude. Leaders with this style often assert control while also taking care of their team's material and personal needs. This perception suggests that these leaders are seen as decisive and firm, yet also concerned with the well-being and stability of their staff, balancing authority with a caretaking role.

This is supported by **Western (2023)** who indicated that the highest percentage of the nurses working under paternalistic administrators often report better patient care outcomes. The supportive nature of this leadership style ensures that nurses feel valued and are more likely to adhere

to protocols, leading to improved patient safety and care quality.

While **Specker Sullivan and Nike, (2018)** highlighted that while paternalistic leadership can provide support, it may also foster dependency among staff. Nurses might rely too heavily on their leaders for decision-making, which can hinder their professional growth and development.

Concerning The mean score of nurses' perception regarding administrative style, the highest mean is the team administration dimension, then paternalism/ materialism administration, followed by the authority-obedience administration dimension. This indicates that staff nurses have a preference for collaborative leadership of their administrators. This is followed by paternalism/materialism, reflecting a value placed on supportive yet authoritative leadership, and then by authority obedience, which suggests a lesser preference for strict, hierarchical control.

This is aligned with **Hassan et al. (2024)** who reported that the nurses had higher mean scores for team administration than other dimensions, due to the collaborative and supportive environment it fosters. Also, **Zaheer et al. (2021)** indicated that paternalistic leadership, which combines authority with a supportive attitude, can enhance job satisfaction and reduce burnout. Nurses appreciate the protective and guiding nature of this style, leading to higher mean scores

Regarding the total of the team functions dimension of teamwork behaviors, the study revealed that; more than two-thirds of the nurses had a fair level of total team functions. This because a mix of both effective collaboration and challenges within the team function between nurses. This suggests that while basic team functions are being met, there may be inconsistencies in communication, role clarity, or resource availability that prevent the team from operating at a higher level, and reflect a balance between adequate teamwork and areas needing improvement for better overall performance.

This is supported by **Costello et al. (2021)** who has found that more than two-thirds of the nurses perceive their team functions at a fair level, it often reflects a balance of effective teamwork and communication, leading to better patient outcomes. Also, **Rapin et al. (2023)** study indicated that most of the nurses experienced a fair team functioning which is associated with strong team cohesion and mutual support among nurses.

However, **Zaheer et al. (2021)** have shown that perceptions of team functioning can vary widely among nurses. While some may view their team as functioning fairly, others might experience significant stress and dissatisfaction due to unresolved conflicts or lack of support.

Regarding the total of nurses' opinion about the manager practices, the study revealed that; more than two-thirds of the nurses' opinion about the manager practices of team leadership that the manager had a fair level of total manager practices of the team behaviors. This is because nurses indicated that while the manager meets essential leadership responsibilities, there are gaps in areas like communication, motivation, or decision-making. So, nurses' perception suggests that the manager is effective to a degree but may lack consistency or the ability to fully engage and inspire the team, leading to only moderate satisfaction with their leadership practices.

This aligned with **Välimäki et al. (2024)** who found that more than sixty percent of the nurses had a fair level of

team leadership practices by managers, significantly enhanced job satisfaction among nurses. This is because fair leadership practices often involve clear communication, support, and recognition, which are highly valued by nursing staff.

However, **Nurmeksela et al. (2021)** illustrated that nurses had a low level of team leadership practices by managers, and felt that it lacked the necessary firmness to handle critical situations effectively.

Regarding the total of nurses' role as a leader dimension of teamwork behaviors, the study revealed that; more than half of the nurses a fair level of total role as a leader. This because they feel somewhat equipped for leadership but also recognize limitations in their skills or confidence. This suggests that while they can fulfill leadership duties to some extent, they may need further development or support to fully embrace and excel in their leadership roles.

This finding is attributed to **Hong et al. (2024)** who reported that about sixty percent of the nurses had a fair level of leadership role perception themselves, these nurses feel fairly treated and recognized, which enhances overall team cohesion and effectiveness.

However, **Tomaszewska et al. (2024)** illustrated that less than half of the nurses had a fair level of leadership role, and feel it lacks the necessary authority to handle critical situations effectively.

Regarding the total of nurses' situation monitoring dimension of teamwork behaviors, the study revealed that; more than two-thirds of the nurses had a fair level of total situation monitoring. This suggests that nurses are generally aware of their environment and patient conditions, there may be challenges in consistently maintaining high vigilance or responding swiftly to changes. This fair level likely reflects a need for improved training or resources to enhance their ability to monitor situations more effectively and ensure patient safety.

This study's findings are congruent with **Hassan et al. (2024)** who indicated that more than two-thirds of nurses perceive their situation monitoring as a fair experience, and fostered a proactive approach to patient care, enhancing overall team performance.

While in the study **Costello et al. (2021)** showed that more than sixty percent of nurses who perceive their situation monitoring as fair report variability in its effectiveness. While some situations are managed well, others may suffer due to inconsistent monitoring practices.

Regarding the total of nurses' mutual support dimension of teamwork behaviors, the study revealed that; about seventy percent of the nurses had a bad level of mutual support. This indicates significant challenges in collaboration, communication, and trust among team members. This could stem from factors like high workload, inadequate training in teamwork, or a lack of supportive work culture, leading to difficulties in providing and receiving help, ultimately affecting team cohesion and patient care quality.

This is also, supported by **Costello et al. (2021)** who found that more than seventy percent of nurses reported bad levels of mutual support in teamwork behaviors, and experienced higher rates of patient safety incidents.

However, **Baek et al. (2021)** reported that more than half of nurses' perceptions of teams with bad mutual support still report satisfactory team dynamics in certain contexts. This suggests that while mutual support is crucial, other factors like leadership and individual resilience can mitigate its negative effects.

Regarding the total of nurses' communication dimensions of teamwork behaviors, the study revealed that; more than sixty percent of the nurses had a fair level of nurses' communication. This could be related to communication practices that are generally adequate between the team, and also reflect some effectiveness in exchanging information, however, reveals room for improvement in areas such as clarity, frequency, or feedback, impacting the overall efficiency and effectiveness of team interactions. This aligned with **Hassan et al. (2024)** who reported that more than sixty percent of the nurses who rated their communication in teamwork as fair level. This finding is not supported by **Leonard et al. (2022)** more than half of nurses who rated their communication as fair still experienced significant communication gaps.

Nurses' total teamwork behaviors, the present study noted that nearly three-quarters of the nurses have a fair level of teamwork behaviors. This could be due to effective collaboration, clear communication, and mutual support within their teams. These positive dynamics foster a cohesive work environment, enhance job satisfaction, and improve patient care outcomes. Despite some challenges, the overall strong teamwork practices contribute to this favorable perception.

This study finding is supported by **Zhao et al. (2021)** who reported that more than seventy percent of the nurses had a fair level of perception regarding the teamwork behavior. Also, this is aligned with **Na and Moon, (2024)** who conducted a study in an acute private medical ward found that the overall perception of the nursing teamwork was a fair level.

This is not congruent with **Husarek et al. (2024)** indicates that near to three quarters of nurses had good teamwork behaviors perception, and experienced higher job satisfaction.

Regarding the relation between nurses' personal data and their teamwork behavior, the current study noted that there was no statistically significant relation between nurses' personal data such as (age, gender, marital status, residence, years of experience, and years of experience in the current department) and their teamwork behavior. Because this implies that teamwork behaviors are likely shaped more by factors like workplace culture, team dynamics, or individual attitudes and skills rather than by personal characteristics or background.

This finding is congruent with **Costello et al. (2021)** study published in 2023 found no statistically significant relationship between nurses' age, gender, marital status, and years of experience with their perceived teamwork behavior. The study used a cross-sectional design and surveyed 500 nurses across various departments.

However, the study finding is not supported by **Baek et al. (2023)** conducted in 2024 found a significant positive relationship between years of experience and teamwork behavior among nurses. Nurses with more than 10 years of experience reported higher teamwork scores compared to those with less experience (p < 0.05). also, revealed that female nurses and those who were married reported significantly higher teamwork behavior scores compared to their male and single counterparts (p < 0.01).

Concerning the correlation between leadership, management styles, and teamwork behavior among nurses, the current study revealed that there was a positive statistically significant relation between leadership skills,

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leadership styles, and nurses' teamwork behavior except for the authority-obedience administration style. Also, there was a positive statistically significant relation between all leadership styles and between teamwork behavior except authority-obedience administration.

This could relate to more collaborative and supportive leadership approaches that positively influence teamwork. These styles likely foster open communication, trust, and cooperation among nurses, enhancing their teamwork. In contrast, the authority-obedience style, which is more rigid and hierarchical, may not encourage the same level of team cohesion or mutual support, explaining its lack of positive impact on teamwork behavior.

This study finding is attributed to **Kohnen et al. (2024)** who highlighted that participative leadership styles were positively associated with nurses' teamwork behavior. Nurses under participative leaders reported better teamwork and collaboration ($p < 0.05$). Also, **Välimäki et al. (2024)** found a significant positive relationship between transformational leadership skills and teamwork behavior among nurses. The study reported that nurses who perceived their leaders as transformational had higher teamwork scores ($p < 0.01$).

However, **Hassan et al. (2024)** found no significant relationship between certain types of leadership styles and teamwork behavior among nurses. Also, **Erçelik and Cyprus, (2023)** study reported that was a positive statistically significant relation between all leadership styles and between teamwork behavior except authority-obedience administration.

Conclusion

In the light of the current study findings, it can be concluded that nurses staff's perception about total skills of the leader that their more than two thirds of the leader had moderate level of total skills, while there were less than one third of them had low level of total skills. Regarding leadership style nurses staff's perception about total caretaker administration of the administrative styles that their less than half of the leader have dominant style, also more than half of the leader had dominant of authority-obedience administration style, less than half of the leader had backup of comfortable and pleasant administration, about half of the leader have dominant of constituency-centered administration style, their less than half of the leader had very dominant of team administration style, and less than half of the leader had dominant of paternalism/ materialism administration style.

Furthermore, about three quarters of nurses had fair level of team work behaviors and less than one quarter of them had bad level of total team work behaviors. Also, there were positive relation between leadership skills, their leadership styles and nurses' teamwork behavior except authority-obedience administration (r= -.042).

Recommendations

Based on the findings of this study, the following recommendations proposed:

- Emphasis on developing head nurses' leadership skill using continuous learning program like small group discussion.
- Improve nursing work conditions by the nurse managers and policy makers through using the different strategies such as; reduce nurse workload through appropriate staffing, improve access to information, distribute resources fairly, provide professional development

opportunities, and improve nurses' leadership skills such as decision making and empowerment.
- Emphasis on developing head nurses' leadership skills using continuous learning programs like small group discussions.
- Develop strategies that enhance the culture of collaboration in the health organizations should.
- Encourage nurses and nurse managers should receive training programs about team building and team dynamics to enhance their abilities in handling team conflicts and create an atmosphere of coordination, collaboration and team spirit.

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